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**United Nations
Environment
Programme**

**Stockholm Convention on Persistent Organic Pollutants
Persistent Organic Pollutants Review Committee
First meeting
Geneva, 7–11 November 2005***

**Designated members of the Persistent Organic Pollutants Review
Committee****

Note by the Secretariat

1. Decision SC-1/7 of the Conference of the Parties of the Stockholm Convention requires the Parties listed in appendix II to the annex to that decision each to formally designate one expert in chemical assessment or management to serve on the Committee. Those Parties are required to provide the names and relevant qualifications of their designated expert to the Secretariat.

2. Pursuant to that decision, the Parties listed in appendix II to the decision designated the following experts to serve as members of the Committee on an interim basis, pending the formal confirmation of their appointment by the Conference of the Parties:

Ms. Anahit ALEKSANDRYAN (Armenia)	Mr. Mario RAMIREZ YARTO (Mexico)
Mr. Ian RAE (Australia)	Ms. Farah BOUQARTACHA (Morocco)
Ms. Adriana de Araújo MAXIMIANO (Brazil)	Ms. Janneche Utne SKAARE (Norway)
Mr. Désiré OUEDRAOGO (Burkina Faso)	Mr. Dario C. SABULARSE (Philippines)
Mr. Robert CHENIER (Canada)	Ms. Hala Saif AL-EASA (Qatar)
Mr. Abderaman Mahamet ABDERAMAN (Chad)	Mr. Thomas Brima Rick YORMAH (Sierra Leone)
Mr. Jianxin HU (China)	Ms. Evelin FABJAN (Slovenia)
Mr. Kouamé Georges KOUADIO (Côte d'Ivoire)	Mr. Henk BOUWMAN (South Africa)
Mr. Ivan HOLOUBEK (Czech Republic)	Mr. Jose V. TARAZONA (Spain)
Mr. Alfredo CUEVA (Ecuador)	Mr. Bo WAHLSTROM (Sweden)
Mr. Mohammed Ali MOHAMMED (Ethiopia)	Mr. Jarupong BOON-LONG (Thailand)
Ms. Razia ZARIEFF (Fiji)	Mr. Wayne RAJKUMAR (Trinidad and Tobago)
Mr. Reiner ARNDT (Germany)	Ms. Leena YLA-MONONEN (United Kingdom)
Mr. Masaru KITANO (Japan)	Ms. Jacqueline ALVAREZ (Uruguay)
Mr. Ziad Mahmoud ABU KADDOURAH (Jordan)	Mr. Ali EL-SHEKEIL (Yemen)
Mr. Mohammad Aslam YADALLEE (Mauritius)	

3. The curricula vitae of the designated experts are given in the annex to the present note. The documents have been reproduced as submitted, without formal editing.

* UNEP/POPS/POPRC.1/1.

** Report of the Conference of the Parties of the Stockholm Convention on the work of its first meeting (UNEP/POPS/COP.1/31), decision SC-1/7.

Annex
CVs of experts nominated for the POPs Review Committee

Armenia

Ministry of Nature Protection of the Republic of Armenia
 Governmental Building 3, Republic Square,
 375010, Yerevan, Republic of Armenia
 Phone: (374 1) 538 838
 Fax: (374 1) 538 838
 E-mail: analeks@freenet.am

Anahit V. Aleksandryan, Ph. D. , Industrial Toxicologist

Date of Birth: October 28, 1955

Education

1973 - 1978 Yerevan State University,
Department of Biology, Faculty of Biophysics

1985 St-Petersburg Institute of Continuing Education, Doctor of Biology,
Ph.D.
Dissertation thesis entitled: "Melamine cyanurate, Melamine and
cyanurate acid peculiarities of impact on organism and hygienic
standardization thereof in the working area air"

Working Experience

1998 – present Head of Department of Hazardous Substances and Waste
Management, Ministry of Nature Protection of the Republic of
Armenia

2002 - present Scientific Adviser, Institute of General Hygiene and Occupational
Diseases, Yerevan

1996 – 1998 Principal Specialist, Ministry of Nature Protection of the Republic
of Armenia

1984 - 1986 Researcher, Laboratory of Industrial Toxicology,
Institute of Labor Hygiene, Kiev (Ukraine)

1979 – 1996 Senior Researcher, Laboratory of Industrial Toxicology, Institute
of General Hygiene and Occupational Diseases, Yerevan

1978 - 1979 Researcher, Laboratory of Toxicology, Armenian Branch of All-
Union Scientific-Research Institute of Hygiene and Toxicology of
Pesticides, Polymers and Plastics, USSR Ministry of Health

Field of Science: Industrial Toxicology, Ecology, Hygiene

Languages: Armenian, Russian and English

Scientific Publications: 70

Focal Point of the following Conventions:

UNEP Rotterdam Convention on Prior Informed Consent
Procedure for Certain Hazardous Chemicals and Pesticides in
International Trade

UNECE Convention on Transboundary Effects of Industrial
Accidents

UNEP Basel Convention on the Control of Transboundary
Movements of Hazardous Wastes and their Disposal

UNEP Stockholm Convention on Persistent Organic Pollutants

Inter-governmental Forum on Chemical Safety (IFCS)

NATO/CCMS National Coordinator

Involvement in International Projects

- 2004- present** National Coordinator of the "Integrated National Programme for
Sound Chemicals and Waste Management" Project
in the Republic of Armenia" Project (UNITAR)
- 2002 - present** National Coordinator of the "Enabling activities to facilitate early
action on the implementation of the Stockholm Convention on
Persistent Organic Pollutants (POPs) in the Republic of Armenia"
Project (UNIDO)
- 1999 - 2000** National Expert of the "National Action Plan to Combat
Desertification in the Republic of Armenia" (UNEP)
- 1998** National Expert of the Environmental Health "National
Environmental Action Plan" (World Bank)
- 1996-1998** National Coordinator from the Ministry of Nature Protection
of the "National Environmental Health Action Plan" (WHO)

BIOGRAPHICAL STATEMENT
IAN DAVID RAE
(July 2005)

Personal

Born	Newport, Victoria on 21 September 1937
Nationality	Australian
Education & Qualifications	North Williamstown Primary School; Footscray Technical School (Dipl. Appl. Chem. 1957); University of Melbourne (BSc 1960, MSc 1962); Australian National University (PhD 1965)
Postdoctoral studies	National Research Council of Canada, Ottawa, 1964-1965 University of Toronto, 1965-1966 Massachusetts Institute of Technology, 1966-1967
Married	Joan Caroline Veal, on 16 January 1960
Family	Anne Louise, born 10 May 1962 Stuart Campbell, born 25 September 1965
Memberships	Fellow, Australian Academy of Technological Sciences and Engineering; Fellow, Royal Australian Chemical Institute. Member of societies of chemistry, history of chemistry, history of science, and history of science and technology.
Honour	Centenary of Federation Medal 2003
Present appointments	Professorial Fellow, Department of History and Philosophy of Science, The University of Melbourne (1998-2008); Technical Director, Australian Academy of Technological Sciences and Engineering (2000-2006)
Private address	16 Bates Drive, Williamstown, Vic 3016, Australia
Telephone/facsimile	61 3 9397 3794
Electronic mail	idrae@unimelb.edu.au
Local activities	Active membership in National Trust of Australia (Victoria), Williamstown Historical Society, and local environment group Friends of Williamstown Wetlands President (1998-2006).

Academic appointments

Monash University	University Research Fellow (1967-1970), Senior Lecturer (1970-1980), Associate Professor (1981-1990), Professor and Dean, Faculty of Science, 1990-1994
Victoria University of Technology	Deputy Vice-Chancellor, 1994-1997
University of Melbourne	Honorary Professorial Fellow, Department of History and Philosophy of Science, 1997-present.
Visiting Appointments	University of Canterbury, Christchurch, senior lecturer (1973); Cornell University, Ithaca, NY, Fulbright Fellow and Visiting Professor (1976-1977); ICI Pharmaceuticals, Alderley Park,

research scientist (1988-1989); Universidad de Buenos Aires, Argentina, Visiting Professor (1989).

Academic experience

Teaching and research	A full range of undergraduate and post-graduate teaching responsibilities in chemistry and environmental science, and substantial research activity. Engaged as examiner of research theses and reviewer of departments and faculties in Australia and overseas, and as adviser on industrial matters, research funding and promotions within Australia.
Administrative	Significant responsibilities as Dean and then Deputy Vice-Chancellor. Chair of the National Council of Deans of Science, 1992 and 1993. Member, National Universities Quality Assurance Team, 1995
Schools	Involvement over 25 years with curriculum development and assessment in secondary school. Member of government review committees on school education.
Publications	Over 190 refereed publications on organic chemistry, chemical education, and history of chemistry and chemical technology Over 100 publications in journals, magazines and newspapers Author of commissioned reports and co-author of patents (3)

Appointments relevant to chemicals in the environment

Chair, Nufarm Inquiry for EPA Victoria, 1990-1991.
 Member, Scientific Advisory Panel, EPA Victoria, 1993-present.
 Chair, National Scheduled Waste Management Group (ANZECC), 1994-2002.
 Chair, National Advisory Body on Scheduled Wastes (ANZECC), 1994-2002.
 Chair, Technical Advisory Panel for National Pollutant Inventory (NEPC), 1997-1998. Reviewer of the Inventory, 2001.
 Member, Technical Advisory Group, National Industrial Chemical Notification and Assessment Scheme, 1998- present.
 Member of committee appointed by Government of Victoria (February 1999-March 2000) to advise on reduction of hazardous waste and the siting of facilities.
 Member and deputy chair, Prescribed Industrial Waste Advisory Committee, EPA Victoria.
 Member, Sector Advisory Committee, CSIRO Chemicals and Polymers Sector, 1995–2002;
 Advisory Committee Molecular Science Division, 2003-2004.
 Member, Steering Group, Air Toxics Initiative of Better Cities Program (Environment Australia), and chair of Technical Advisory

Group.

Chair, PCB Strategy Implementation Group for Intergovernmental Forum on Chemical Safety, 1999-2002.

Co-chair, Process Agents Task Force, United Nations Environment Programme Ozone Secretariat 2001 and 2004, and subsequently Co-chair of Chemicals Technical Options Committee 2004-.

Member of panel to review pulp mill effluent guidelines, Government of Tasmania, 2004.

Member of Commonwealth Government steering committee for review of legislative arrangements for Product Stewardship (Oil), 2004.

Other significant experience

Australian Academy of Technological Sciences and Engineering

Responsibility as Technical Director (2000-2003) for development of study proposals, securing funding, implementing studies, publishing results and making submissions to government. Studies managed include pesticide use in Australia, environmental effects of population growth, applications of the precautionary principle, social impacts of changing water regimes, recycling water in Australia, review of transitional arrangements for used oil stewardship, adaptation to the impacts of climate change.

Chemical Institute

President Elect 2004-2006. Writer of monthly column in *Chemistry in Australia* since 1984. Youth lecturer in Victoria (1985), South Australia (1986) and Western Australia (1988). Member of History and Archives Committee (1993-present), and *Chemistry in Australia* management Committee (1997-1998). Chair, Heritage Group, Victoria, 1998-present.

Patents

Preparation of affidavits and court appearance as expert witness in connection with patent litigation concerning drugs, pesticides, diagnostic materials, and refrigerants.

Consultancy

Consultancies on chemical and related matters for Queensland Government, EPA Victoria (Coode Island chemical storage works approval; greenhouse gases), City West Water (Melbourne) (blue water; alkalinity), National Industrial Chemical Notification and Assessment Scheme (flame retardants; annual reporting of industrial chemicals), CSIRO bioremediation (enzymic action), Department of the Environment and Heritage (effects of ethanol on automobile components; Environmental Risk Assessment).

Science Awareness

Involvement as organiser and selector for ScienceNOW event in National Science Week, 1997-2005. Judge for Young Innovators even 2004-2005. Judge of Young Water Scientist of the Year 2002-2005.

Brazil

CURRICULUM VITAE

ADRIANA DE ARAUJO MAXIMIANO

Nationality: Brazilian

Address: SQN 403 Bl. "E" - 108, Brasilia/DF, Brazil - 70835-050.

e-mail: adriana.maximiano@ibama.gov.br / amaximiano@gmail.com

Phone: 55(61) 3316-1310 (work)

Fax: 55(61) 3225-0445

I. CURRENTS ACTIVITIES

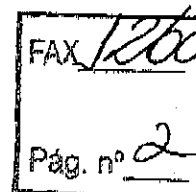
Brasilia/DF, since November /2004:

- Coordinator of the Coordination of Evaluation and Control of Chemical Substances (COASQ)", integrated unit Office of Licensing and Environment Quality (DILIQ) of the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA). Activity in progress at: SCEN Trecho 2, L4 Ed. Sede of IBAMA.
- Member of the Technical Committee of Advice in Pesticides (CTA), as substitute representative of the Ministry of the Environment (MMA).
- Member of the Sectorial Chamber of Agricultural Inputs, of the Ministry of the Agriculture, Livestock and Provisioning (MAPA), as substitute representative of the Brazilian Institute of environment and Renewable Natural Resources (IBAMA).
- Member of National Commission of Chemical Safety (CONASQ), as titular representative of the Brazilian Institute of environment and Renewable Natural Resources (IBAMA).
- Member of the Work Group on Globally Harmonized System for the classification and labeling of Chemicals (GHS), Coordinated by for the Ministerial of the Development, Industry and External Trade (MDIC), as titular representative of the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA).

II. PROFESSIONAL EXPERIENCE

- Brasilia/DF, November/ 2003 - November/ 2004:
Technical Adviser of Coordination for Control and Environmental Quality (CGQUA) – Office of Licensing and Environment Quality (DILIQ)" - Brazilian Institute of Environment and Renewable Natural Resources (IBAMA).
- Brasilia/DF, September/ 2001 – May/ 2003:
Technical consultant of the General Coordination of Surveillance in Environmental Health (CGVAM), of the National Center of Epidemiologist (CENEPI), in the National Foundation of Health (FUNASA), dealing with contaminated soils, regulations, preparing technical reports, making proposition of new technical rules, technical support and follow up of meetings, researches and commissions concerned to environmental health.
- Brasilia/DF, February/2001 - August/ 2001:
Technical consultant, of the Control and Supervision Division (DIRCOF), of the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA), for issues regarding to the environmental evaluation of pesticides.
- Washington D.C./USA, October/ 2000 - February/ 2001:
Follow up and development of several activities under responsibility of the Environmental Fate and Effects Division (EFED), in the Office of Pesticides (OPPS), of the United States Environmental Protection Agency (USEPA).

Curriculum Vitae of Adriana de Araujo Maximiano



- Brasilia/DF, December/ 1992 - September/ 2000:
Technical consultant of the Office of Control and Supervision, of Brazilian Institute of Environment and Renewable Natural Resources (IBAMA), for issues concerning to environmental evaluation of pesticides.

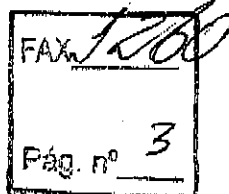
III. ACADEMIC FORMATION

1. Specialization in Toxicology Applied to the Sanitary Surveillance, followed in the National School of Public Health, Oswald Cruz Foundation (FIOCRUZ). Duration: 360 hour and concluded in June/ 2003.
2. Specialization in Health Sanitary Public/ Surveillance, in the area of medicines, household chemicals and cosmetics, followed at University of Brasilia (UnB). Duration: 550 hour and concluded in June/ 2000.
3. Graduated in Chemistry by University of Brasilia, Brazil. Concluded in June/ 1990.

IV. PARTICIPATION IN COURSES AND EVENTS

1. Consults Regional to the Countries of Preparatory Latin America for COP-1, of the Convention of Stockholm, accomplished at Buenos Aires, Argentina, in March 14 to 16, 2005.
2. International Taller "Chemistry of la protection of cultivations en Latin America: Focuses harmonization for evolution environmental y Regulations", accomplished in Costa Rica, in the February 14 to 16, 2005.
3. Sub-regional seminar "Plans of Action for PCBs and Dioxins/ Furans inside of the National Plan of Application for Convention of Stockholm", accomplished in Santiago of Chile, Chile, in the February 19 to 23, 2004.
4. Participation in the Group of Work, Technical Cameras and Plenary Meetings of the National Council of Environment (CONAMA) that it accomplished the revision of the Resolution CONAMA 20/86, in Brasilia-DF, in the September/2003 to December/ 2004.
5. Seminar Solid Residues: Administration, Tendencias and Technology, accomplished in São Paulo, in August 19, 2002.
6. I National Seminar of Training on Equivalence of Pesticides accomplished in Brasilia, in April 02 to 04, 2002.
7. I Workshop of Global Evaluation of Mercury - A Brazilian contribution to the International Project, accomplished in São Paulo, in February 20 and 21, 2002.
8. Workshop on "Contamination by Arsenic", held in Amapá, Brazil (16 hour) in December 14 -15, 2001.
9. First Course on "Methodology of Evaluation of Risk to Health for Dangerous Substances", held in Amapá, Brazil (24 hour) in December 11-13, 2001.
10. "Methodologies for the Prevention of Major Industrial Accidents", coordinated by the International Labor Organization, International Center for Training, held in Rio of Janeiro/RJ, Brazil (40 hour) in October 26, 2001.
11. V Course on Communication and Environment coordinated by International Institute of Education of Brazil (IIEB), in Brasilia/DF, Brazil (40 hours) in October 16, 2001.
12. Training in "Monte Carlo Analysis in Probabilistic Risk Assessment Course", coordinate by USEPA, on Arlington, Virginia - USA (24 hours) in January 25, 2001.
13. Training in "Microsoft Excel goes Probabilistic Risk Assessment", coordinated by USEPA/OPP - Environmental Fate and Effects Division, in Arlington, Virginia - USA. (8 hours) in November 24, 2000.

SA



14. "Attendance of Pisces Slaughter", organized by CEPTA - Center National of Research of Tropical Pisces in cooperation together with Company of Technology of Environmental Sanitation (CETESB), of State of São Paulo/SP, Brazil (24 hours) in February 2-4, 2000.
15. Symposium "Agriculture and Preservation of the Quality of the Water", organized for the Brazilian Society of Toxicology, in Ribeirão Preto/SP, Brazil in August 15-18, 1999.
16. "Assessing the Environmental Safety or Risk of Crop Protection Products" led by Teachers Johann A. Guth and Enrico Keifer, in Brasília/DF, Brazil (24 hours), in March 11, 1998.
17. "37th Annual Meeting on "The Aquatic Plant Management Society", Sanibel Harbour Resort & SPA, in Fort Myers's city, in Florida - USA, July 13-16, 1997.
18. "Advance Toxicological Hazard and Risk Assessment goes Pesticides in the Environment", led by Teachers Dr. Keith Ross Solomon, of the Department of Environmental Quality, IBAMA/Brazil (24 hours); in October 21-23, 1996.
19. "National Workshop for Initiation in the Evaluation and Handling of Risks - Elements to Establish Politics in Environmental Health", course lectured by Organization Pan-American of Health, and Environmental Protection Agency (USEPA) and the Center Pan-American of Human Ecology and Health (ECO/OPS), in Brasília - DF (40 hours); in May 20-24, 1996.
20. Seminar "Evaluation of Risk of Products Pesticides", by the Dr. Keith Ross Solomon, of the University of Guelph, Canada, in IBAMA, Brasília, DF (30 hours) in March 1-5, 1996.

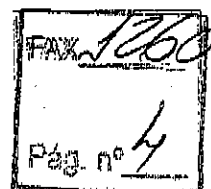
VII. PAPERS

1. "Pesticides and similar products utilization in aquatic resources: an approach of environmental health" - Presentation of Poster, approved in the Congress of ABRASCO - accomplished on July 29 to August 04, 2003.
2. Monograph "Uses of veterinary drugs and pesticides in the aquatic environment: Part I - Demand and regulation" - presented in May 2003.
3. Monograph "Uses of veterinary drugs and pesticides in the aquatic environment: Part II - Application and toxicology" - presented in May 2003.
4. "Strategy to approach the Problems of Health and Atmosphere contamination by BHC in the Place Called "Cidade dos Meninos/ RJ, Brazil" - Presentation of Poster, in the Congress of ABRASCO, in August 4, 2003.
5. "Instruments for Support for Implementation of a Politics of Environmental Health in Brazil: actions and perspectives" - Presentation of Poster, in II National Seminar of Health and Atmosphere, accomplished on June 9 - 13, 2002, in Rio de Janeiro, RJ - Brazil.
6. "National inventory of Areas with Dangerous Residues: Methodology of Identification adopted in the Program of the Environmental Surveillance in Health" - Presentation of Poster, as co-author, in II National Seminar of Health and Atmosphere, accomplished on June 9-13, 2002, in Rio de Janeiro, RJ - Brazil.
7. Monograph "Advertisers of Medicines in Brazil: Analysis of Public Manifestations about Regulations"- presented in June of 2000.

Brasília, June 04, 2005.

Adriana de Araujo Maximiano
 Adriana de Araujo Maximiano
 CRQ 12100167 - 12'

Curriculum Vitae of Adriana de Araujo Maximiano



3/3

CURRICULUM VITAE



I- IDENTIFICATION

SURNAME : OUHDRAOGO
NAME : Désiré
NATIONALITY : Burkinabé
DATE AND PLACE OF BIRTH : November 21st 1964 in Ouagadougou
PROFESSION : State Engineer in Industrial Chemistry
OPTION : Environmental engineering
PROFESSIONAL ADDRESS : Po Box 7044 Ouagadougou 03 / Ministry of Environment and of the Living Space
FAX : (00226) 50 30 19 98 / 50 31 81 34
TEL : (00226) 70 24 10 35 / 50 30 19 96
E-MAIL : desireouedraogo@yahoo.fr
CURRENT POSITION : National coordinator of project BKF/03/G31
"National implementation plan of Stockholm Convention in Burkina Faso"

II- STUDIES AND DEGREES

1987 : Zinda Secondary School, Ouagadougou / Baccalaureat, "D"
(Mathematics and Science).
1987 – 1993 : University Centre of Mostaganem (Algeria).
State Engineering in Industrial Chemistry/ Environmental Engineering
1998 : Luxembourg University Foundation (Belgium): Post grade Certificate of specialization in water management in tropical and subtropical countries.

III- QUALIFICATIONS

- o Industrial Chemistry - Chemistry of Environment and water
- o Public Health and development / Industrial security / pollution prevention
- o Categorisation of the National source / National strategies for radioactive sources security / statutory framework for the radioactive sources security / conception and estimation of measures of physical protection
- o environmental impact assessment (road network, hydroelectric power plants, electric lines, setting up of factories, dams, mining sites, etc.)
- o Purification of the urban and semi-urban sites (collective and individual purification)
- o Management of the persistent organic pollutants (POPs, PCB, Dioxins, Furans, etc.)
- o Management of outdated stocks of pesticides / management of chemicals
- o Geographical information system (Idrisi 32 Software under Windows and Atlas GIS under Windows)/ Mastering of data-processing tool (Excel, Word, Internet...)
- o Atmospheric pollution (techniques of reduction, gases treatment, etc.)
- o Laboratory works in chemistry (general chemistry, organic chemistry, electrochemistry, physical method of analysis, etc.)

IV- LANGUAGES

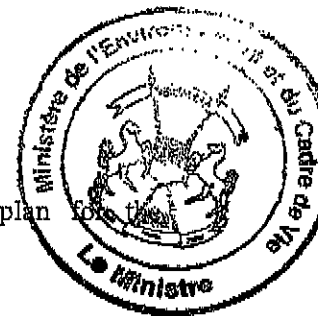
- o French : native fluency (read, written and spoken)
- o English : well read, written and spoken

V- POSITIONS OCCUPIED

From 1996 to present: Responsible for chemicals management at the national level

From 1997 to present: Focal point of the Stockholm Convention on POPs.

2001: Coordinator of the project "Inventory of obsolete, out-of-date and/or prohibited stocks of pesticides in Burkina" Project funded by FAO with the technical support of Ministries in charge of Environment and Agriculture...



From 2002 to present: National coordinator of project BKF/03/G31 «National plan for the implementation of the Stockholm Convention in Burkina Faso». Project funded by World Environment Fund (WEF) with UNDP as execution agency.

VI- PROFESSIONAL EXPERIENCE

- Committee in charge with the follow-up of the elaboration of environmental standards for Burkina Faso (standards on drinkable waters - waste water - quality of the air...);
- Inter ministerial Committee set up by the UICN and the Ministry of Environment and Water for the nomenclature of dangerous, unhealthy and uncomfortable sites (EDI);
- National Commission of Medicine and Pharmacopoeia (CNMPT);
- Scientific council of the Research institute in the Health Sciences;
- National commission for the control of pesticides;

VII-MAIN ACTIVITIES OF EXPERTISE AND CONSULTATION BURKINA FASO

National Consultant for the inter ministerial committee for the implementation of the convention on climate change.

Subject of the study : "Inventory of gases with greenhouse effect in the transport sector".

* **2002 (in March and June)**

Co-worker for the elaboration and second reading of the report on the current situation of Environment in Burkina Faso (REEB).

July: National Consultant for the Division of management of environmental information of the Permanent Secretariat of the National council for the management of environment (SP/ CONAGESE).

Subject: «Contribution of Burkina Faso to the supply of the sub regional data base for an integrated management of the Environment in western Africa (Atmosphere, human health and the Environment, urban zones).

* **2003 (in February)**

Dakar (SENEGAL)

Member of the expert group of NEPAD (New Partnership for African Development) in charge of the identification and proposition of projects in the domains of health and environment for African Governments.

VIII- INTERNATIONAL EXPERIENCE

2005 (In March): Representative of Burkina Faso at the regional workshop organized in Marrakech (Morocco) by UNEP on capacity building for Stockholm Convention Focal Points on the POPs.

(In April) : Representative of Burkina Faso at the workshop organized by UNEP for the coordinators of the implementation plan of the Stockholm Convention on the best available techniques and the best environmental practices (BAT/BEP) concerning the management of POPs (Nairobi / Kenya).

(From 22 till 25, May 2005): Representative of Africa at the workshop organized by the American Environmental Protection Agency on the reduction of mercury use in products and wastes (Portland, Maine / USA)

(In May) : Group supervisor of Burkina Faso delegation, provided with the full powers, at the first conference of countries partners of the Stockholm Convention on the POPs (Punta del Este / Uruguay)

(From June 15 till 17, 2005): Representative of Africa at the round table of negotiation with the American Environmental Protection Agency and the World Bank for the establishment of a partnership with the aim of elimination of mercury use in the small mines. (Washington D.C./ USA)

(From June 1998 to September 2003): Representative of Burkina Faso at all the international committees of negotiation on the POPs



* 2004 (In February) Representative of Burkina Faso at the sub regional dialogue of the coordinators of the programs of implementation of the Stockholm Convention on Persistent Organic Pollutants and a workshop of training on the inventory of dioxins and furans (Nouakchott-Mauritania).

(In June) Representative of Burkina Faso at the educational tour organized by Switzerland and UNEP for the National coordinators of the Programs of implementation of Stockholm Convention (Geneva - Zurich - Basel - Bern / Switzerland (Swiss))

Subject: Investigation of the developed countries experiences in management of POPs and other waste.

(In May 2004 and March 2005): Representative of Burkina Faso at all the international workshops organized by the UNEP and the government of Switzerland for the development of a strategic approach for the international management of chemicals (Nairobi, Kenya) / (Abuja, Nigeria) / (Saly, Senegal)

(In November): Representative of Burkina-Faso at the regional workshop of sensitization on the pollution by Mercury (the mining and other sites) organized by the UNEP (Dakar Senegal)

* 2002 (In September): Representative of Burkina Faso at the working group member of UNEP on global Mercury Assessment (Geneva-Switzerland).

* 2002 (in July and August) : Participation as expert to the expert group of UNEP on Persistent toxic substances / Project PTS: Africa strategies to get rid of PTS (Mombassa, Kenya)

* 2000

(In April): Participation to the regional workshop for the training of the focal points in charge of the questions of the Persistent Organic Pollutants on the techniques of identification and ecologically rational management of the PCB, furans and dioxins (organized by the United Nations Environment Program) (Yaoundé-Cameroon).

* 1999 * (In June): Member of the criteria expert group (CEG) of UNEP asked to elaborate scientific criteria as well as procedure to identify Persistent Organic Pollutants that must be the object of a future international action (Vienna-Austria).

IX- SCIENTIFIC PUBLICATIONS

* 1993 : "Evaluation of the Ozone layer in Burkina Faso" (Report of end of studies)

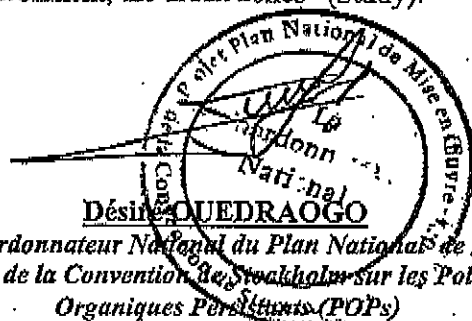
* 1997: "Culture - Health and Environment" (Article)

* 1999: "Atmospheric Pollution" (Article)

* 2000: "Control of obsolete stocks of pesticides" (Articles) "Pollution relating to plastic waste"

* 2001 : "Appropriated technologies for the treatment of industrial waste water" (Communication)

* 2002: "The Atmosphere, the human health and the environment, the urban zones" (Study).



Curriculum vitae

Name: Robert Chénier
Citizenship: Canadian
Birth: Ottawa, Ontario, Canada, 27 April 1954
Current coordinates:
Mail: Environment Canada, Existing Substances Branch, Gatineau QC K1A 0H3 Canada
Phone: 819-953-1680 Fax: 819-953-4936 E-mail: robert.chenier@ec.gc.ca

Education

Ph.D. Doctor of Philosophy (Biology), University of Ottawa, 1988
M.P.M. Master of Pest Management (Entomology), Simon Fraser University, 1983
B.Sc. Bachelor of Sciences (Biology), Honours *cum laude*, University of Ottawa, 1976

Languages

Fluency in English and French
Working knowledge of German and Spanish

Professional Employment

Chief, Assessment Division

Dates February 2002 - on-going
Employer Existing Substances Branch, Environment Canada, Ottawa, Canada
Mandate *The Assessment Division leads Environment Canada's domestic scientific assessment and policy activities and represents Canada in international fora in areas relating to ecological risks of existing substances.*
Duties Responsible for management of Division of 25 professional and support staff and ensuring delivery of programs, notably assessment of existing substances under the *Canadian Environmental Protection Act, 1999*. Focus of the program is the assessment of persistent bioaccumulative substances identified through the categorization of 23,000 substances in commerce in Canada. In particular, management responsibility for the assessment, approval, consultations and regulatory decisions relating to, e.g., PBDEs, PFOS, chlorinated paraffins, chlorobenzenes, polychloronaphthalenes, etc.
Duties include: supervise management, professional and support staff; coordinate Division budgets and work plans; participate in management of the Existing Substances Branch and the Risk Assessment Directorate; coordinate Division activities with program partners in Health Canada; ensure outreach to research community in support of assessments and identification of emerging priorities; promote coordination of assessments with risk managers; ensure delivery of domestic and international programs.
Canadian representative on the Existing Chemicals Task Force under the OECD Chemicals Programme.

Section Head, Chemicals Evaluation Division

Dates June 1991 – February 2002 (with various concurrent assignments)
Employer Chemicals Evaluation Division, Environment Canada, Ottawa, Canada
Mandate *The Chemicals Evaluation Division led Environment Canada's domestic scientific assessment and policy activities and represented Canada in international fora in areas relating to ecological risks of existing substances.*
Duties Supervise professional staff involved in ecological risk assessments under the *Canadian Environmental Protection Act*; contribute to the management of the Division.
Lead the assessment of Priority Substances, including: planning and budget management, direct the work of task groups, prepare assessments, coordinate activities with industry and

non-government organizations, oversee editing and publishing of assessment reports and notices in the Canada Gazette, ensure interactions with risk management.

Provide support to the Director of the Commercial Chemicals Evaluation Branch and Director General of the Toxics Pollution Prevention Directorate in areas of science and policy.

Direct responsibility in ecological assessments having major stakeholder, government or media interests (e.g., road salts).

Working with the Director General of the Toxics Pollution Prevention Directorate, led technical and policy discussions with federal, provincial and territorial representatives, leading to adoption of a Policy for the Management of Toxic Substances by all members of the federal-provincial-territorial Canadian Council of Ministers of the Environment

Assistant to the Director, Commercial Chemicals Evaluation Branch

Dates	September 1994 - August 1995
Employer	Commercial Chemicals Evaluation Branch, Environment Canada, Ottawa, Canada
Mandate	<i>The Commercial Chemicals Evaluation Branch led Environment Canada's domestic scientific assessment and policy activities and represented Canada in international fora in areas relating to ecological risks of existing substances and new commercial chemicals and in the management of such products.</i>
Duties	On behalf of the Environment Canada's Pollution Prevention Directorate, coordinate the development and adoption of a federal Toxic Substances Management Policy which outlines federal policy on persistent bioaccumulative chemicals and other toxic substances. Responsibilities included: <ul style="list-style-type: none"> - oversee public consultations (including public workshops, written consultations); - coordinate discussions with other federal departments; - address recommendations of a science advisory group on criteria for persistence and bioaccumulation; - prepare Memorandum to Cabinet to obtain adoption of policy by the federal government; - ensure publication and distribution of policy and related documents. Key elements of the policy, released in June 1995, were subsequently incorporated into revisions to the <i>Canadian Environmental Protection Act</i> and was adapted and adopted by the Canadian Council of Ministers of the Environment.

Pesticide Evaluation Officer

Dates	February 1988 - June 1991
Employer	Pesticides Division, Environment Canada, Ottawa, Canada
Mandate	<i>The Pesticides Division provided science and policy guidance for the ecological risk assessment of pesticides considered under the federal Pest Control Products Act.</i>
Duties	Conduct regulatory ecological risk assessments for pesticides and provide departmental science and policy advice regarding registration of pesticide products. Lead ecological assessments and act as key departmental representative in discussions with industry and other government agencies relating to the registration of tributyltin and other ship antifoulants Lead ecological assessments and act as key departmental representative in discussions with industry and other government agencies relating to lumber anti-sapstain chemicals.

Forest Products Entomologist

Dates	January 1980 - October 1982
Employer	Forintek Canada Corp., Ottawa, Canada
Mandate	<i>Forintek Canada Corp. is a private-sector research and consultation company carrying out research and development work related to forest products.</i>
Duties	Responsible for the entomological program of Forintek's Forest Products Protection Division, including planning and implementation of research program, securing of funding, supervision of technical staff, and reporting; provide advisory services and present technical courses. Research included identification of potential replacements for pentachlorophenol-based wood preservatives.

Chad

CV of Abderaman Mahamat Abderaman

CURRICULUM VITAE

MARITAL STATUS:

Name: Abderaman
First name: Mahamat Abderaman
Dates and birthplace: 10/08/68 in Abéché
Marital status: Married
Nationality: Chadian
Function: Coordinator of the POPs Project

STUDIES SUPERIEURES EFFECTUEES A:

- Agronomic National Institute of El-Harrach in Algiers, Algeria
- Faculty of Law and of Economic Sciences of Limoges, France

DIPLOMAS OBTAINED:

- Bsc d' Etat in Agronomy: 1996
- DESS in the Environment law: 2003

PROFESSIONAL EXPERIENCES:

- Coordinator of the Project: To develop and support a national programme integrated of management of the chemicals and waste into Chad
- Coordinator of the Network of Exchange for Chemical Information (REIC) cofinanced by the UNEP and the EPA of the USA.
- Since May 06, 2003: Coordinator of the Project POPs (Activities of capacities building aiming at facilitating the application shortly of Stockholm Convention on the persistent organic pollutants).
- Focal Bridge Chemical Substances
- Since March 2002: Representative of the Management of the Forests and the Environmental protection and member of the Technical Unit urgently of STEE.
- Since August 2001: Coordinator of the National Profile to evaluate the national capacities of management of chemicals
- 2001 - 2003: Attending the National Plan of Action for the Environment, UNEP
- Since March 2001: Corresponding national and member of the Technical Working Group on the World Evaluation of Mercury, UNEP
- 2001 - 2003: Head of Division Environmental protection/Direction of the Forests and the Environmental protection.
- Since October 2000: Secretary of the National Technical Committee in charge of the monitoring and the evaluation of the International Conventions on the persistent organic pollutants, pesticides, chemicals and dangerous waste for human health and the environment (CTN/POPs).

WORKSHOP/CONFERENCE/SEMINAR:

Rotterdam Convention:

- From September 30 to 04 October, 2002: Ninth session of the intergovernmental committee of negotiation charges with juridically working out an international instrument

forcing suitable to ensure the application of the procedure of preliminary assent with full knowledge of the facts haven certain chemicals and dangerous pesticides being the subject of an international trade, Bonn, Germany.

- From the 22 to 27 October, 2001: workshop on the Rotterdam Convention: seek solutions and substitution of the chemicals and dangerous pesticides for human health and the environment, Dakar, in Senegal.

SAICM, PrepCom:

- From the 15 to 18 March, 2005: Second African regional Meeting on the development of a strategic Approach of the international management of the chemicals, Saly, Senegal
- From 04 to 08 October, 2004: Second session of the preparatory committee of the Development of a Strategic Approach for the International Management of the Chemicals SAICM, PrepCom2) Nairobi, Kenya
- From 24 to 26 Mai 2004: African regional workshop on the development of the Strategic Approach of the Management of the Chemicals, Abuja, Nigeria.
- From 9 to 13 November, 2003: First Meeting of the Preparatory Committee of the strategic approach of the international management of the chemicals (PrepCom1 SAICM) which is held in Bangkok, in Thailand TAX

FISC:

- From 1st to 7 November, 2003: Fourth session of the intergovernmental forum on chemical safety, in Bangkok, Thailand.

BAT/BEP:

- From 11 to 13 April, 2005: Regional consultation for the African countries on the directives on the Best available Technical and Better Environmental Practices BAT/BEP, Nairobi, Kenya

REIC:

- From 17 to 19 May, 2004: Sous-régional seminar on the Network of Workshop of information on the Chemicals (REIC) of the 13 to 14 2004 and Workshop of training on setup the Web pages using ESTIS held in Yaounde, Cameroun, PNUE and EPA
- From the 12 to 16 January, 2004: Workshop of training on the access to chemical training "Network of Chemical Exchange of information (REIC), N'Djaména, Chad, organized by UNEP/USEPA

Synergies of the International agreements:

- From March 30 at 2 April, 2004: Workshop defining the themes on synergies in the international agreements for the capacities building in the field of the management of the chemicals, in Geneva, in Switzerland, organized by the UNITAR/IOMC.

Heavy metals:

- From 22 to 25 November, 2004: Regional workshop of sensitizing on pollution by mercury a world problem which should be solved, Dakar, Senegal, organized by UNEP
- From 16 to 17 March, 2004: Sous-regional Conference on the elimination of the lead of the gasoline in Power station and West Africa, Douala, Cameroun, organized by the World Bank and the PNUE.

- From 09 to 13 September, 2002: Conference on the Moniale Evaluation of Mercury in Geneva, Switzerland.

Environmental impact study:

- From 24 to 29 June, 2002: Workshop on the Environmental impact study on the electric works Libreville, Gabon

Stockholm Convention:

- From 2 to 6 May, 2005 First Conference of the Parts to Stockholm Convention on the persistent organic pollutants, Punta del Este, Uruguay
- From February 28 to 4 March, 2005: Regional workshop on the capacities building of the focal points of the Stockholm Convention, Marrakech, Morocco
- From 22 to 26 February, 2004: Sous-régional workshop on the inventories of dioxanes and furans, in Nouakchott, Mauritania, organized by the PNUE
- From 9 to 13 February, 2004: Workshop on the search for the solutions of the replacements in POPs of which the use is forbidden/restraint, Cotonou, Benign, organized by the ONUDI.
- From 14 to 18 July, 2003: 7th Session of the Intergovernmental Committee of Negotiation of the Stockholm Convention on the persistent organic pollutants, in Geneva, Switzerland.

National plan of Action for the Environment

- From 1st at 19 October, 2001: study trip within the framework of the National Plan of Action for Environment (PNAE) Burkina Faso, Mali and Benign.
- From February 18 at April 02, 2002: Training in environment management held in N'Djamena, Chad.

Basel Convention:

- From 25 to 29 October, 2004: 7th Conference of the Parties under the Basel Convention of on the control of the transbordaring movements of dangerous waste and of their elimination, Geneva , Switzerland
- From 08 to 12 January, 2001: Continental conference on the Basel Convention of relating to dangerous waste like their elimination Rabat, Morocco.

OTHERS:

- April 1997: Training course at the Management of Technological and Agronomic Research Center at
- Year 1997 - 1998: Professor of the Lycee of Moundou, part-time lecturer of Physical sciences and mathematical.
- Year 1998 - 1999: Professor at the Lycee of Freedom: , part-time lecturer of physical sciences and biology
- Secretary in charge of the environment of Chadian Association for the Promotion of Water and the Environment
- Member of the National Association of the Technicians Biologists of Chad (ASNATEBT)
- Knowledge in data processing: Winword, Excel, QPro, Statitcf...

China

CURRICULUM VITAE OF JIANXIN HU

Nationality: P. R. China
Date of Birth: 06.10.1962
Status: Male
Title: Professor, Director of Environmental Process Division, College of Environmental Sciences, Peking University
Telephone: +86 10 62756593 **Fax:** +86 10 62751927
Postal Address: College of Environmental Sciences, Peking University, Beijing 100871, P. R. China
Email: jianxin@pku.edu.cn

PROFILE

He holds a Bachelor and a Master degree in Chemistry at the Peking University in 1983 and 1986. Since then, he works in Peking University as a faculty. Currently, he is a Professor and Director of Environmental Process Division, College of Environmental Sciences; and has involved in many research activities about controlling/management of POPs and phasing out Ozone Depleting Substances under the Montreal Protocol. His special research areas includes source of POPs and Halocarbons, technical and economic assessment of controlling of POPs and Halocarbons, master plans for controlling POPs and Halocarbons.

Currently, he is the team leader for the project to develop the National Plan for Implementation the Stockholm Convention on Persistent Organic Pollutants in China. He is also the team leader for the German-China project to develop long-term management strategy for controlling HCFC-22 in China.

During 1997-2004, he was a Member of UNEP Solvents, Coating and Adhesives Technical Options Committee (STOC). He participated in to draft the STOC 1998 and 2002 assessment reports. Since 2005, he is a Member of UNEP Chemicals Technical Options Committee. During 2003-2005, he, as one of the Lead authors for IPCC/TEAP, drafted the special report on safeguarding the ozone layer and the global climates system.

During 1993-1995, he, as a visiting scholar, researched on Nitro-Polycyclic Aromatic Hydrocarbons and Polycyclic Aromatic Hydrocarbons in Dept. of Environmental Sciences and Engineering, The University of North Carolina at Chapel Hill, North Carolina, USA with Prof Richard Kamens.

Previously, he worked as Assistant professor within Peking University during 1986-1992 on researching of controlling acid deposition in China.

His team was awarded the 2004 "Special Gold Award of Ozone Layer Protection contribution Award of China" by Chinese government; and was awarded USEPA Stratospheric Ozone Protection Awards in 2005. As the team leader, he contributed a lot to the achievements; one of the achievements in the appreciation summary drafted by USEPA says ".....and Prof. Jianxin Hu have actively supported and served in leadership roles in UNEP, TEAP, EEAP and the MLF, and....."

KEY QUALIFICATIONS:

Experience in the areas of technical and economical assessment on controlling / phasing out of harmful chemicals, study on chemistry of Polycyclic Aromatic Hydrocarbons, and design master plan / strategy for controlling and phasing out harmful chemicals.

EDUCATION

1983 – 1986 M. S. Chemistry, Department of Technical Physics, Peking University, Beijing, P. R. China.

1979 – 1983 B. S. Chemistry, Department of Technical Physics, Peking University, Beijing, P. R. China.

WORK EXPERIENCE

1986 – Present Assistant Professor\\Associate Professor\\Professor, College for Environmental Sciences, Peking University, Beijing, P. R. China

1993 – 1995 Visiting Scholar, Dept. of Environmental Sciences and Engineering, The University of North Carolina at Chapel Hill, North Carolina, USA

TEAP AND IPCC ACTIVITIES¹

Member of UNEP Chemicals Technical Options Committee during since 2005

Member of UNEP Solvents, Coating and Adhesives Technical Options Committee. during 1997-2004.

Lead authors for IPCC/TEAP special report on safeguarding the ozone layer and the global climates system during 2003-2005

¹ TEAP, UNEP Technical and Economical Assessment Panel. IPCC, Intergovernmental Panel for Climate Change

MAIN OUTPUTS OF RESEARCH ACTIVITIES

Main Outputs of Research activities including:

1. Drafted "Strategy for Phaseout Pesticidal POPs in China (For Implementation the Stockholm Convention on Persistent Organic Pollutants)"
 - As the Team leader of the national expert group (project finished in 2004)
2. Drafted "The CFC Accelerated Phaseout Plan in China"
 - As the Team leader of the national expert group (project finished in 2004)
3. Developed "Strategy for ODS Substitute Development in China"
 - As the Team leader of the national expert group (project finished in 2002)
4. Drafted "Strategy for Phaseout CFCs in China Domestic Refrigeration Sector"
 - As the Coordinator of the national expert group (project finished in 2002)
5. Researched on Environment Impact of Trifluoroacetates (China National Science Foundation)
 - As the Coordinator of the working group (project finished in 2002)
6. Drafted "Sector Plan for Phaseout CFC-11 in China Foam Sector"
 - As the Team leader of the national expert group (project finished in 2001)
7. Drafted "Strategy for Phaseout CFCs in China Industrial and Commercial Refrigeration Sector"
 - As the Team leader of the national expert group (project finished in 2001)
8. Drafted "Phasing out ODS Strategy for Solvent Sector in China"
 - As the Team leader of the national expert group (project finished in 2000)
9. Drafted Update of Country Program for ODS Phaseout in China
 - As a Key National expert (project finished in 2000)
10. Drafted Sector Plan for Phasing out CFC-11 in China Tobacco Sector
 - As the Team leader of the national expert group (project finished in 2000)
11. Drafted "Sector Plan for Phaseout CFC Production in China"
 - As the Team leader of the national expert group (project finished in 1999)
12. Drafted "Phaseout Plan for Halon in China Fire Fighting Sector"
 - As a Key National expert (project finished in 1997)

Cote d'Ivoire
CURRICULUM VITAE of Pr. KOUADIO Kouamé Georges

Professor KOUADIO Kouamé Georges, University's Master of Conferences
Specialist in Physic and chemistry of atmosphere,
Research and Formation in environmental sciences

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1. PERSONAL INFORMATION

First name : KOUADIO
Surname: Kouamé Georges
Date and place of birth: 13/09/1961 at Dimbokro, Republic of Cote d'Ivoire
Nationality: Ivorian, **Marital status:** Married, 1 Child
Position: Lecturer, Head of Physical Sciences Dept
Address: C/O Ecole Normale Supérieure, 08 BP 10 Abidjan 08, Cote d'Ivoire
Tel: +225 22 48 88 55 **Mob. :** +225 07 764 729
Email : adrohgk@yahoo.fr or georges.kouadio@laposte.net

Association affiliations

- **Head of SOACHIM CI secretariat (West African Chemical Society – Côte d'Ivoire Section) during 2000-2005**
- **Head of GNO SOS FORETS secretariat during 1998-2005**

2. QUALIFICATIONS

July 1991 **Doctorate, (equiv. PhD Degree)**
Physical chemistry in the Atmosphere
 Paul Sabatier University, Toulouse III- FRANCE

June 1987 **D.E.A. (post graduate diploma, prerequisite for Doctorate candidates)**
Environmental physical chemistry
 Paul Sabatier University, Toulouse III- FRANCE

October 1986 **Maîtrise, Physical and Chemistry (equiv Master's Degree)**
 University of Abidjan, Cocody – CÔTE D'IVOIRE

June 1985 **Licence, Physical and Chemistry Sciences (Equiv. Bachelor's Degree)**
 University of Abidjan, Cocody – CÔTE D'IVOIRE

3. KEY COMPETENCIES

- **Chemist Analyst**
 - **Analysis and dosage of major atmospheric pollutants with high performance liquid chromatography (HPCL)**
 - **Realization of techniques or methods for atmospheric pollutants measurements**
 - **Use of some apparatus for atmospheric pollutants measurements during field campaigns**
- **Formative**
 - **In environmental sciences course (atmospheric chemistry , pollution in different ecosystems, quality of waters, climate change, sustainable development, interaction ocean – atmosphere /parameters of oceanic carbon , biogeochemical cycle of elements as carbon, nitrogen and sulfur)As consultant in cabinets Terrabo and Enval for environmental questions**

CURRICULUM VITAE of Pr. KOUADIO Kouamé Georges

• **Research activities**

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➤ **Main activities in Program Approach Multidisciplinary of Monsoon African (AMMA Program) in collaboration with another scientific teams in Africa and in Europe**

Focus 1: EGEE project, the oceanic parts of AMMA Program / I am concerned by the study of system of oceanic carbon parameters in the Golf Guinea sector.

The overall objective is to quantify the source of CO₂ in the Gulf of Guinea Ocean and its variability on seasonal and inter-annual time scale but also to get a better understanding of the processes governing its variability in order to be able to predict the evolution of the CO₂ source over time. The data collected during the project is to enable us to refine the existing climatology to constrain atmospheric inversion and to validate ocean carbon models

Focus 2: ORE /IDAF project – Atmospheric chemistry part of AMMA program / I am interested to precipitation chemistry and atmospheric depositions. The main objective is to analyze the evolution tendency of chemical composition of precipitations, aerosols, and atmospheric gas by identifying the influence of seasonal sources governing the atmospheric dry and wet deposition in tropical areas. The study of physical and chemical process regulating those depositions will be made and the major process of deposition parameterized for numeric models at regional and global scales.

3. MISSIONS & CONFERENCES

- 14-18 Febr. 2005 *Regional Ecohealth Course – Seminar on the theme : Ecosystem approach and health trough the transmissible diseases and those linked to environmental pollution , Cotonou (Bénin)*
- 25-29 Oct. 2004 *Member of scientific committee for the 1st International journey of Chemical at Abidjan on the theme : Chemistry and sustainable development in west Africa.*
- 10-12 May, 2004 *International Science Symposium on the Ocean in a high-CO₂ World, UNESCO, Paris - FRANCE*
- 24 Apr- 24 July. 2004 *Training on the 1D Biogeochemistry model for temporal variability of Air - Sea CO₂ flux follow-up - Laboratory of Biogeochemistry & Marine Chemistry (LBCM), Paris FRANCE*
- 12 -23 April 2004 *Processes, pattern and ecosystem modelling in semi-arid savannas: the use of flux measurements (Workshop), Skukuza rest camp of the Kruger National Park, SOUTH AFRICA*
- 08 - 21 Dec. 2003 *Training on the 1D Biogeochemistry model for temporal variability of Air - Sea CO₂ flux follow-up - Laboratory of Biogeochemistry & Marine Chemistry (LBCM), Paris FRANCE*
- 1st - 08 Nov. 2003 *COPROMAPH and AMMA Programmes Committee's joint Workshop, Cotonou – BÉNIN*
- 1st - 12 Sept. 2003 *1st AMMA Summer School, Centre for Atmospheric Research of Campistrous, FRANCE*

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- 12 Apr-12 July 03 *Training at Laboratory for Oceanographic Dynamics and Climatics (LODYC) and Laboratory of Biogeochemistry & Marine Chemistry (LBCM), Paris Jussieu, FRANCE*
- 16 Feb-16 May 02 *Training at Laboratory for Oceanographic Dynamics and Climatics (LODYC) and Laboratory of Biogeochemistry & Marine Chemistry (LBCM), Paris Jussieu, FRANCE*
- 1st - 15 Sept. 2002 *Consultant and Researcher for Cabinet TERRABO on Environmental Impact as part of Roads and Transportations facilities project, San Pedro Port Zone, CÔTE D'IVOIRE*
- 29 July - 03 Aug. 02 *Participant in the 8th Annual Session of the West African Chemistry Society (SOACHIM/WACS), Ouagadougou, BURKINA - FASO*
- 06 Aug. - 11 Aug. 01 *Participant in the 7th Annual Session of the West African Chemistry Society (SOACHIM/WACS), Bamako, MALI*
- 23 Jul-25 Aug. 2000 *EQUALANT Campaign 2000 - THALASSA Ship, IFREMER
Participated in the research works on the variability of oceanic circulation and Ocean-Atmosphere interactions in Equatorial Atlantic*
- 27 May-18 Jun. 2000 *Abdus Salam International Centre for Theoretical Physics, Trieste - ITALIA
Summer school on the interactions between Chemistry and the Climate*
- 16 - 21 Apr. 2000 *Sub Region Workshop for PCBs and Dioxins / Furans identification and management, Yaoundé- CAMEROUN*
- 15-18 Dec. 1997 *PNUE - FISC, Sub Regional Workshop for sensitization on Persistent Organic Pollutants (POPs) Bamako, MALI*
- Mars - April 1997 *Experiments on household fires: Measurements of nitrogen and organic gaseous compounds generated by domestic wood fires, NIGER*
- December 1995 *Experiments on the evolutions of reducing agents and the physicochemical characteristics of artificial water damming. Case study on hydroelectric dams of Ayamé, Taabo and Buvo, CÔTE D'IVOIRE*
- Jan. - Nov. 1995 *Centre for Atmospheric Research of Campistrous at Lennemezan, Honour Scholar of AUPELF- UREF
Training on measurement techniques for nitrogenous compounds flux by fertilized agro system*
- 27 Aug.-Sept. 1995 *Experiments on matter and energy interchange between hydroelectric dams and the atmosphere, GUYANE*

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4. PUBLICATIONS

- [1] *Study of monoacids in the air of the Mayombe forest (Congo): role of the forest as source or sink*
Journal of the Atmospheric Chemistry 12: 367-380, 1991
- [2] *Precipitation Chemistry in the Mayombe forest of Equatorial Africa.*
Journal of Geophysical Research, Vol.97, N°D6, pp 6195-6206, April 30, 1992
- [3] *Emissions from the combustion of bio fuels in western Africa*
Biomass Burning and Global Change . MIT Press, Cambridge, Mass ., 1996 (In J.S. Levine)
- [4] *Long - term greenhouse gas emissions from hydroelectric reservoirs in tropical forest regions*
Global biogeochemical cycles, vol.13, N°2, pages 503-517, June 1999
- [5] *Physical chemistry and bacteriological checks of drinking water in sample cities, COTE D'IVOIRE*
SOACHIM bulletin (2000)-002, pp 6 -17
- [6] *Chemical and hydro-facieses quality of well water used in shantytowns in Abidjan*
SOACHIM bulletin (2000)-002, pp 32- 43
- [7] *Identification of chemical pollutions of the water in the surrounding areas of the rubbish dump of Akouédo*
Revue Sciences et Technologie, ENS -CI Série A (2001),pp 34-31
- [8] *Study of compound carbon and nitrogen emissions induced by domestic wood fires in Niger*
Sécheresse (2002)
- [9] *The deep equatorial currents in the eastern Equatorial Atlantic Ocean*
Geophys. Res. Lett. & GRL CLIVAR/TAV Special Issue, 2002.
- [10] *Study of the chemistry of rains in humid savannas of Lamto, SOACHIM Journal, Vol 14, 2003*
- [11] *Emission of nitric oxide from agricultural soils at rural site at the atmospheric centre of Campistrous (France), SOACHIM Journal, Vol.15, 2003*
- [12] *Aqueous phase chemistry of the aldehyde-organic acid couple in the atmosphere of Mayombe forest (CONGO)SOACHIM Journal, Vol. 17, 2004*

LANGUAGES:

	<i>Read</i>	<i>spoken</i>	<i>Written</i>
• <i>French</i>	<i>Excellent</i>	<i>Excellent</i>	<i>Excellent</i>
• <i>English</i>	<i>Acceptable</i>	<i>Acceptable</i>	<i>Acceptable</i>

Certification:

I declare that disclosed information is correct and correspond sincerely to my qualification and experience.

Pr. KOUADIO Georges 

Czech Republic

Prof. RNDr. Ivan H O L O U B E K, CSc.

RECETOX - TOCOEN & Associates
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E-mail: holoubek@recetox.muni.cz; tocoen@tocoen.cz; <http://recetox.muni.cz/>; <http://www.tocoen.cz/>

CURRICULUM VITAE

Date of birth: April 11, 1951
Private address: Kuršova 1, 635 00 Brno, Czech Republic, phone: + 420 5 46 21 25 43
Nationality: Czech
Civil status: married

Educational training:

1975 - Organic Chemistry, Purkyně University, Brno, CR
1977 - MSc. - Analytical Chemistry, Purkyně University, Brno, CR
1987 - PhD. - Ecology - Charles University, Praha, CR
1990 - Assoc. Prof. - Environmental Sciences, Charles University, Praha, CR
1998 - Prof. - Environmental Chemistry, Technical University Brno, CR

Employment:

1976 - Water Research Institute, Brno, technical assistant
1977 - Department of Organic Chemistry, Purkyně University, Brno, Assistant Professor
1983 - Department of Environmental Studies, Purkyně University (from 1990 Masaryk University)
1990 - Head of Department of Environmental Studies, Masaryk University, Brno (from 1995 - Department of Environmental Chemistry and Ecotoxicology)
From 1993 - Director of TOCOEN, s.r.o.
From 1994 - Director of RECETOX (Research Centre for Environmental Chemistry and Ecotoxicology, Masaryk University Brno, CR)
1995 - Project Manager of EU PHARE Project EU/Air/21
1997 - 1998 - Expert for Risk Assessment, PHARE Programme „Air Pollution Monitoring of Slovakia“, EU/Air/22
1997 - Co-ordinator of Consortium RECETOX - TOCOEN & Associates
2001 - 2002 Regional co-ordinator of UNEP Chemicals/GEF Project "Regionally-based assessment of Persistent Toxic Substances - Region 3 - Europe"
2002 - 2004 - National Co-ordinator of UNIDO/GEF Project "Enabling activities to facilitate early action in the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs Convention) in Czech Republic"
2003-2005 - UNIDO/GEF Projects "Enabling activities to facilitate early action in the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs Convention) in Armenia, Croatia, Egypt, Hungary, Macedonia - training courses, development of NIP"

Qualification: Environmental Chemist

Language skills: English, Russian

Educational topics:

Environmental Chemistry, Ecotoxicology, Chemical Ecotoxicology, Risk Analysis, Monitoring Systems, Environmental Impact Assessment

Research activities:

The fate of persistent organic pollutants in the environment, environmental impact assessment, risk analysis - ecological risk assessment

Publication:

25 books or book chapters, 8 textbooks, over 750 scientific papers, conference contributions, research and technical reports

Grants 1993-2005:

USA (1), Canada (1), EC (3), Belgium (1), Ministry for Environment Czech Republic (15), Ministry for Education (15), Czech Grant Agency (6), UN (2)

Scientific visits:

1988 - 2004 - more than 100 short time stays (5 days - 4 month)

Memberships in scientific organisation and institutions:

UN/ECE - Task Force on Persistent Organic Pollutants, Task Force on Emission Inventory, Ad Hoc Preparatory Working Group on Persistent Organic Pollutants, Task Force on Measurements and Modelling
OSN UNEP/IFCS - POPs Protocol - regional experts group, regional co-ordinator of UNEP/GEF Regionally Based Assessment of PTS Project
Society for Risk Analysis, SETAC - Society of Environmental Chemistry and Toxicology, SECOTOX - Society of Ecotoxicology and Chemical Safety (member of CREC regional committee)
Chairman of Czech Society for Environmental Chemistry and Ecotoxicology

Selected papers:

1. **Holoubek, I., Kočan, A., Holoubková, L., Hilscherová, K., Kohoutek, J., Falandysz, J., Roots, O. (2000):** Persistent, Bioaccumulative and Toxic Chemicals in the Central and Eastern European Countries - State-of-the-Art Report. The 2nd version. TOCOEN REPORT No. 150a, May 2000. RECETOX - TOCOEN & Associates, Brno, Czech Republic. Internet: <http://recetox.chemi.muni.cz/>.
2. **Holoubek, I. (2002):** Polychlorinated biphenyls (PCBs) world-wide contaminated sites. TOCOEN, s.r.o., Brno, TOCOEN REPORT No. 170, May 2000. Internet: <http://recetox.chemi.muni.cz/>
3. **Holoubek, I., Čáslavský, J., Šeda, Z., Vančura, R., Helešic, J., Benedik, J., Kočan, A., Petrik, J., Chovancová, J., Bíliková, K., Kořínek, P., Boháček, Z., Borkovcová, I., Holoubková, I., Dostál, P., Houšková, L., Mikeš, C., Bezačinský, M., Neubauerová, L., Matoušek, M., Mikulíková, R., Zemek, A., Hájšlová, J., Vávrová, M. (1994):** Project TOCOEN (Toxic Organic Compounds in the ENvironment). The Fate of Selected Organic Compounds in the Environment, Part XX. The Pollution of Environment in Czechoslovakia by Selected Organic Pollutants. In: Environmental Contaminants in Eastern Europe. Geochemical and Ecotoxicological Case (Eds. E. Heinisch, A. Kettrup, S. Wenzel-Klein), ECOMED, Landsberg 1994, Ch. 7.1., 302-315.
4. **Holoubek, I., Čáslavský, J., Nondek, I., Kočan, A., Pokorný, B., Leniček, J., Hájšlová, J., Kocourek, V., Matoušek, M. (1993):** The Compilation of Emission Factors for Persistent Organic Pollutants. Prepared for Government Canada, TOCOEN MU Brno, March 1993, 200 p.
5. **Váňa, M., Pacl, A., Pekárek, J., Smitka, M., Holoubek, I., Honzák, J., Kliegrová, S., Hruška, J. (1995):** Quality of the natural environment in the Czech Republic at the regional level. ČHMÚ Praha.
6. **Heinisch, E., Kettrup, A., Holoubek, I., Matoušek, M., Podlešáková, E., Hecht, H., Wenzel, S. (1997):** Persistente organische Verbindungen in Nahrungsketten 7 von Bayern und Tschechien. Teil 1: Terrestrische Systeme. GSF-Berichte 10/97, Munich, FRG, 371 s.
7. **Heinisch, E., Kettrup, A., Holoubek, I., Langstädler, M., Podlešáková, E., Svobodová, Z., Wenzel, S. (1997):** Persistente organische Verbindungen in Nahrungsketten 7 von Bayern und Tschechien. Teil 2. Aquatische Systeme. GSF-Berichte 11/97, Munich, FRG, 318 s.
8. **Heinisch, E., Kettrup, A., Holoubek, I., Wenzel, S. (1997):** Persistente organische Verbindungen in Nahrungsketten 7 von Bayern und Tschechien. Teil 3: Persistente organische Verbindungen in Unteren Teil der Troposphäre in Bayern und Tschechien – Zusammenhänge von Emission und Kontamination. GSF-Berichte 12/97, Munich, FRG, 189 s.
9. **Shatalov, V., Malenichev, A., Berg, T., Larsen, R., Holoubek, I., Milukaitė, A.-R., Afinogenova, O., Rozovskaya, O. (2000):** Investigation and assessment of POP transboundary transport and accumulation in different media. EMEP Report 4/2000, MSC-EAST, Moscow, Russia, June 2000, 90 s.
10. **Holoubek, I. (2000):** A Eastern European Perspectives. In: Persistent Organic Pollutants (POPs): Environmental Behaviour and Pathways of Human Exposure. Kluwer Academic Publishers, Ch. 9, 233-266.
11. **Holoubek, I. (2000):** PCBs and PCDDs/Fs in the Czech Republic and Central and Eastern European Countries. Proceedings of the Subregional Workshop on Identification and Management of PCBs and dioxins/furans. Dubrovnik-Cavtat, Croatia, 29 May - 01 June, 2000. IOMC Inter-organization programme for the sound management of Chemicals. UNEP Chemicals, Geneva 2000, 47-72.
12. **Shatalov, V., Malenichev, A., Vulykh, N., Berg, T., Mano, S., Holoubek, I., Milukaitė, A.-R., Afinogenova, O. (2001):** Assessment of POP transport and accumulation in the environment. EMEP Report 4/2001, MSC-EAST, Moscow, Russia, June 2001, 131 s.
13. **MacDonell, M., Holoubek, I. (2001):** Methods and tools for assessment and management of environmental risks (Report of the working group on environmental risk assessment methods and tools). In: Assessment and Management of Environmental Risks: Methods and Applications in Eastern European and Developing Countries. Kluwer Academic Publishers, 143-154, 2001.
14. **Holoubek, I., Dušek, L., Machala, M., Čupr, P., Bláha, K. (2001):** Project IDRIS - Ecological Risk Assessment - regional approaches. In: Assessment and Management of Environmental Risks: Methods and Applications in Eastern European and Developing Countries. Kluwer Academic Publishers, 283-298.
15. **Váňa, M., Holoubek, I., Pacl, A., Pekárek, J., Smrčková, V., Machálek, P., Helešic, J., Šeda, Z., Adamec, A., Janouch, M., Honzák, J., Ansorgová, A., Kohoutek, J., Holoubková, I., Shatalov, V., Dutchak, S., Fottová, D., Hruška, J., Hofman, J., Anděl, P. (2001):** Quality of the Natural Environment in the Czech Republic at the Regional Level. Results of the Koštice Observatory. ČHMÚ Praha, 189 p., ISBN 80-85813-88-2.
16. **Holoubek, I., Dušek, L., Mátllová, L., Čáslavský, J., Patterson, D. et al. (1995):** The fate of selected organic compounds in the environment Part XXVI. The contents of PCBs and PCDDs/Fs in human fat in Czech and Slovak Republics. Proceedings DIOXIN '95 - Organohalogen compounds, Vol 26., 257 - 559.
17. **Holoubek, I., Čáslavský, J., Helešic, J., Kočan, A., Petrik, J., Chovancová, J., Drobná, B., Kořínek, P., Boháček, Z., Holoubková, I., Kaláčková, L., Kaláček, J., Vančura, R., Šeda, Z., Dušek, L., Mátllová, L., Kohoutek, J., Štaffová, K., Zemek, A. (1996):** Project TOCOEN. Arch. Environ. Protect., 3 - 4, 9-34.
18. **Holoubek, I., Čáslavský, J., Kořínek, P., Štaffová, K., Kohoutek, J., Hrdlička, A. (1996):** Project TOCOEN - The fate of selected organic compounds in the environment. Part XXVIII. Levels of PAHs and some halogenated POPs in ambient air in Czech Republic. Polycyclic Aromatic Compounds 9, 159-167.
19. **Holoubek, I. (1996):** Persistent organic pollutants - the state of contamination of ambient air in Central Europe. Possible sources and effects. Arch Toxicol (Suppl 18), 381-390 (1996).
20. **Holoubek, I., Tříška, J., Cudlín, P., Čáslavský, J., Schramm, K.-W., Kettrup, A., Kohoutek, J., Čupr, P., Schneiderová, E. (1998):** Project TOCOEN (Toxic Organic Compounds in the Environment), Part XXXI. The occurrence of POPs in high mountain ecosystems of the Czech Republic. Toxicol. Environ. Chem., 66, 17-25.
21. **Holoubek, I., Čupr, P., Cremonini, M., Lombardo, P., Stenhouse, I., Kočan, A. (1998):** PHARE Project EU/93/AIR/22 local studies of air quality in the cities of Bratislava and Košice, national needs assessment of air pollution; ambient air quality monitoring and human risk assessment. Meteorological Journal. 1(2), 3-15.

22. Holoubek, I., Tříska, J., Cudlín, P., Schramm, K.-W., Kettrup, A., Jones, K. C., Schneiderová, E., Kohoutek, J., Čupr, P. (1998): The occurrence of PCDDs/Fs in high-mountain ecosystems of the Czech Republic. *Organohalogen Compounds* 39, 137-144.
23. Holoubek, I., Machala, M., Štaffová, K., Helešic, J., Ansorgová, A., Schramm, K.-W., Kettrup, A., Giesy, J. P., Kannan, K., Mitera, J. (1998): PCDDs/Fs in sediments from Morava river catchment area. DIOXIN 98, Stockholm, Sweden, 17-21/08/98 (poster). *Organohalogen Compounds*. Vol. 39, 261-266.
24. Watack, H. W., Bakker, D. J., Braudt, I. J., Brostrom-Lundén, E., Brouwer, A., Bull, K. R., Gough, C., Guardans, R., Holoubek, I., Jansson, B., Koch, R., Kuylenstierna, J., Lecloux, A., Mackay, D., McCutcheon, P., Mocarelli, P., Taalman R. D. F. (1998): Controlling persistent organic pollutants – what next? *Environ. Toxicol. Pharmacol.* 6, 143-175.
25. Holoubek, I. (1999): Persistent bioaccumulative and toxic chemicals in Central and Eastern Europe: Levels and Risks. *Crit. Revs. in Anal. Chem.*, 29, 179-185 (1999).
26. Holoubek, I. (2000): Persistent, Bioaccumulative and Persistent chemicals in Central and Eastern Europe - levels and risks. *Centr. Eur. J. Publ. Hlth.* 8, 3-4.
27. Holoubek, I., Ansorgová, A., Kohoutek, J. (2001): Persistent Organic Pollutants (POPs) on the regional level in the Czech Republic – 12 years of measurements. Symposium 2000 – EUROTRAC-2. Transport and Chemical Transformation of Pollutants in the Troposphere. Garmisch-Partenkirchen, 27-31/03/2000. Proceedings from the EUROTRAC Symposium 2000, P. M. Midgley, M. Reuther, M. Williams (Eds.), Springer Verlag Berlin, Heidelberg.
28. Holoubek, I., Kočan, A., Holoubková, I., Hilscherová, K., Kohoutek, J., Falandysz, J., Roots, O. (2000): Persistent, Bioaccumulative and Toxic Chemicals in the Central and Eastern European Countries - State-of-the-Art Report. *Organohalogen Compounds* 46, 384-386.
29. Holoubek, I., Kohoutek, J., Machálek, P., Dvořáková, I., Bretschneider, B., Mitera, J., Bureš, V., Fara, M. (2000): The emission inventory of POPs (PAHs, PCBs, PCDDs/Fs, HCB) in the Czech Republic. *Organohalogen Compounds* 46, 51-55.
30. Holoubek, I., Ansorgová, A., Kohoutek, J., Kořínek, P., Holoubková, I. (2000): The regional background monitoring of POPs (PAHs, PCBs, OCs) in the Czech Republic. *Organohalogen Compounds* 46, 387-390.
31. Holoubek, I., Klán, P., Ansorgová, A., del Favero, D. (2000): Photochemistry of PBT compounds in ice - new potential source of ice contamination? *Organohalogen Compounds* 46, 228-231.
32. Klán, P., Ansorgová, A., Del Favero, D., Holoubek, I. (2000): Photochemistry of chlorobenzene in ice. *Tetrahedron Letters*, 41, 7785-7789.
33. Holoubek, I., Kořínek, P., Šeda, Z., Schneiderová, E., Holoubková, I., Pacl, A., Tříska, J., Cudlín, P. (2000): The use of mosses and pine needles to detect atmospheric persistent organic pollutants at the local and regional scale. *Environ. Pollut.* 109, 283-292.
34. Holoubek, I. (2000): Advances and Trends in Environmental Chemistry - The Case of Persistent, Bioaccumulative and Toxic Compounds (PBTs) in the Environment. *Chem. Listy* 94, 771-775.
35. Holoubek, I., Kočan, A., Holoubková, I., Hilscherová, K., Kohoutek, J., Falandysz, J., Roots, O. (2001): Persistent, Bioaccumulative and Toxic compounds in the Central and Eastern European countries - The State-of-the-Art Report – human exposure. *Arch. Industr. Hyg. Toxicol.*, 52(2), 181-215.
36. Holoubek, I., Kočan, A., Holoubková, I., Hilscherová, K., Kohoutek, J., Falandysz, J., Roots, O. (2001): Persistent, Bioaccumulative and Toxic compounds in the Central and Eastern European countries – The State-of-the-Art Report – hot spots. *Arch. Industr. Hyg. Toxicol.*, 52(2), 239-251.
37. Klán, P., del Favero, D., Ansorgová, A., Klánová, J., Holoubek, I. (2001): Photodegradation of halobenzenes in water ice. *Environ. Sci. Pollut. Res.* 8, 195-200.
38. Holoubek, I., Ansorgová, A., Shatalov, V., Dutchak, S., Kohoutek, J. (2001): Regional background monitoring of PBT compounds. The comparison of the results from measurements and modeling. *Environ. Sci. Pollut. Res.* 8, 201-211 (2001).
39. Holoubek, I., Ansorgová, A., Kohoutek, J., Holoubková, I., Váňa, M., Pacl, A., Pekárek, J., Smrčková, V. (2001): Regional background monitoring of persistent, bioaccumulative and toxic compounds in Central Europe - I: Overview of 12 years of TOCOEN Project. *Meteorological Journal*, 4 (2), 3-18.
40. Holoubek, I., Shatalov, V., Dutchak, S. (2001): Regional Background Monitoring of Persistent, Bioaccumulative and Toxic Compounds in the Central Europe II – The Comparison of Results from Measurements and Modelling. *Meteorological Journal*, 4 (3), 37-52.
41. Hilscherová, K., Kannan, K., Kung, Y.-S., Holoubek, I., Machala, M., Masunaga, S., Nakanishi, J., Giesy, J. P. (2001): Characterization of dioxin-like activity of riverine sediments from the Czech Republic. *Environ. Toxicol. Chem.* 20, 2768-2777.
42. Holoubek, I., Shatalov, V., Dutchak, S., Ansorgová, A., Kohoutek, J., Holoubková, I. (2001): Regional background monitoring of PBTs in Central Europe and comparison with model results. Workshop Slowly degradable organics in the atmospheric environment and air-sea exchange. Max Planck Institute for Meteorology. Report No. 335, Hamburg, Germany, November 2001, 45-50.
43. Klán, P., Holoubek, I. (2002): Ice (Photo)chemistry. Ice as a Medium for Long-Term (Photo)chemical Transformations - Environmental Implications. *Chemosphere* 46(8), 1201-1210.
44. M. Picer, J. Holoubek: PCBs in the karstic environment of Slovenia and Croatia as consequence of their accidental release. *Fresenius Environ. Bull.* 12, 86-93 (2003).
45. A. Heinisch, A. Kettrup, W. Bergheim, I. Holoubek, S. Wenzel: PCB in aquatic ecosystems of the River Elbe and Berlin waters - source oriented monitoring. *Fresenius Environ. Bull.* 12, 103-110 (2003).
46. J. Klánová, P. Klán, J. Nosek, I. Holoubek: Environmental ice photochemistry: monochlorophenols. *Environ. Sci. Technol.* 37, 1568-1574 (2003).
47. J. Klánová, P. Klán, D. Heger, I. Holoubek: Comparison of the effects of ultraviolet, H₂O₂/UV and gamma-irradiation processes on frozen and liquid water solutions of monochlorophenols.
48. P. Klán, J. Klánová, I. Holoubek, P. Čupr: Photochemical activity of organic compounds in ice induced by sunlight irradiation: The Svalbard project. *Geophys. Res. Lett.* 30, 1313 (2003).
49. Z. Prokop, P. Čupr, V. Zlevorová-Zlámalíková, J. Komárek, L. Dušek, I. Holoubek: Mobility, bioavailability and toxic effects of cadmium in soil symplex. *Environ. Res.* 91, 119-126 (2003).
50. S. Taniyasu, K. Kannan, I. Holoubek, A. Ansorgova, Y. Horii, N. Hanari, N. Yamashita, K. M. Aldous: Isomer-specific analysis of chlorinated biphenyls, naphthalenes and dibenzofurans in Delor: polychlorinated biphenyl preparations from the former Czechoslovakia. *Environ. Pollut.* 126, 169-178 (2003).

51. I. Holoubek, P. Čupr, L. Jech, T. Ocelka, V. Kužilek, R. Vácha, M. Škarek, J. Matoušek, A. Kočan: PCDDs/Fs contamination of the surroundings of Spolana Neratovice before and after floods 2002. *Organohal. Compds.*, 61, 353-356 (2003).
52. I. Holoubek, E. Brörström-Lundén, J. Duyzer, V. Shatalov, J. Klánová, J. Kohoutek: Regional trends of POPs in European ambient air. *Organohal. Compds.*, 61, 518-521 (2003).
53. I. Holoubek, P. Čupr, V. Kužilek, M. Rieder, J. Klánová, L. Jech, T. Ocelka, M. Škarek: Spatial and temporal trends in POPs sediment contamination in the Czech Republic. *Organohal. Compds.*, 62, 101-104 (2003).
54. I. Holoubek, J. Hofman, M. Šáňka, R. Vácha, J. Zbiral, J. Klánová, L. Jech, T. Ocelka: Spatial and temporal trends in persistent organic pollutants soil contamination in the Czech Republic. *Organohal. Compds.*, 62, 460-463 (2003).
55. I. Holoubek, R. Alcock, E. Brörström-Lundén, V. Petrosjan, O. Roots, V. Shatalov, A. Kocan, P. Čupr, I. Holoubkova: UNEP/GEF Project Regional Based Assessment of Persistent Toxic Substances - European Regional Report. *Organohal. Compds.*, 62, 436-439 (2003).
56. O. Roots, V. Zítka, I. Holoubek: Chlorinated dibenzo-p-dioxins and dibenzofurans patterns in the Baltic herring and sprat. *Organohal. Compds.*, 62, 140-143 (2003).
57. O. Roots, I. Holoubek, V. Zítka: Polychlorinated biphenyls and chlororganic pesticides in perch (*Perca fluviatilis*). *Fresenius Environ. Bull.* 12, 883-900 (2003).
58. J. Klánová, P. Klán, D. Heger, I. Holoubek: Comparison of the effects of UV, H₂O₂/UV and γ-irradiation processes on frozen and liquid water solutions of monochlorophenols. *Photochem. Photobiol. Sci.* 2, 1023-1031 (2003).
59. P. Kosubová, R. Grabic, I. Holoubek: (HR)GC-MS/MS analysis of toxaphene congeners in various matrices from the Czech environment. *Fresenius Environ. Bull.* 12, 1303-1308 (2003).
60. J. Hofman, J. Bezchlebová, L. Dušek, L. Doležal, I. Holoubek, P. Anděl, A. Ansorgová, S. Malý: Novel approach to monitoring of the soil biological quality. *Environ. Intern.*, 28, 771-778 (2003).
61. J. Hofman, L. Dušek, J. Klánová, J. Bezchlebová, I. Holoubek: Monitoring microbial biomass and respiration in different soils from the Czech Republic - a summary of results. *Environ. Intern.* 30, 19-30 (2004).

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RESUMEN DE APTITUDES

Especialista con veinte años de experiencia en ingeniería, gestión y políticas ambientales. Experto en la gestión de productos químicos en países en desarrollo, con una dinámica carrera en asesoría, consultoría y actividad académica. Profesional creativo y efectivo en resolver problemas, con habilidades analíticas, sociales, empresariales, de supervisión, liderazgo y negociación probadas. Posee conocimientos y destrezas avanzadas en el manejo ambientalmente adecuado de productos químicos, contaminantes y desechos, la administración de equipos de trabajo multidisciplinarios, la política y gestión ambiental, la investigación científica, la realización y procesamiento de encuestas de evaluación contingente, los servicios de agua potable, saneamiento y gestión de residuos, la evaluación de impactos ambientales y de riesgos, la producción más limpia, el desarrollo sustentable y la construcción de capacidad de las organizaciones. Posee excelente habilidad en la comunicación, con dominio total del inglés y del español, y gran destreza en conferencias y presentaciones. Relaciones inter-personales, valores morales e integridad profesional a toda prueba. Experiencia en trabajo multi-cultural y multi-organizacional. Excelente habilidad en programas de computación.

EDUCACIÓN

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Ingeniero Civil (B.S.), especialidad Ingeniería Hidráulica, Sanitaria y Ambiental. Escuela Politécnica Nacional. Quito, Ecuador (Agosto 1985).

PRINCIPALES HONORES

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Delegado de CEDENMA ante Comité Nacional para la Gestión de Productos Químicos Peligrosos de CEDENMA - Fundación Natura
- 2004 Jurado, Bayer Encuentro Juvenil Ambiental, Bayer - F. Natura - PNUMA.
Jurado, Fondos Concursables Municipios de Loja, CARE.
- 2003 Conferencista Invitado, IFCS-FORUM IV (Bangkok, Tailandia), COSUDE
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- 1998 Premio de Viaje Hoescht Celanese, University of North Carolina (UNC).
Asistente de Investigación, University of North Carolina (UNC).

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- 1994 -1997 **UNC – Beca del Consejo Directivo, UNC.**
- 1994 -1998 **Becario del BID con Fondos del Gobierno de Japón, UNC**
- 1992 -1994 **Becario de la Comisión Fulbright, Clemson University.**
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- 1992 -1994 **Asistente de Investigación, Clemson University.**

EXPERIENCIA LABORAL

- 2002 – Presente** Director del Programa, "Manejo Ambientalmente Adecuado de Productos Químicos Industriales y Desechos Especiales en el Ecuador – Fase III" Fundación Natura, con auspicio de la Agencia Suiza para el Desarrollo y la Cooperación - COOUDC, Quito, Ecuador. En esta calidad se ha correspondido apoyar al Ministerio del Ambiente, a los municipios y al sector industrial en la implementación del Convenio de Basilea y en las gestiones para el avance, ratificación y aplicación de los Convenios de Estocolmo y de Rotterdam. Ha apoyado el trabajo del Comité Nacional para la Gestión de Productos Químicos Peligrosos, a pedido del cual organizó dos eventos de capacitación para sus miembros: el Curso - Taller Internacional "Manejo de Productos Químicos y Sustancias Peligrosas" y el Curso - Taller Internacional "Gestión de Bifenilos Policlorados (PCBs) en el Sector Eléctrico," en alianza con el Instituto de tecnología Ambiental de la Universidad de Ciencias Aplicadas de Basilea, Suiza, con el auspicio de los Ministerios de Relaciones Exteriores y del Ambiente, la Agencia Suiza para el Desarrollo y la Cooperación, el Proyecto GEF-COPs del MAE, CONELEC, y otras organizaciones.
- 2001 – 2001** Director del Proyecto Sistema Único de Manejo Ambiental del Ecuador, para el Diseño del Sistema de Evaluación de Impacto Ambiental del Ecuador, ejecutado por el Consorcio CEMAPRIMES – ECOFOREST - ECOLEX, para el Ministerio del Ambiente, Proyecto PATRA y Banco Mundial.
- 2000 – 2002** Consultor Senior y Asesor de varios clientes públicos y privados en temas relacionados con política y gestión ambiental, producción más limpia, gestión de productos químicos industriales y tratamientos de aguas de nitrógeno y de aguas residuales. Entre sus clientes se incluyen: Productos Sanitron de Quito, en tratamiento de aguas residuales industriales; Banco del Estado (Banco Ecuatoriano de Desarrollo), en capacitación sobre participación del sector privado en suministro de agua y saneamiento en el Ecuador; CEMAPRIMES Cia. Ltda. en elaboración de propuestas especializadas; La Internacional S.A. (Planta Textil Equinoccial), en la concepción y desarrollo de proyectos de producción más limpia y de gestión del recurso agua y de los residuos; Alpha-Gamma Technologies, Inc. en manejo de residuos sólidos y compostaje anaerobio de materia orgánica.
- 1999 – 2000** Senior Environmental Engineer & Director of Business Development for Latin America and the Caribbean, Alpha-Gamma Technologies, Inc., Raleigh, NC, U.S.A., firma para la que, entre otros aspectos, desarrolló la práctica de tratamiento de aguas residuales industriales, manejo de residuos sólidos y cuidado en el análisis de información para la determinación de estándares nacionales de la EPA para el control federal de contaminantes peligrosos en las industrias de teñido y acabado de cuero y en la de fabricación de ácido fosfórico y de fertilizantes a base de fosfatos.
- 1996 – 1997** Co-Director del "Estudio de la Voluntad de Pago para Mejoras en los Servicios de Agua y Saneamiento de Dakar, Senegal." Además, Consultor y Conferencista en los Seminarios "Diseño de Tarifas del Sector Agua" y "Evaluación Contingente de Proyectos de Agua Potable y Saneamiento."

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- 1995 – 1996 Co-Director del "Estudio de la Voluntad de Pago para Mejoras en los Servicios de Agua y Saneamiento de Monagas – Venezuela." ejecutado por la compañía CVM, Inc., Carrboro, NC, U.S.A., para el Banco Mundial y Aguas de Monagas – AdM.
- 1990 – 1992 Director Técnico y Director de Proyectos de INVPCA, Cia. Ltda., empresa privada de consultoría ambiental, con la que desarrolló varios de los primeros estudios de evaluación de impactos ambientales en proyectos de desarrollo promovidos en el país, Quito, Ecuador.
- 1987 – 1991 Consultor Ambiental para varias compañías y consorcios en el Ecuador, entre los que se destacan: OTECO, Cia. Ltda., Consorcio INAM – OTECO, ALDIR, Cia. Ltda., y Caminos y Canales, Cia. Ltda., Quito, Ecuador.

EXPERIENCIA ACADEMICA

- 2001 – Presente Profesor Invitado del Programa de Maestría en Gestión Ambiental de la Universidad San Francisco de Quito. Conferencista invitado por el Programa de Maestría en Gestión Ambiental de la Universidad Católica de Quito, Ecuador.
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 3. Cueva, A.H., "Programa Alternativas para un Manejo Ambientalmente Adecuado de Productos Químicos Industriales y Desechos Especiales en el Ecuador". Presentación realizada durante el Taller Latinoamericano "Manejo de Productos y Sustancias Peligrosas," organizado por University of Applied Sciences Basel, Institute of Environmental Technology (FHBB, Switzerland) y el Centro Nacional de Producción más Limpia de Costa Rica (CNP+L, Costa Rica), San José, Costa Rica, Julio 2004.
 4. Cueva, A.H., "Medio Ambiente: Necesidades, Gobernanza, Políticas Ambiental y Gestión Ambiental Urbana" Presentación Magistral durante el X Congreso Nacional de la Asociación Ecuatoriana de Ingeniería Sanitaria y Ambiental del Ecuador (AEISA), Quito, Ecuador, Junio 2004.
 5. Cueva, A.H., "Sound Management of Chemical Products and Special Wastes in Ecuador: Implementation of the Responsible Care® Program in Ecuador". Presentación realizada durante un evento colateral organizado por el Gobierno Suizo, para participantes de la IV Sesión del Foro Inter gubernamental de la

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Seguridad Química (IFCS-FORUM IV). Bangkok, Tailandia. Noviembre 2003.

6. Cueva, A. H. "Gestión y Disposición Final de Residuos Sólidos Hospitalarios." Presentación en un panel organizado por el Colegio de Ingenieros Civiles del Guayas. Guayaquil, Ecuador. Septiembre 2003.
 7. Cueva, A.H., *Waste Management of Chemical Products and Special Wastes in Ecuador*. Presentación realizada durante un evento colateral organizado por el Gobierno Suizo, para participantes de la VII Sesión del Comité Intergubernamental de Negociación del Convenio de Estocolmo sobre Contaminantes Orgánicos Persistentes (POPs INC-7). Ginebra, Suiza, Julio 2003.
 8. Cueva, A. H. "Manejo de Aguas Residuales Industriales en el Ecuador." Presentación durante el Curso de Entrenamiento "Simposio de Aguas Residuales" organizado por ANEMAPA (Asociación Nacional de Empresas de Agua Potable y Alcantarillado del Ecuador). Quito, Ecuador. Junio 2003.
 9. Cueva, A.H. "Propuestas del Grupo Temático del Agua Para Consumo Humano." Presentación ante el Segundo Encuentro Nacional del Foro de los Recursos Hídricos. Quito, Ecuador. Mayo 2003.
 10. Cueva, A.H. "CRECIMIENTO URBANO DE QUITO: Algunas reflexiones sobre sus efectos en la gestión de residuos sólidos y consecuencias ambientales." Presentación ante un grupo de estudiantes de The London School of Architecture. Quito, Ecuador, Enero 2003.
 11. Cueva, A.H. "La Gestión Integral de los Residuos Sólidos en el Distrito Metropolitano de Quito." Propuesta presentada por Fundación Natura ante grupo de 90 líderes del DMQ. Conocoto, Ecuador. Julio 2002.
 12. Cueva, A.H. "Fundamentos de Sistemas de Gestión Ambiental Aplicables a la Actividad Marítima" Presentación ante funcionarios de la Dirección General de Intereses Marítimos y otras organizaciones relacionadas con aspectos ambientales del quehacer marítimo en el Ecuador. Quito, Ecuador. Mayo 2002.
- Cueva, A.H. "Evaluación del Sector Privado en el Manejo de Residuos Sólidos en el Ecuador." Serie de 2 talleres (24 horas), para funcionarios del Banco del Estado. Quito, Ecuador. Enero - Marzo 2002.

PUBLICACIONES SELECTAS (Siete Últimos Años)

1. Cueva, A.H. (2004). "El Programa Alternativas para un Manejo Ambientalmente Adecuado de Productos Químicos Industriales y Desechos Especiales en el Ecuador (Programa PQ/DE)," en Memorias del Taller Latinoamericano "Manejo de Productos y Sustancias Peligrosas", organizado por FHBB y el Centro Nacional de Producción más Limpia de Costa Rica, San José, Costa Rica, Julio 19-30, 2004.
2. Cueva, A.H. y colaboradores (2003). "Propuestas del Grupo Temático del Agua Para Consumo Humano," Trabajo presentado al Segundo Encuentro Nacional del Foro de los Recursos Hídricos. Quito, Ecuador.
3. Cueva, A.H. y colaboradores (2002). "La Gestión Integral de los Residuos Sólidos," Propuesta preparada para Fundación Natura y el Consejo Técnico Ejecutivo para la Gestión Integral de los Residuos en el Distrito Metropolitano de Quito. Quito, Ecuador.
4. Cueva, A.H. y colaboradores (2001). "Diseño e Implementación del Sistema de Evaluación de Impactos Ambientales del Ecuador," Informe a la UCP-PATRA, al Ministerio del Ambiente, y al Banco Mundial, cinco volúmenes (Inédito). Consorcio Camaprimas - Ecoforest - Ecotex. Quito, Ecuador.
5. Cueva, A.H. and B.T. Lauria (2000). "Assessing Consequences of Political Constraints on Rate Making in Dakar: A Monte Carlo Approach," Chapter 8. *The Political Economy of Water Pricing Implementation*, Ariel Dinar, ed., Oxford University Press, The World Bank, Washington, D.C., 2000. 167-187.
6. Lauria, B.T. and A.H. Cueva (1999). "Willingness to Pay for Improved Water Supply in Rural Communities in Venezuela", in *Providing Safe Drinking Water in Small Systems: Technology, Operations, and Economics*, Joseph Cotruvo, Gunther F. Craun and Nancy Heame, eds., Lewis Publishers, Boca Raton, 63-72.
7. Cueva, A.H. and B.T. Lauria (1998). "Monte Carlo Simulation for Design of Water Tariffs in Developing Countries," in *Proceedings of the UCOWR/98 Conference: Cross Currents in Water Policy*, Hood River, OR. August 4-7, 1998.

CURSOS DE ESPECIALIZACIÓN SELECTOS (Tres Últimos Años)

1. Taller Internacional "Manejo de Productos Químicos y Sustancias Peligrosas," realizado por la Universidad de Ciencias Aplicadas de Basilea, Suiza (FHBB) y Fundación Natura, con el auspicio de COSUDE, Ministerio de Recursos Humanos, Ministerio del Ambiente y BAYER S.A., Quito, Ecuador, Abril 2005 (35 horas). Rol: organizador y docente.
2. Taller Internacional "Gestión de Bifenilos Policlorados (PCBs) en el Sector Eléctrico," dictado por ETI Internacional, bajo los auspicios de la Universidad de Ciencias Aplicadas de Basilea, Suiza (FHBB), Ministerios del Ambiente (Proyecto GEF-COPs), Fundación Natura, COSUDE, CONELEC y Empresa Eléctrica de Quito, Quito, Ecuador, Abril 2005 (16 horas). Rol: organizador.
3. Curso "ISO 14001 EMS Lead Auditor Training Course," dictado por BVQi Bureau Veritas Ecuador S. A., Quito, Ecuador, Diciembre 2004 (40 horas). Rol: participante.
4. Taller Latinoamericano "Manejo de Productos y Sustancias Peligrosas," organizado por la Universidad de Ciencias Aplicadas de Basilea, Suiza (FHBB) y el Centro Nacional de Producción más Limpia de Costa Rica, San José, Costa Rica, Julio 2004 (80 horas). Rol: participante.
5. Taller Internacional "RETOS, LEONOS, EXPERIENCIAS Y DESAFIOS EN LA GESTIÓN DE CONFLICTOS DEL AGUA: La experiencia exitosa de Yanacocha, Perú, y su posible aplicación en el Ecuador," Organizado por Fundación Natura, Programa PQ/DE, con el apoyo de Siratus Consulting, Inc., Abril 2004 (8 horas). Rol: organizador y participante.
6. Taller Internacional "El Agua: Fuente de Salud, Desarrollo y Paz," organizado por el Municipio del Distrito Metropolitano de Quito, The Natura Conservancy, y la Corporación Andina de Fomento, Quito, Ecuador, Abril 2004 (20 horas). Rol: participante.
7. Seminario Internacional "Habilidades y Técnicas de Negociación Avanzada," dictado por Tecnológico CESAL de Consultor, Quito, Ecuador, Marzo 2004 (9 horas). Rol: participante.
8. Cuarta Reunión del Foro Intergubernamental de Seguridad Química (IFCS-FORUM IV), realizado por el IFCS, Bangkok, Tailandia, Noviembre 2003 (50 horas). Rol: participante observador y conferencista del evento colateral "Switzerland's commitment towards chemicals management: highlights from partnerships in Ecuador, Macedonia, Morocco and Vietnam: The Responsible Care® Program in Ecuador".
9. Séptima Reunión del Comité Intergubernamental de Negociaciones del Convenio de Estocolmo sobre Contaminantes Orgánicos Persistentes (POPs-INC-7), realizado por la Secretaría del Comité Intergubernamental del Convenio de Estocolmo, Ginebra, Suiza, Julio 2003 (50 horas). Rol: participante observador y conferencista del evento colateral "Switzerland's commitment towards chemicals management: highlights from partnerships in Ecuador, Macedonia, Morocco and Vietnam: The Program "Environmentally Responsible Management of Industrial Chemical Products and Hazardous Wastes in Ecuador".
10. Normas de Calidad ISO 9001:2000, dictado por Colegio de Economistas de Quito, Quito, Ecuador, Junio 2003 (16 horas). Rol: participante.
11. Congreso Iberoamericano de Desarrollo y Medio Ambiente "Desafíos Locales Ante la Globalización," organizado por la Facultad Latinoamericana de Ciencias Sociales (FLACSO), Quito, Ecuador, Abril 2003 (16 horas). Rol: participante.
12. Seminario: Alianzas Estratégicas, dictado por Fundación Esquel, Quito, Ecuador, Enero 2003 (16 horas). Rol: participante.

IDIOMAS

Español: lengua materna; excelente comunicación oral, lectura y escritura.
Inglés: nivel avanzado; oral, lectura y escritura.
Portugués: básico; lectura y oyenta.

Ethiopia

Curriculum Vitae

A. Personal Data

Name: Mohammed Ali Mohammed
Sex: Male
Date of birth: June 17, 1966
Nationality: Ethiopian
Marital Status: Married

B. Language

English - Written and Spoken
Amharic - " "

C. Education

Institutions	Credentials	Year
Loughborough University United Kingdom	MSc in Water and Environmental Management	2001/2002
Bahir Dar Poly Technique Institute Bahir Dar, Ethiopia	Advanced Diploma in Industrial Chemistry	1985to 87
Natural Resource. Institute, Kent United Kingdom	Certificate in Techniques and Laboratory Procedures in Plant, Water and Soil analysis	28 Sept. to 18 Dec, 1992
Tamper University of Technology Finland in Cooperation With Ethiopian Management Institute	Certificate in Environmental Management	13 Nov. to 8 Dec., 1995
Basal Institute of Technology, Switzerland	Certificate in Hazardous Waste Management	2 to 28 Sept, 1997
Atlas Information and Management Service Addis Ababa, Ethiopia	Certificate in Research Methods, Communication and Report Writing Skills	2 to 30 Sept, 1997
World Bank in co- operation with Environmental Protection Authority of Ethiopia	Certificate in Environmental Impact Assessment and Management	May, 1999

Education Con...

UNIDO in cooperation with CSIR, South Africa	Certificate in Analytical Laboratory Procedure & Techniques	2 to 29 Sept 2000
World Bank Institute & Global Development Learning Network in Africa in cooperation with Civil Service Collage, Ethiopia	Certificate in Environmental Compliance & Enforcement	April 23 to May 2, 2001
Computer Professional United (CPU), Addis Ababa, Ethiopia	Certificate in Microsoft Window 20 Hours Microsoft Word 40 Hours Microsoft Excel 40 Hours SPSS 40 Hours	October, 2000 to May 2001
Bowling Green State University, USA in cooperation with Environmental Protection Authority of Ethiopia	Certificate in Air Quality Management	3 to 6 January 2005
Loughborough University, UK	Certificate in English Language Course	30 August to 26 September 2001

D. Work Experience

1. **Since August 2003, Acting Head, Pollution Control Department of the Federal Environment Protection Authority of Ethiopia.**

Major duties and responsibilities

- Carry out research and studies on causes of environmental pollution which enables to undertake monitoring and control activities in co-operation with concerned offices;
- Collaborate in the preparation of standards, policies, laws and regulations and monitor their implementation;

- Carry out monitoring and control activities regarding disposal, storage, utilization and handling of elements that have hazardous and poisonous, explosive, flammable, acidic and radio-active character/nature;
- Devise methods of conducting study on environmental pollution at the Federal and Regional level.
- Supervise and follow up the proper implementation of Persistent Organic Pollutants (PoPs) and Environmental Audit Projects.

2. May 1994 to July 2003 Senior Pollution Control Expert; Federal Environmental Protection Authority of Ethiopia.

Major duties and responsibilities: -

- Conduct evaluation on the type and quantity of pollutants and hazardous waste that come out from industries and City/Towns etc. In order to prevent inappropriate dumping that cause negative consequence, evaluate methods of handling the same. Give training and technical assistance to concerned in view of solving encountered environmental pollution problem,
- Assess the quantity and type of pollutants and hazardous wastes that come out from industries and makes follow-up activities on in appropriate dumping that could bring environmental pollution,

3. 1987 to April 1993 Soil, Water, and plant analyst at the National Soil Service Laboratory, Ministry of Agriculture, Ethiopia.

Major duties and responsibilities: -

- Conduct analysis on soil, water and plant physical and chemical characteristics;
- Prepare and analyse data according to the reporting procedure.

E. Relevant International and National Meetings and Workshops Participation

- Workshop on Environmental Impact Assessment in the development process 18 to 22 Nov 1996, Langano, Ethiopia;
- Work shop on solid waste disposal, 22 Sept 1997, Addis Ababa, Ethiopia;
- Technical review workshop on national capacity development for cleaner industrial production project. 30 Oct. to 1 Nov. 1997, Addis Ababa, Ethiopia;
- The users training on the rural water supply and sanitation. 29 to 31 Aug 1997, Bahir Dar, Ethiopia;

- Regional training workshop on municipal waste management, 23 to 27 Nov. 1998, Dar-es-salam, Tanzania;
- Workshop on Climate change enabling activities. 28 Jan 1999, Addis Ababa, Ethiopia;
- Workshop on the National report regarding the implementation of the UN Convention to Combat Desertification. 10 to 11 May 1999, Addis Ababa, Ethiopia;
- Workshop on pollution control and environmental impact assessment draft regulation for Addis Ababa City. 22 to 25 December 1999;
- Workshop on Chemicals Weapons Convention development in Ethiopia. 27 January 2000, Addis Ababa, Ethiopia;
- Workshop on industrial pollution status in and around Addis Ababa. 29 March 2000, Addis Ababa, Ethiopia;
- Training Workshop on Dioxin and Furan inventories Kampala, Uganda, 12 to 15 August 2003;
- The 2nd Regional Meeting on DDT/GEF Project 29th September to 1 October 2003, Windhoek, Namibia;
- The Third African Roundtable on Sustainable Consumption and Production meeting, Casablanca, Morocco 17 to 20 May 2004;
- Regional workshop on successful case studies of recycling, reuse and resource recovery methods towards the environmentally sound management of Hazardous Waste in Africa, Ibadan, Nigeria 9 to 12 August 2004;
- Nile Basin initiative Project launching meeting, Addis Ababa, Ethiopia 27 October 2004.

F. Relevant papers and other output

Papers

- Industrial pollution and its impact on the Little Akaki River. MSc thesis, Addis Ababa, Ethiopia.
- Country Profile on Environmental Management in Ethiopia, a paper presented on International workshop on environmental management organized by Tampere University of Technology, November 1995, Debre- Zeit, Ethiopia;
- Country Profile on Hazardous Waste Management in Ethiopia, a paper presented on International training workshop organized by Secretariat of the Basle Convention, September 1997, Basel, Switzerland;

- Country Profile on Solid Waste Management in Ethiopia, a paper presented on regional training workshop organized by UNIDO. Nov 1998, Dar-es-salam, Tanzania;
- Basic principles of Solid Waste Management, a paper presented on National workshop on environmental management organized by Harari, Somalia and Dire Dawa Regional States, Harar, Ethiopia, August 2004;
- Overview of pollution control in Ethiopia, a paper presented on workshop organized by the Ministry of Health, Nazreath, Ethiopia February 2003;
- Overview of Mercury pollution in Ethiopia, a paper presented Regional Awareness Raising workshop on Mercury Pollution organized by Secretariat of the Basel Convention, Pretoria, South Africa;
- Ethiopian experience on obsolete pesticide disposal, a paper presented on Regional awareness workshop organized by secretariat of the Basle Convention, Ibadan, Nigeria;
- Environmental Impact Assessment Guideline for Industrial Development Sector 1997,Ethiopia.
- The State of Industrial Pollution in and around Addis Ababa, Ethiopia 1997.
- National Profile to Assess the Chemicals Management Infrastructure in Ethiopia, 1999.

Other outputs

- Involved in inventory on Ozone Depleting Substances consumption in Ethiopia, 1995;
- Involved in water quality survey on Great Akaki and Kebena Rivers, March 1997,Ethiopia.
- Involved in the formulation of effluent standards for different industrial sectors, 1999/2000,Ethiopia.
- Involved in industrial effluent survey in and around Addis Ababa, February 2000,Ethiopia.
- Involved in Ecological Sustainable Industrial Development project implementation, 1999 to 2002, Addis Ababa, Ethiopia.
- Undertaken environmental Audit on the Ethiopian Industries, 2003/2004;
- Involved in water quality monitoring on the Awash River, 2004, Addis Ababa, Ethiopia.

Fiji

CURRICULUM VITAE

PERSONAL INFORMATION

Name: Razia Zahina Zariff
Date of Birth: 11th February 1981
Home Address: 28 Vuna Road, Suva
Postal Address: P.O. Box 3477, Lautoka
Telephone: 3311699 (work), 9960151 (mobile)

QUALIFICATIONS

2005 Jan till present **Post Graduate Diploma in Biology**
(Microbiology and Genetics)
University of the South Pacific

2000 - 2002 **Bachelor of Science (Biology and Chemistry)**
University of the South Pacific

1995 - 1999 **Form 3 - Form 7**
FJC – 574/600
FSLC – 333/400
FSFE – 313/400
Natabua High School

WORK EXPERIENCE

April 2005 to date: **Acting National Project Coordinator**
Persistent Organics Pollutants Project
Department of Environment

July 2003 to April 2005: **Project Assistant**
Persistent Organics Pollutants Project
Department of Environment

Principal/Duty Statement

1. Participate in day-to-day activities relating to project implementation such as:

- a) Prepare a national profile for POPs
- b) Identify POPs-related human health and environmental issues of concern
- c) Assess the capacity of infrastructure and institutions to manage POPs
- d) Determine national objectives in relation to priority POPs issues
- e) Identify management options including phase out and/or risk reduction options
- f) Develop a detailed implementation plan (NIP), including an action plan for unintentional reduction options
- g) Prepare an initial funding request package for implementation of the NIP
- h) Develop a national strategy for information exchange, education, communication and awareness
- i) Oversee the overall execution of national actions consistent with the Stockholm Convention

2. Responsible for daily communication with project partners and for daily tasks that do not require the participation of the National Project Coordinator; of organizing of workshops/ meetings/training and preparation of background documents for these forums.

3. Participate in each Project Team meeting as well as National Coordinating Council meetings.

4. Responsible for maintaining the appropriate day-to-day records referring to the project implementation.

5. Responsible for carrying out a Chemical Awareness Survey for the Department of Environment.

6. Responsible for organizing and conducting workshops on chemical safety

7. Responsible for updating the financial and progress records for the POPs Unit

PROJECTS AND OTHER EXPERIENCE

1. Development of the National Solid Waste Management Strategy of Fiji

A series of Forums (four in total) were carried out to develop the National Solid Waste Management Strategy of Fiji. Assisted in the

organization of two of them and have facilitated the final two. Collaborated with the stakeholders and other relevant organizations in developing the Draft National Solid Waste Management Strategy for Fiji for submission to the cabinet.

2. Isolation of Heavy Metal Resistant Bacteria from Soil Contaminated with Copper, Chromium and Arsenic

Carried out a research under Postgraduate studies to isolate species of bacteria which were resistant to heavy metals and had the capacity to bioremediate environments contaminated with heavy metals. These bacteria were isolated from soil from a timber treatment yard where the soil was contaminated with copper, chromium and arsenic.

3. Chemical Awareness Survey

A chemical awareness survey was carried out in the Central, Western, Northern parts of Fiji, including a representative of the island groups Kadavu. This was part of the Persistent Organic Pollutants project. This baseline survey was carried out to gauge the level of chemical awareness in our country in various sectors of the community and industrial sector was one of these various sectors. The industrial workers were asked questions to gauge their level of awareness on their production processes and whether and how these practices affect the environment. A report was prepared based on this survey.

4. Chemical Safety Workshops

These chemical safety workshops were carried out in the Central, Western, and Northern parts of Fiji. This was carried out under the Persistent Organic Pollutants project. The target participants for these workshops were industrial workers. Videos on chemical safety, presentations on chemicals and the environment and on occupational health and safety issues were carried out in these workshops. Workers were also given a chance to raise the problems they face in terms of chemicals or OHS issues and give their recommendations. Also participated in radio talk back shows regarding environmental issues.

5. Solid Waste Management in Hotels

A survey was carried out to identify the solid waste management in Suva area and in the Western division, especially Nadi. The practices that hotels have in place to manage their solid wastes were identified and a report was prepared based on the findings.

6. Microbial Properties of Soft Coral

This project mainly focused on discovering about the antimicrobial properties in a soft coral, experimenting with various chemical reactions to identify if the particular soft coral has any medicinal properties. This was an individual project.

COMPUTER SKILLS

- Microsoft Word
- Microsoft Excel
- Microsoft Access
- Microsoft Power Point
- Internet

OTHER QUALIFICATIONS

- Training in Project Management and Finance from United Nations Environment Programme (UNEP)
- Valid Drivers License
- Member of the Biological Society of the South Pacific (BSSP)
- Orator and Participated in Radio Talk Back shows
- Platoon Sergeant 1999

INTERESTS

- Socializing and carrying out awareness work in communities
- Reading
- Playing Badminton
- Driving
- Catching up on latest scientific developments and environmental issues

REFEREES

I.Ms Vandana Naidu
Activities Manager
AusAID
Ph: 3388275

2. Dr Culwick Togamana
Lecturer in Chemistry Department-SPAS
University of the South Pacific
Ph: 3313900 ext: 2477

3. Professor Anand Tyagi
Lecturer in Biology Department- SPAS
University of the South Pacific
Ph: 3313900

Germany

Curriculum Vitae

Dr. Reiner Arndt: born 1949, married, two children

University:

1968 - 1974 University of Braunschweig, Diploma and PhD in chemistry

1974 - 1978 University of Braunschweig, 1976 - 1977 University of Alberta, Edmonton, Canada, Research associate

Profession:

1978 - 1981 Federal Institute for Occupational Safety and Health, Dortmund, Germany, Assistant to head of division

1982 - 1999 Institute for Occupational Safety and Health, Dortmund, Germany
Head of German chemical notification unit (competent authority for new and existing chemicals, PIC)

implementation of EU legislation in Germany, development of test methods and test strategies for chemicals, hazard, exposure and risk assessment of chemicals, risk management of chemicals for worker, consumer and the environment.

1999 - 2001 Federal Institute for Occupational Safety and Health, Dortmund, Germany
Head of department on Safety and Health regarding hazardous Chemicals

2001- Federal Institute for Occupational Safety and Health, Dortmund, Germany
Head of department Safety and Health regarding Chemical and Biological Agents

implementation of occupational safety and health legislation regarding chemical and biological agents in Germany, exposure and risk assessment and risk management for chemicals and biological agents, research on exposure measurements and assessment, hazard and risk assessment and risk management options for the workplace, capacity building in chemicals management, international information exchange on hazardous (PIC) chemicals, German expert in international negotiations on legal, technical, scientific and enforcement aspects of chemicals management (EU, OECD, ILO, FAO/UNEP, UNITAR, WHO, IFCS), chairman of the Interim Chemical Review Committee of the Rotterdam Convention, co-chair of the Criteria Expert Group for the POPs Convention

International experience on scientific, technical and political aspects of chemical control legislation

UN POPs

UNEP Intergovernmental negotiation committee (INC) for a Convention on Persistent Organic Pollutants

(1998 - 2001, co-chairman of the Criteria Expert Group for new POPs (CEG), co-chairman of the working group on article 5 and annex C, co-chairman of working group for the mandate of the POPs Review Committee)

other POPs related activities

Round table discussion on criteria for phasing out persistent and bioaccumulating organic chemicals, Steningvik, Stockholm by Swedish committee on new guidelines on chemical policy, 1999, (invited expert)

Dioxin 2001, 21st International Symposium on halogenated environmental Organic Pollutants and POPs, Gyongshu, 2001 (invited expert, Measures to reduce or eliminate releases from unintentional production of by- products in the Stockholm Convention)

Subregional workshop on national action on measures to reduce or eliminate the releases of by-products from unintentional production as requested by the Stockholm Convention on POPs, Bangkok, 2002
(organisation and cochair)

Stockholm Convention Workshop on liability and redress concerning the use and intentional introduction into the environment of persistent organic pollutants, Vienna, 2002 (invited expert)

UN PIC

UNEP/FAO Intergovernmental negotiation committee (INC) for a convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade
(1996 - 2004, Chairman of the Technical Working Group, Chairman of working group for the mandate for the Interim Chemical Review Committee)

Interim Chemical Review Committee of the Rotterdam Convention
(2000 -2004 , Chairman of the Committee)

Other UN activities

International capacity building projects to implement the Rotterdam Convention and the Stockholm Convention (1998 - , German expert)

UNEP Expert group "Further measures for PIC chemicals"
(1996, German representative and chairman of subgroup "Phasing out of chemicals")

UNEP/OECD Workshops on New Industrial Chemicals Notification and Information Sharing (1997, 1998, 1999 German representative and co-chairman)

UNITAR Expert meetings on strengthening national capabilities and capacities for the sound management of chemicals (1996, German delegate)

UNITAR Informal capacity building network for the sound management of chemicals (1997 - 2001, German delegate)

UNEP/UNITAR Expert meetings for the development of a series of resource documents on chemical management instruments
(1997 - 2001, German representative)

UN ECOSOC Subcommittee on global harmonisation of classification and hazard information for chemicals, GHS (2001 - , German representative)

UNITAR/ILO GHS Capacity Building Programme Advisory Group (PAG)
(2001 -, German representative and expert in projects)

Intergovernmental Forum on Chemical Safety and Intersessional Group
(1995 -, German delegate)

OECD

OECD Joint meetings of the chemicals group and management committee
(1989 -, German delegate)

OECD Steering group on existing chemicals
(1995 - 1999, German representative)

OECD/IPCS meeting on co-ordination of work on the assessment of existing
chemicals (1995, German delegate)

OECD Workshops 'Sharing information about new industrial chemicals and
confidential business information'
(1996, 1999 Co-chairman)

OECD Co-ordination group for sharing information on new industrial chemicals
(1996 - 1999, Chairman)

OECD Workshops 'Polymers'
(1991, 1993, German representative and chairman of subgroup)

OECD Workshop on gathering exposure information on chemicals
(1995, Chairman)

OECD Expert group on testing methods for polymers
(1994, Chairman)

European Community

EU Committee on risk reduction strategies for chemicals
(1994 - 1995, German delegate)

EERO Expert meeting on risk assessment and management of new and existing
chemicals (1996, German representative)

EU Expert group on test strategy and testing for polymers
(1993 - 1994, Chairman)

EU Expert group on inhalation toxicology testing
(1992 - 1993, Chairman)

Publications on all aspects of chemical control including POPs

Japan

Curriculum Vitae

Name: Masaru Kitano

Address:

(home)

3-17-13 Iko, Adachi-Ku, Tokyo
121-0823 Japan

Tel: +81-3-5838-0616

Fax: +81-3-5838-0616

(office)

Shukutoku University
1150-1 Fujikubo, Miyoshi-machi
Iruma-gun Saitama 354-8510, Japan

Tel: +81-49-274-1511

Fax: +81-49-274-1521

E-mail: kitano@ccb.shukutoku.ac.jp

Nationality: Japanese

Date and Place of birth: May, 29, 1942-Tokyo

Educational background:

1972 PhD (Industrial Analytical Chemistry), Tokyo Metropolitan University

Current Work:

- Member of Chemical Substances Council, Industrial Structure Council, and Central Environment Council as an expert of environmental chemistry and biodegradation and bioaccumulation.
- Professor, School of Cross-cultural Communication and Businesses, Shukutoku University (Chemical Management)

Work Experience:

July 1973 - Mar. 1994: Chemicals Evaluation and Research Institute, Japan

Apr. 1994 - Mar. 1996: Professor, Shukutoku Junior College

Key Qualification:

- Development of Analytical Methods for the Fate of Chemicals in the Environment. He has developed pre-treatment and Chromatographic analytical methods for the analysis of chemicals for bioaccumulation and biodegradation study.

Y.Doi and K.Fukuda (editors) (1994), *Evaluation of Biodegradability of Biodegradable Plastics in Activated Sludge, Strategy for Biodegradability Testing in OECD*, Biodegradable Plastics and Polymers

Takashi Kameya, Takeshi Murayama, Kohei Urano, Masaru Kitano (1995), *Biodegradation Ranks of Priority Organic Compounds under Anaerobic Conditions*, The Science of the Total Environment, 170, 43-51

➤ **Development of Eco-Toxicity Testing Methods of Chemicals**

He has proposed the analysis of chemical concentration in test solution which has become essential part of eco-toxicity tests to ensure the reliability of test results.

Mariko Kodama, Tsuyoshi Yamamoto, Kikuo Oikawa, Masaru Kitano (2003), Effects of Surfactants on the Toxicity of Chemical Substances Acting on Daphnia, Jpn, J. Environ Toxicol, 6 (2), 31-43

Hiroshi Tadokoro, Masanobu Maeda, Yasuro Kawashima, Masaru Kitano, Deng-Fwu Hwang, Tamao Yoshida (1991), Aquatic Toxicity Testing for Multicomponent Compounds with Special Reference to Preparation of Test Solution, Ecotoxicology and Environmental Safety 21, 57-67

➤ **Development of Safety Assessment Scheme of Polymers**

Ministry of Economy, Trade and Industry has developed Polymer Assessment Scheme for the implementation of Chemical Substances Control Law and he has played an essential role to develop this scheme.

➤ **Contribution to OECD Chemicals Testing Program**

He has contributed to the development of OECD Test Guidelines as a national expert of biodegradation and bioaccumulation test and introduced concepts such as analysis of degradation products in biodegradation test and analysis of fat content of fish in bioaccumulation test.

OECD Tokyo Meeting (1978), *Biodegradation and Bioaccumulation Test on Chemical Substances*
Takashi Kameya, Takeshi Murayama, Kohei Urano, Masaru Kitano (1995), Testing and Classification Methods for the Biodegradabilities of Organic Compounds under Anaerobic Conditions, The Science of the Total Environment, 170, 31-41

Masaru Kitano (1992), Updating of OECD Guidelines for the Testing of Chemicals, Sci. Tech Vol.25, No.11, 465-472

➤ **Contribution to the Development of Regulatory Measures of IMO**

He has contributed to the development of regulatory measures of IMO as a national expert of bioaccumulation and tainting to fish.

➤ **Contribution to the Raising Awareness for Chemical Management**

Masaru Kitano, Kikuo Oikawa (1997), *Human, Environment, and the Earth -chemicals and safety-*, Tokyo: Kyoritsu Shuppan,

Masaru Kitano etc, (1979), *Chemical Safety*, Tokyo Japan Management Association and others

RESUME

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ACCOMPLISHMENTS

- Chemical and Hazardous expert in Ministry of Environment.
- Consulting with *International Projects* in cooperation between the Ministry of Environment (MOENV) and European Communications Society and other projects in cooperation between MOENV and United Nation for Environment Protection (UNEP) and Global Environment Facility (GEF).
- Technical adviser for Persistent Organic Pollutants project in Gaza funded by GEF.
- Organize, contact and manage the short-term consultant and experts, and supervise their performance during running different international projects.
- Organize, Manage and train in different training programs on the topics of *Chemical and Hazardous Waste Management, Risk Assessment and Risk Management, Public Awareness and Public Participation and Medical Waste Management.*
- Developed and established new aspects in *Environmental Engineering and Quality Control* fields. And published technical articles in International Journals and International conferences.
- Teaching experience in lecturing undergraduate & postgraduate students and ability to teach and train the following courses: *Environmental Engineering, Waste Management and Utilization. Public health, Water and Wastewater Engineering, Solid Waste Management, Environmental Impact Assessment, Risk assessment and Risk Management, Environmental Law.*
- Supervise and coordinate environmental projects and participated on research activities for governmental R & D agencies on field of *Chemicals and Waste Management.*

EXPERIENCE:

Current Position

2002-now Persistent Organic Pollutants (POPs) Project in cooperation between MOENV, UNEP and GEF, Ministry of Environment, Amman, Jordan.

Chemical and Hazardous Waste Expert/ Ministry of Environment National Project Coordinator / POPs Project

The National Project Coordinator has the following principal responsibilities:

- Lead and coordinate the day-to-day management of the project and the project staff, including administration of the project.
- Lead the development of the detailed project design, in collaboration with the concerned technical experts and in consultation with the National Coordinating Committee. This includes the production of a work plan; preparation of the Terms of Reference for international and national experts recruited under the project, drafting of contracts for experts, preparation of technical specifications for equipment purchased under the project; cost estimation; activity scheduling, and reporting on the forward planning of project activities and budget expenditures.
- Ensure activities stipulated in the workplan, such as workshops, capacity assessments, training, environmental appraisals and inventories are implemented.
- Coordinate, monitor, and supervise the activities of consultants and short term experts providing input to the project, including the supervision of the implementation of the activities undertaken by consultants and experts; logistics; the review of technical and progress reports; the achievement of the project outputs and objectives; and cost control.

2000-2002 Development Of National Biosafety Framework For Jordan
Project in cooperation between MOENV, UNEP and GEF,
& Environment Law Enforcement Project in cooperation between
(MOENV) and European Communications Society, Euro.
Com./Berlin,

Ministry of Environment, Amman, Jordan.

Project Assistant

- Act as the secretary of the National Coordinating Committee (NCC).
- Ensure effective communication with the relevant authorities, institutions and government department in close collaboration with the national coordinating committee.
- Prepare and submit to UNEP and the NCC, regular work plan progress and financial report.
- Organize, contact and manage the short-term consultant and experts, and supervise their performance. For examples, survey studies related to different environmental issues, issue a by-law to control transport, dealing and using of genetically modified organisms products.
- Organize, Manage and train in training programs on the topics of Risk assessment, risk management, Public awareness and public participation for a different target groups.
- Presenting the Environmental Regulation in Jordanian in training courses "Implementation of an Environmental Management System according to ISO 14001" .
- Participate and present Country Progress Report in UNEP-GEF Biosafety Sub-Regional Workshops on developing a Regulatory Regime and Administrative Systems for NBFs for Asia, Shiraz, Iran, 19-22 October, 2003.
- Promoting the technical capacity of the MOENV employees through providing equipment to measure different pollutions and training the technical cadre on the manner of using them in order to be

subsequently distributed on the different directorates to be used in their filed surveys.

- Helping in raising the level of awareness in the filed of environmental law and by-laws.
- Helping in raising the standard of the MOENV in the field of environmental awareness.

1997–2000 University of Putra, Malaysia.

Teaching Assistant & Researcher

- Lectured and trained undergraduate students and research staff on the principle of Chemical and Waste Engineering & Management and Utilization of Waste.
- Participated in research activities for a government R&D agency.
- Supervised and coordinated environmental engineering projects.
- Developed new techniques in the field of waste management and utilization; for controlling heavy metals inside the residual during thermal treatment, up to 1550 centigrade, while preserving as much as 99.9% of the individual metal.
- Established a guideline for processing & controlling heavy metals from the waste materials.
- Utilized sewage sludge, after thermal treatment, as reusable building and construction material
- Utilized the molten sludge product as a replacement of cement in the concrete mixture which improves the compressive strength more than 50% the standard mortar.
- Utilized the molten sludge product as a replacement of sand in concrete mixture; thus, the produced mortar has been more superior in quality than the standard mortar in terms of compressive strength.

1996-1997 University of Science, Malaysia
Processing Engineering & Research Officer

- Utilized the Cyanide in the gold extraction process.

- Utilized the distillation to control the Cyanide and waste in the extraction gold during the extraction process.
- Developed and established new techniques to improve the quality of clinker which improves the final quality product of the cement considerably.
- Cement plant processing which include raw material preparation, clinker burning and grinding.
- Participated in a consultant group that provided cement plants in Malaysia with consultation regarding cement manufacturing processes.
- Participated in research activities for a government R&D agency.
- Supervised and coordinated processing & Quality control projects.

EDUCATION:

- 1997–2000 University of Putra, Malaysia
Ph.D. Environmental Engineering
- 1994–1996 University of Science, Malaysia
M.Sc. Mineral Processing Engineering
- 1990–1994 Al-Yarmouk University, Jordan
B.Sc. Earth and Environmental Science

COMPUTER SKILLS:

- Skills in M.S. Word, Excel, PowerPoint, Outlook.
- Internet and its viewers.
- Adobe Photoshop.
- Corel Draw
- Auto-Cad.
- Skills in Harvard graphic & graphics editors.
- System Analyst and trouble shooting.
- Installed and maintained software and computer hardware.

Languages

Arabic: mother language

English: Excellent

Mauritius

Curriculum Vitae of Mr. Mohammad Aslam Yadallec

Personal

Sex : Male **Date of Birth** : 21.02.59

Marital Status: Married **Children** : 3

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Fax. (230) 212 66 71 (office)
e-mail envlaw@intnet.mu (office); yadaas@intnet.mu (home)

Academic Qualifications

1. MSc Environmental Engineering, University of Mauritius (2002).
2. Degree in Chemical Engineering with Honours [*Diplôme d'Ingénieur d'Etat en Génie Chimique (Mention Très Bien)*], obtained at the National Polytechnic School of Algiers, Algeria (June 1985).
3. Cambridge Higher School Certificates (1977 & 1978) and Cambridge School Certificate (1975).
4. Fellowship Training Award in Environmental Science (Laboratory Instrumentation), Australia (December 1994);
5. Certificate in "Advanced Environmental Management System Auditing", organized by SIRIM Training Services, Malaysia for the Mauritius Standards Bureau (14-18 June 1999)

Other Certificates

1. Certificate of Participation in a training course for "Trace Metals Analysis", organised by IOC/FAO/IAEA/UNEP/SAREC in Mombassa, Kenya (June 1992).
2. Certificate of Attendance on "Laboratory Internal Audit Program" and on "Quality Management in the Laboratory" organised by NATA, Australia (December 1994);
3. Certificate of Participation in the Second Training & Development Course, organized by the International Greenhouse Partnerships Office (IGPO), Melbourne, Australia, 8 -12 May 2000

Training Courses attended locally and abroad

I have participated in several local, regional and international workshops, including *inter-alia*:

1. Fourth Meeting of the ISO/TC 207 Environmental Management held in Rio de Janeiro, Brazil, from 18 to 23 June 1996.
2. Third Session of the International Negotiating Committee for an Internationally Legally Binding Instrument for the Application of the Prior Informed Consent (PIC) Procedure for certain Hazardous chemicals and Pesticides in International Trade held in Geneva, Switzerland, from 26-30 May 1997.
3. Second Training & Development Course, organized by the International Greenhouse Partnerships Office (IGPO), Melbourne, Australia, 8 - 12 May 2000
4. Meeting of Senior Government Officials expert in Environmental Law organized by UNEP in Nairobi, Kenya, 23-28 October 2000.
5. Workshop on Environmental Guidelines for the Industrial Sector for the Regional Members Countries organized by the African Development Bank in Ghana, 12-13 November 2001
6. Regional workshop on "Implementation of International Environmental Laws in the Indian Ocean" organized by UNITAR in Réduit, Mauritius, 2-5 April 2002)
7. Workshop on the Reduction/Elimination and Management of Pesticides organized by UNEP in Pretoria, South Africa, 4 - 8 November 2002
8. Workshop for SADC countries on Dioxins, Furans and PCB inventories, Livingstone, Zambia, 31 March - 4 April 2003
9. Second session of the Preparatory Committee for the Development of a Strategic Approach to International Chemicals Management ("SAICM PrepCom2") held in Nairobi, Kenya, from 4 to 8 October 2004.
10. Second African Regional Consultation on the Development of a Strategic Approach to International Chemicals Management, Saly Senegal, 15 - 18 March 2005

Employment Record

1. Acting Divisional Environment Officer, Environmental Law Division, Ministry of Environment (November 2000 to date)
2. Environment Officer, Ministry of Local Government & Environment (June 1995 to October 2000)
3. Technical Officer, Ministry of Environment & Quality of Life (November 1989 to February 1993).

Previous positions:

- 1 Customs and Excise Officer, Customs and Excise Department, (January 1987 to November 1989);
- 2 Technical Assistant, Ministry of Health (October 1979 to October 1980);
- 3 Medical Records Assistant, Ministry of Health (July 1979 to October 1979).

Work experience in present position

- (1) Chairman of Technical Standards Committee for the development and review of national environmental standards, guidelines, regulations and licensing systems as required in various sectors for the protection of the environment.
- (2) Was fully involved in the drafting of the new Environment Protection Act 2002
- (3) Was fully involved in the implementation of control of vehicle emission project (regulations, fuel quality, public sensitization campaign, etc.)
- (4) Responsible for the promotion and implementation of Industrial Waste Audit Regulations and ISO 14000 standards in industries.
- (5) I am the National Project Coordinator for the SADC PCB Inventory Project
- (6) I was involved in the Stockholm Enabling Activities project for Mauritius and in the writing of the National Implementation Plan Report
- (7) I will be responsible for coordinating the various activities under the NIP as well as under all chemical-related Conventions (Stockholm, Rotterdam, Basel and Bamako)

Referees

You are kindly invited to contact the following persons for further information about my character and/or work:

Mrs D. Lan-Ng
Ag. Director
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2nd Floor, Ken Lee Tower
Line Barracks Street, Port Louis
Mauritius
Tel. No. (230) 212 69 75
Fax No.(230) 212 66 71.
e-mail: dirdoe@mail.gov.mu

Mr S. Sechaluck
Permanent Secretary
Ministry of Environment & NDU
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Mexico

Mario Alberto Yarto-Ramírez

Director of Research on Chemical Substances and Ecotoxicological Risks
National Institute of Ecology- SEMARNAT
Av. Periférico 5000, 4th floor, Col. Insurgentes Cuicuilco, México, D.F., Coyoacán, C.P 04530
Tel: (55) 5424 6425, Fax (55) 5424 5404
Email: myarto@ine.gob.mx
Nationality: Mexican; Date of birth: 17/05/67

His main responsibilities are planning and directing research programs for the environmental assessment and sound management of toxic chemicals. In addition Dr. Yarto is responsible, in collaboration with universities and research centers, for issuing guidelines and methodologies for research on human health and ecological risk assessment, including the development of risk communication strategies. Dr. Yarto is a member of the Sound Management of Chemicals (SMOC) working group of the North American Commission for Environmental Cooperation. He is also an active member of the OECD Committee for Chemicals, Pesticides and Biotechnology, and of the Working Group of Pesticides of the same organization.

EDUCATION

- 1996-1999 Doctorate (PhD) in Instrumentation and Analytical Science, with a specialization in Environmental Chemistry. University of Manchester Institute of Science and Technology (UMIST), Great Britain.
- 1993 -1995 Postgraduate in "Pollution and Environmental Control". University of Manchester Institute of Science and Technology (UMIST), Great Britain.
- 1986 -1991 Bachelors degree (BSc.) in Chemical Sciences. Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM), Campus Monterrey, Mexico.

WORK EXPERIENCE

- 2002-to date Director of research on chemical substances and ecotoxicological risks. National Institute of Ecology, Ministry of the Environment and Natural Resources, México.
- 1999-2002 Director of the Environmental Quality Center, ITESM, Campus Mexico City.
- 1991-1992 Chemical Analyst. ATLATEC-CYDSA, Monterrey, Mexico.

TEACHING EXPERIENCE

Department of Basic Sciences, ITESM, Campus Mexico City, 1999-2005.

Courses taught, Undergraduate: Ecology and Sustainable Development; Inorganic Chemistry; Analytical Chemistry. Postgraduate: Management of contaminated sites.

Academic advisor, MSc programme in Environmental Planning and Management, ITESM, Campus Mexico City. 2000-2002

Assistant professor, Analytical instrumentation laboratory. Manchester University, Great Britain. 1998-1999.

Assistant professor, Physical-chemistry laboratory. ITESM , Campus Monterrey.1989-1990.

SELECTED PUBLICATIONS

Fernández-Bremauntz A.; Yarto-Ramírez M.; Castro-Díaz J. (coords). 2004. **Las Sustancias Tóxicas Persistentes en México**. Instituto Nacional de Ecología - SEMARNAT. México, D.F. 324 pp.

Yarto-Ramírez M. 2004. **Mexico's success in eliminating chlordane within a regional cooperation framework**. *Industry and Environment*. United Nations Environment Programme (UNEP), Volume 27 (2-3)

Evans, J., A. Fernández-Bremauntz, I. Ize-Lema, M. A. Yarto-Ramírez, y M. Zuk (coords). 2003. **Introducción al Análisis de Riesgos Ambientales**. Instituto Nacional de Ecología - SEMARNAT. México, D.F. 123 pp.

Yarto M., J. Barrera y A. Gavilán. 2003. **El Convenio de Estocolmo sobre Contaminantes Orgánicos Persistentes y sus Implicaciones para México**. *Gaceta Ecológica* 69. Instituto Nacional de Ecología

Yarto-Ramirez, M. A., Dawson, J.B., Snook, R.D., *Analytical Sciences*, 2001, 17, i403

OTHER COURSES AND FURTHER TRAINING

Introduction to environmental risk analysis and decision making (2004)

International negotiation in environmental conflicts (2004)

International programme on the management of sustainability (2003)

Human health risk assessment (2003)

Hazardous waste management (2000)

Auditor of environmental management systems ISO14000 (2000)

Energy, environment and sustainable development (2000)

Environmental law enforcement in Mexico (1999)

Health and safety guidelines (1999)

LANGUAGES

Spanish (100%) , English (100%)

C U R R I C U L U M V I T A E

I- STATUS

- **Name and First name** : **BOUQARTACHA FARAH**
- **Date of birth** : 17 – 2 – 1962
- **Nationality** : Moroccan
- **Profile** : Doctor in Microbiology – Biochemistry
- **Address** : Street Oum Errabia n° 2 Agdal Rabat
Ministry for Managing of Territory,
Water and Environment
- **Tél (Office)** : 212 37 77 63 34
- **Tél (Mobile)** : 212 61 40 40 34
- **Fax** : 212 37 77 26 58 / 77 63 30
- **e-mail** : farah_pop-maroc.org
farahbouqartacha yahoo.fr

II- EDUCATION :

- **1980-1981:** Certificate of Baccalaureat series applied sciences
- **1985-1986 :** Licence in sciences - option vegetable Biology ; mention well
- **1986-1987 :** Certificate Speciality Biochemistry – Microbiology
Mention: Very well
- **1987-1991 :** Diploma of Higher Studies (D.E.S), Option
Microbiology with the Very honourable Mention and
congratulations of the jury : Mechanisms of action of
the fatty acids on the spores of *Bacillus cereus*

III- PROFESSIONAL EXPERIENCE

- **October 1993 TO DECEMBER 1999 :** Department of the Environment
- **Since January 2000 :** Head of the Service of Risks Prevention within the
Direction of the Monitoring and risks Prevention, Ministry for the
Regional planning, Water and Environment;

In charge of the following files:

- Project of Management and Environmental protection financed by the
World Bank (accomplished) ;
- Implementation of the Basel Convention on the control of
transboundary movements of hazardous waste and their disposal, in
particular the examination of the files and the requests for import and

export of waste. Member of the international technical group of the Basel Convention;

- Implementation of the Convention of Rotterdam on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade (PIC Convention), in particular the examination of the documents of orientation and the files relating to the importation of the chemicals;
- Implementation of the Stockholm Convention on the Persistent Organic pollutants (POP) ;
- Focal Point of the Intergovernmental Forum on Chemical Safety (IFCS) ;
- Development of a strategy on the prevention of the natural and technological risks and the management of the disasters ;
- Coordinator of the project concerning Inventory of the equipment containing PCBs financed by the Swiss Government ;
- Coordinator of the project relating to the development of risks prevention plans related to the management of the hazardous chemicals with the realization of an inventory of all the chemicals imported or manufactured at the national level and the development of maps of risks ;
- Coordinator of the team in charge of the project "development of the National Implementation Plan of the Stockholm Convention (NIP) ;
- Coordinator of the African Program on the Elimination of Stocks of Obsolete Pesticides (PASP) and having taken part in the negotiations with the World Bank and the other partners ;
- Participation in the development of the law on waste management and their elimination, specially the chapter relating to the control of the transboundary movements of hazardous waste and their disposal ;
- Organization of the African Conference on the environmentally sound management of stocks of dangerous waste organized in Rabat in January 2001 ;
- Organization of the African workshop on the reinforcement of the capacities of the focal points of the Stockholm Convention held in Marrakech in March 2005 ;
- Organization of several workshops of information and sensitization at the level national, regional and local, on the implementation of three conventions, on the management of POPs and their impacts on health and the environment, the chemicals, and the natural risk management and technological ;
- Member of the national commission of homologation of the pesticides

VI- Training AND PROFESSIONAL EXPERIENCE:

- Training course at the laboratory of Microbiology in Orsay- Paris Southern – France;

- Training course in Egypt on the water pollution and the techniques of depollution;
- Study Tour in Switzerland on the implementation of the Convention of Stockholm and Synergy between Basel, Rotterdam and Stockholm Conventions ;
- Training course on integration of the provisions of the international law in particular the International Conventions, in national law and to define strategy to be adopted for the implementation of these conventions at the national level.
- Analysis carried out at the laboratory of Microbiology and Biotechnology at the Hassan II Agronomic Institute and Veterinary;
- Assistance to the students in engineering ;
- Participation in the meetings of negotiation for the development of Rotterdam, Stockholm, Basel conventions and of the protocol on the responsibility and the compensation in the event of damage resulting from the transboundary movements of hazardous waste and their disposal within the framework from Basel Convention ;
- Presentation of several communications on Basel, Rotterdam and Stockholm Conventions, on synergy which exist between these conventions and on the ecologically rational management of POPs and their impact on health and the environment;
- Participation in the meetings at the international level for the implementation of Basel, Rotterdam and Stockholm Conventions in particular Conferences of the Parties ;
- Member of the Special Committee with Composition not limited of the Basel Convention ;
- Participation in the workshops at the international level on dangerous waste and the toxic chemicals with presentation of the experience of Morocco on the matter;
- Member of the Moroccan Association of Clinical and Analytical Toxicology.

V - PUBLICATIONS:

- Development of the National Report on the Prevention of the Disasters prepared within the framework of the World Conference on the Prevention and the management of the Disasters organized in KOBE - Japan in January 2005 ;
- Development of folders on PCBs, POPs, and on technological and natural risk management ;
- Ababouch.L, Bouqartacha.F and F.F.Busta – 1991. Comparaison of three methods to study germination of bacterial spores (Acts of I'I.A.V Hassan II) .

- Ababouch.L, Bouqartacha.F et F.F Busta – 1994 ;
Inhibition of Bacillus cereus Spores and vegetatives cells by fatty acids and glyceryl monododecanoate. (Food Microbiology) ;
- Ababouch.L, Bouqartacha.F et F.F Busta - 1994
Inhibition of L-alanine triggered Bacillus cereus T. Spore germination and outgrowth by fatty acids and glyceryl monododecanoate . (Food Microbiology) ;
- The results of the research tasks of the D.E.S are included in an international patent (U.S.A, Japan, Europe) entitled: *Process for control of food pathogenic and spoiling bacterial spores* , presented by l'Institut Agronomique et Vétérinaire Hassan II et l'Université de Minésota-U.S.A

IV- Language: Arabic, French and English

Ultrashort version of curriculum vitae for Janneche Utne Skaare

Bibliographical data

Full name and address: Janneche Utne Skaare, Skogstuveien 11, 1363 Høvik, Norway
Date of birth: November 10, 1946
Sex: Female
Citizenship: Norwegian
Present position: Deputy director, National Veterinary Institute, P.O.Box 8156 dep., N-0033 Oslo, Norway
Head of Department of Feed and Food hygiene, Toxicology, Chemistry, Microbiology
Professor, Environmental Toxicology, Norwegian College of Veterinary Medicine, P.O.Box 8146 Dep., N-0033 Oslo
Telephone: +4722597444, telefax: +4722597453,
E-mail: janneche.skaare@vetinst.no

University degree(s) or equivalent

Bachelor of Science 1970, Chemistry and Biology, South Dakota School of Mines and Technology, S.D., USA

- **Master of Science** 1971, Organic Chemistry and Biochemistry, University of Minnesota, Minneapolis, Minn., USA
- **Dr. Philos., (Ph.D.)** 1980, Toxicology, Faculty of Medicine, University of Oslo, Norway

In 1986 I was assessed to have professor's qualification in food hygiene (evaluation done by an international panel)

In 1993 I was assessed to have professor's qualification in environmental toxicology and chemistry, and was appointed as professor in environmental toxicology at the National School of Veterinary Science, Oslo, Norway (evaluation done by an international panel)

Professional experience

- Teaching Associate I, 1970-1971, University of Minnesota, Minneapolis, USA
- Assistant professor 1972-1973, Dept. of Toxicology and Chemistry, National Veterinary Institute, Oslo, Norway
- Research Fellow, 1974-1975, Dept. of Food Hygiene, Norwegian College of Veterinary Medicine, Oslo, Norway
- PhD student, 1975-1979, Dept. of Pharmacology and Toxicology, Norwegian College of Veterinary Medicine
- Researcher, 1979-1987, Norwegian Agricultural Research Council's Laboratory for Environmental Toxicology. From 1980 Head of the Laboratory
- Associate professor, 1988-1991, Dept. of Pharmacology and Toxicology, Norwegian College of Veterinary Medicine

- Professor in Environmental toxicology, Dept. of Pharmacology, Microbiology and Food hygiene, Norwegian College of Veterinary Medicine
- Head of the Dept. from Aug. 1991 to 1993
- From 1993 Deputy director, National Veterinary Institute. Head of Dept. of Feed and Food hygiene, constituting of sections for Microbiology, Toxicology and Chemistry. National Veterinary Institute has a total yearly budget of ca. 200 mill. NOK and has approx. 270 employees. The Dept. of Feed and Food Hygiene has approx. 70 employees including 15 PhD students, yearly budget of ca 34 million NOK. (The National Veterinary Institute is the Ministry of Agriculture's official scientific institution for veterinary research, diagnostic, analytic and other support services and plays a major role in the surveillance and control of serious animal diseases and food safety. The National Veterinary Institute provides support and expertise to Ministry of Agriculture, the Norwegian Animal Health Authority, Norwegian Food Control Authority and the Norwegian Agricultural Inspection Service. The Institute has departments including Epidemiology, Animal Health, Fish Health, Feed and Food Hygiene and Regional Laboratories. Primary goals are to ensure optimal animal health, fish health and safe food. Through the research, diagnostic and reference functions, developmental activities, participation in surveillance programs and consultations, the National Veterinary Institute is a major contributor to the formulation and implementation of Norwegian agriculture and food policies).
- From 2003 Deputy director general, National Veterinary Institute
- Since 1980 also Head of Laboratory for Environmental Toxicology, Norwegian School of Veterinary Science, (My research group within environmental chemistry/toxicology p.t. include 4 Ph.D students, 4 M.Sci. students, 2 research assistants and 2 technicians. In addition 2 Ph.D students are associated to the group).

Professor Janneche Utne Skaare is a Member of several national and international advisory groups/committees/steering committees including EUs Scientific Committee of Toxicity, Ecotoxicity and Environment (SCTEE) since 1999-2004; The Norwegian Advisory Board for Pesticide Use, 1996-2002; The Scientific Committee of the Norwegian Food Control Authority, 1996-2004, The Norwegian Scientific Committee for Food Safety, chair of panel on contaminants, biotoxins and drugs; member of panel of pesticides; member of ad hoc groups under EFSA in EU; Working Groups/Steering committees appointed by the Norwegian Research Council to develop research programs within the fields: Marine Pollution, Ecotoxicology, Environmental Contamination and Health, Environment and Health; Gene, environment and health; Member of the Steering Committee of the Swedish research program NEWS, "New strategy of risk analysis and " ReproSafe "Reproduction and chemical safety", Member of several committees for evaluation of applicants for professorships in Norway and Sweden; Member of several committees for evaluation of doctoral dissertations and research projects in Norway, Sweden, Kenya and Zimbabwe. Since 1980 Skaares major field of research has been within pesticide toxicology and environmental toxicology in Norway, the Norwegian Arctic and in some developing countries. Focus has particularly been on occurrence, levels, and effects of low level exposure to environmental contaminants (industrial chemicals like PCBs, by-products like HCB, dioxins, pesticides like DDTs, HCHs, organophosphorous compounds, brominated flame retardants etc.). The effects that have been studied include neurobehavioural effects of PCBs in experimental animals, effects of PAHs and OCs on xenobiotic metabolising enzymes in fish and insects (field and laboratory studies), immunotoxic effects of OC exposure in seabirds, marine mammals and polar bears (field studies); effects on reproduction, retinol, thyroid hormone and sex hormone metabolism in polar bear (field study) and glaucous gull (field and semifield studies), occurrence and levels of environmental contaminants have been studied in humans,

seabirds, marine mammals, polar bear, fish and along marine food chains in the Arctic as well as in the Oslofjord. My research group within environmental chemistry/toxicology at NVI and NSVS p.t. include 5 Ph.D students, 6 M.Sci. students, 2 research assistants and 2 technicians. In addition 3 Ph.D students are associated to the group. I am author/coauthor of 194 scientific publications in international journals with referee plus numeral publications/book chapters etc.

Relevant publications (4 last years):

113. Ruus A, Ugland KI, Espeland O, Skaare JU. Organochlorine Contaminants in the Local Marine Food Chain from Jarfjord, Northern Norway. *Marine Environ Res* 1999; 48: 131 - 146.
114. Murvold KM, Skaare JU, Nilssen VH, Bech C, Østnes JE, Jenssen BM. Yolk PCB and Plasma Retinol Concentrations in Shag (*Phalacrocorax aristotelis*) Hatlings. *Arch Environ Contam Toxicol* 1999; 36: 308-315.
115. Teigen SW, Andersen RA, Daae HL, Skaare JU. Heavy metal content in liver and kidney of grey seal (*Halichoerus grypus*) in various life stages correlated with metallothionein levels: some metal-binding characteristics of this protein. *Environ Toxicol Chem*. 1999; 18: 2364-2369.
116. Holene E, Nafstad I, Skaare JU, Krogh H, Sagvolden T. Behavioural effects in female rats of postnatal exposure to sub-toxic doses of polychlorinated biphenyl congener 153. *Acta Paediatr Suppl* 1999; 429: 55-63.
117. Føreid S, Rundberget T, Severinsen T, Wiig Ø, Skaare JU. Determination of toxaphenes in fish and marine mammals. *Chemosphere* 2000; 41: 521-528.
118. Kleivane L, Severinsen T, Skaare JU, Biological Transport and mammal to Mammal Transfer of Organochlorines in Arctic Fauna. *Marine Environ Res* 2000; 49:343-357.
119. Skaare JU, Bernhoff A, Derocher A, Gabrielsen GW, Goksøyr A, Henriksen E, Larsen HJ, Lie E, Wiig Ø. Organochlorines in top predators at Svalbard - occurrence, levels and effects. *Toxicol Letters* 2000; 112-113:103-109
120. Holene E, Nafstad I, Skaare JU, Sagvolden T. Behavioural effects of postnatal exposure to PCB congeners 126 and 153 in rats. *Organohalogen compounds* 1999; 42: 325-328
121. Chikuni O, Nhachi FB, Neill P, Nafstad I, Polder A, Skaare JU. Influence of geographical and weather patterns on environmental pollution by DDT and its metabolites in Zimbabwe. *Organohalogen compounds* 1999; 44: 225-228.
122. Severinsen T, Skaare JU, Lydersen C. Spatial distribution of persistent organochlorines in ringed seal (*Phoca hispida*) blubber. *Marine Environ Res* 2000; 45 (3): 291-302
123. Bernhoff A, Skaare JU, Wiig Ø, Derocher AE, Larsen HJ. Possible immunotoxic effects of organochlorines in polar bears (*Ursus maritimus*) at Svalbard. *J Toxicol Environ Health* 2000; 59: 101-114.
124. Henriksen EO, Gabrielsen GW, Trudeau S, Walkers H, Sagerup K, Skaare JU. Organochlorines and possible biochemical effects in Glaucous Gulls (*Larus hyperboreus*) from Bjørnøya, the Barents Sea. *Arch Environ Contam Toxicol* 2000; 38:234-243
125. Wiig Ø, Berg V, Gjertz I, Seagars, DJ, Skaare JU. Use of skin biopsies for assessing levels of organochlorines in walrus (*Odobenus rosmarus*). *Polar Biology* 2000; 23: 272 - 278
126. Sagerup K, Henriksen EO, Gabrielsen GW, Skorpung A, Skaare JU. Intensity of Parasitic Nematodes is Associated with Organochlorine Levels in the Glaucous gull (*Larus hyperboreus*). *Journal of Applied Ecology* 2000; 37: 532 - 539
127. Berg V, Ugland KI, Hareide NR, Groenningen D, Skaare JU. Mercury, cadmium, lead and selenium in fish from a Norwegian fjord, the importance of sampling locality. *J Environ Monit* 2000; 2: 375 - 377
128. Bustnes J, Erikstad KE, Bakken V, Mehlum F, Skaare JU. Feeding ecology and the concentration of organochlorines in glaucous gulls. *Ecotoxicol* 2000; 9: 179 - 186 (175-182)
129. Lie E, Derocher AE, Wiig Ø, Skaare JU. Polychlorinated biphenyls in mother/offspring pairs of polar (*Ursus maritimus*) at Svalbard. *Organohalogen Compound* 2000; 49: 457 - 460.

130. Braathen M, Haave M, Olsen GH, Derocher AE, Skaare JU, Ropstad E, Wiig Ø, Sormo EG, Jenssen BM. PCB contamination in relation to levels of thyroid hormones and progesterone, and migration pattern polar bears (*Ursus maritimus*); *Organohalogen Compound* 2000; 49: 438 – 441
131. Muir D, Riget F, Cleemann M, Kleivane L, Skaare JU, Severinsen T, Nakata H, Tanabe S. Circumpolar Trends of PCBs and Organochlorine Pesticides in the Arctic Marine Environment Inferred from Levels in Ringed Seals. *Environ Sci Technol* 2000; 34: 2431 – 2438
133. Bustnes JO, Bakken V, Erikstad KE, Mehlum F, Skaare JU. Patterns of incubation and nest site attentiveness in relation to polychlorinated biphenyl (PCB) contamination in glaucous gulls. *J Ecol* 2001; 38 (4): 791 - 802
134. Sagerup K, Henriksen EO, Skaare JU, Gabrielsen GW. Intraspecific variation in trophic feeding levels and organochlorine concentrations in glaucous gulls (*Larus hyperboreus*) from Bjørnøya, the Barents Sea. *Ecotoxicology* 2002; 11:119-125
135. Borgå K, Gabrielsen G:W, Skaare J.U. Biomagnification of organochlorines along a Barents Sea food chain. *Environ Poll* 2001;113 (2): 187 – 198
136. Borgå K, Gulliksen B, Gabrielsen GW, Skaare JU. Size-related bioaccumulation of organochlorines in Arctic Sea-ice-amphipods. *Organohalogen Compounds* 2000; 49 : 461 - 465
137. Skaare JU, Bernhoff A,Wiig Ø, Norum KR, Haug E, Eide DM, Derocher AE. Relationships between plasma levels and organochlorines, retinol and thyroid hormones from polarbears (*Ursus maritimus*) at Svalbard. *Toxicol. Environm. Health* 2001; Part A, 62:101 - 115.; samt: *J Toxicol Environ Health Pt A* 2001;62,(4): 227-241.
138. Andersen M, Lie E, Derocher AE, Belikov SE, Bernhoff A, Bultinov AN, Garner GW, Skaare JU, Wiig Ø. Geographic variation of PBC congeners in polar bears (*Ursus maritimus*) from Svalbard east to the Chukchi Sea. *Polar Biol* 2001; 24: 231 - 238
139. Andersen G, Kovacs KM, Lydersen C, Skaare JU, Gjertz I, Jenssen BM. Concentrations and patterns of organochlorine contaminants in white whale (*Delphinapterus leucas*) from Svalbard, Norway. *Sci Total Environ* 2001; 264: 267 – 281
140. Bustnes JO, Skaare JU, Erikstad KE, Bakken V, Mehlum F. Whole blood concentrations of organochlorines as a dose metric for studies of the Glacous gull (*Larus hyperboreus*). *Environ Tox and Chem.* 2001; 20 (5): 1046-1052
141. Bang K, Jenssen BM, Lydersen C, Skaare JU. Organochlorine burdens in blood of ringed and bearded seals from north-western Svalbard. *Chemosphere* 2001; 44: 193-203
142. Jenssen BM, Nilssen VH, Murvoll KM, Skaare JU. PCBs, TEQs and plasma retinol in grey heron (*Ardea cinerea*) hatchlings from two rookeries in Norway. *Chemosphere* 2001; 44: 483-489
143. Henriksen EO, Wiig Ø, Skaare JU, Gabrielsen GW, Derocher AE. Monitoring PCB in polar bears: lesson learned from Svalbard. *J Environ Monitoring* 2001; 3 : 1-7
144. Bustnes JO, Bakken V, Erikstad KE, Mehlum F, Skaare JU. Patterns of incubation and nest-site attentiveness in relation to organochlorines (PCB) contamination in glaucous gulls. *J of app ecology* 2001; 38:791-801
145. Ruus A, Skaare JU, Ingebrigtsen K. Disposition and depuration of lindane (γ -HCH) and polychlorinated biphenyl – 110 (2,3,3',4',6 – pentachloribiphenyl) in cod (*Gadus morhua*) and bullrout (*Myoxocephalus scorpius*) after single oral exposures. *Envir tox and chem.* 2001; 20: 2377-2382
146. Skaare JU, Larsen HJ, Lie E, Ropstad e, Bernhoff A, Derocher AE, Lunn JN, Norstrom R, Wiig Ø. Relationship between high loads of organic contaminants and health effects in arctic mammals – immune response and chlorinated environmental pollutants in polar bears. *Pharmacology & Toxicology* 2001; 88: suppl. 1: 14
147. Tarazona JV, Hund K, Jager T, S-Salonen M, Soares AMVM, Skaare JU, Vighi M. Predicting the risk of chemicals for terrestrial ecosystems. Is there enough scientific basis for a proper evaluation? *An European perspective. Nature* 2002; 415: 14

148. Borgå K, Poltermann M, Polder A, Pavlova A, Gulliksen B, Gabrielsen GW, Skaare JU. Influence of diet and sea ice drift on organochlorine bioaccumulation in arctic ice – associated amphipods. *Environ Pol* 2002; 117 (1): 47-60
150. De Guise S, Shaw SD, Barclay JS, Brock J, Brouwer A, Déwailly E, Fair PA, Fournier M, Grandjean P, Guilette Jr LJ, Hahn ME, Koopman-Esseboom C, Letcher RJ, Matz A, Norstrom RJ, Perkins CR, Schwacke L, Skaare JU, Sowles J, St.Aubin DJ, Stegeman J, Whaley JE. Consensus Statement – Atlantic Coast Contaminants Workshop 2000. *Envir H perspectives* 2001; 109 (12): 1301-1302
151. Lydersen C, Wolkers H, Severinsen T, Kleivane L, Nordøy ES, Skaare JU. Blood is a poor substrate for monitoring pollution burdens in phocid seals. *Sci Tot Environ* 2002; 292: 193-203
152. Borgå K, Gulliksen B, Gabrielsen GW, Skaare JU. Size-related bio-accumulation and between – year variation of organochlorines in ice-associated amphipods from the Arctic Ocean. *Chemosphere* 2002; 46: 9 – 10
153. Sagerup K, Henriksen EO, Skaare JU, Gabrielsen GW. Intraspecies variation in trophic feeding level and Organochlorine concentrations in glaucous gulls (*Larus hyperboreus*) from Bjørnøya, the Barent Sea. *Ecotox* 2002; 11: 119-125
154. Ruus A, Skaare JU, Ingebrigtsen K. Accumulation of the lipophilic environmental contaminant lindane (γ -HCH) in metacercariae of *Bucephaloides gracilescens* (Trematoda, Bucephalidae) in the central nervous system of bullrout (*Myoxocephalus scorpius*). *Diseases of Aqua Org* 2001; 48: 75-77
155. Borgå K, Gabrielsen GW, Skaare JU. Difference in contamination load between planktonic and ice-associated fauna in the Arctic marginal ice zone: influence of habitat, diet and geography. *Marine Eco Progress* 2002; 235: 157-169
156. Hop H, Borgå K, Gabrielsen GW, Kleivane L, Skaare JU. Trophic level accumulation of persistent organic pollutants for poikilotherms in the Barents Sea food web. *Environ Sci Technol* 2002; 36: 2589 – 2597
157. Chikuni O, Nhachi CFB, Polder A, Bergan S, Nafstud I, Skaare JU. Effects of DDT on paracetamol half-life in highly exposed mothers in Zimbabwe. *Tox letters* 2002; 134: 147-153
158. Lie E, Bernhoff A, Riget F, Belikov SE, Boltunov AN, Derocher AE, Garner GW, Wiig Ø, Skaare JU. Geographical distribution of organochlorine pesticides (OCPs) in polar bears (*Urus maritimus*) in the Norwegian and Russian Arctic. *Sci of the Total Environ* 2003; 306: 159-170.
159. Bustnes JO, Folstad I, Erikstad KE, Fjeld M, Miland ØO, Skaare JU. Blood concentration of organochlorine pollutants and wing feather asymmetry in glaucous gulls. *Functional Ecology* 2002; 16: 617-622.
160. Skaare JU, Larsen HJ, Lie E, Bernhoff A, Derocher AE, Norstrom R, Ropstad E, Wiig Ø. Ecological risk Assessment of persistent organic pollutants in the arctic. *Toxicology* 2002; 181-182, 193-197.
161. Hop H, Borgå K, Gabrielsen GW, Kleivane L, Skaare JU. Food web magnification of persistent organic pollutants in poikilotherms and homeotherms from the Barents Sea. *Environmental Science and Technology* 2002; 36: 2589-2597
162. Ruus A, Ugland KI, Skaare JU. Influence of trophic position on organochlorine concentrations and compositional patterns in a marine food web. *Environ tox and chem.* 2002; 21 (11): 2356-2364.
163. Ruus A, Sandvik M, Ugland KI, Skaare JU. Factors influencing activities of biotransformation enzymes, concentrations and compositional patterns of organochlorine contaminants in members of marine food web. *Aquatic tox* 2002; 61: 73-87.
164. Becher G, Småstuen L, Nicolayesen T, Polder A, Skaare JU. Temporal and spatial trends of PCDDs/PCDFs and PCBs in Norwegian breast milk- results from three rounds of WHO coordinated studies. *Organohalogen compounds* 2002; 56: 325-328.
165. Sørmo EG, Skaare JU, Lydersen C, Kovacs KM, Hammill MO, Jenssen BM. Partitioning of persistent organic pollutants in grey seal (*Halichoerus grypus*) mother – pup pairs. *The Science of the Total Environment* 2003; 302: 145-155.

166. Haave M, Ropstad E, Derocher AE, Lie E, Dahl E, Wiig Ø, Skaare JU, Jensen BM. Polychlorinated Biphenyls and reproductive hormones in female polar bears at Svalbard. *Environmental Health Perspectives* 2003; 4 (volume 111): 431-436.
167. A. Polder, J. O. Odland, A. Tkachev, S. Føreid, T.N. Savinova, J.U. Skaare. Geographic variation of chlorinated pesticides, toxaphenes and PCBs in human milk from sub-arctic and arctic locations in Russia. *The Science of the Total Environment* 2003; 306: 179-195
168. Bustnes JO, Erikstad K E, Skaare J U, Bakken V, Mehlø, F. Ecological effects of organochlorine pollutants in the Arctic: a study of the glaucous gull. *Ecological Applications* 2003;13(2): 504-515
169. *Collection of materials of the Third Internasjonal Conference Issue 3. Complex investigations of Spitzbergen nature. Apatity* 2003
170. Sørmo EG, Skaare JU, Jüssi I, Jüssi M, Jenssen B. Polychlorinated biphenyls and organochlorine pesticides in baltic and atlantic gray seal (*Halichoerus Grypus*) pups. *Environmental Toxicology and chemistry* 2003; 22(11): 255-265.
171. Borgå K, Gabrielsen GW, Skåre JU. Comparison of organochlorine concentrations and patterns between free-ranging zooplankton and zooplankton sampled from seabirds' stomachs. *Chemosphere* 2003; 53: 685-689.
172. Skåre JU, Larsen HJ, Lie E, Bernhoff A, Derocher AE, Norstrom R, Lunn N, Ropstad E, Wiig Ø. Polar bear case study. *Organohalogen Compounds* 2003; 61: 299-302.
173. Bustnes JO, Bakken V, Skåre JU, Erikstad KE. Age and accumulation of persistent organochlorines: A study of arctic-breeding glaucous gulls (*Larus Hyperboreus*). *Environmental toxicology and chemistry* 2003; 22(9): 2173-2179.
174. Jenssen BM, Haugen O, Sørmo EG, Skåre JU. Negative relationship between PCBs and plasma retinol in low-contaminated free-ranging gray seal pups (*Halichoerus grypus*). *Environmental Research* 2003; 93: 79-87.
175. Olsen GH, Mauritzen M, Derocher AE, Sørmo EG, Skaare JU, Wiig Ø, Jensen BM. Space-Use Strategy is an important determinant of PCB concentrations in female polar bears in the Barent Sea. *Environmental Sci. Technol.* 2003; 37:4919-4924.
176. Oskam I, Ropstad E, Dahl E, Lie E, Derocher AE, Wiig Ø, Larsen S, Wiger R, Skaare JU. Organochlorines affect the major androgenic hormone, testosterone, in male polar bears (*Ursus maritimus*) at Svalbard. *Journal of Toxicology and Environmental Health, Part A.* 2003; 66: 2119-2139.

Attn: FRITZ FERNANDEZ
 2/2

CURRICULUM VITAE

Name : **DARIO C. SABULARSE**
 Nickname : Dar
 Birthdate : July 1, 1943
 Nationality : Filipino
 Residence : Bughaw St., Collegeville, UPLB
 College, Laguna
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An academician, a chemist by profession, lecturer, a research fellow and the author of research reference materials, Dr. Sabularse put into use his vast training, expertise and technical experience for the government as Deputy Executive Director for Pesticide of the Fertilizer and Pesticide Authority (FPA), a technically-oriented regulatory agency that registers and license handlers of fertilizer and pesticide products. He is involved in a thorough chemical assessment of the specifications, bioefficacy, toxicology, human exposure and safety; environmental effects, residue in foods, environmental fate, transport and labeling of pesticide products being considered for registration. The FPA is at the forefront of the country's initiative in ensuring consumer safety in terms of strict implementation of maximum residue limits (MRLs) in agricultural produce. On the other hand, Dr. Sabularse spearheads the strict implementation of the Occupational Health and Safety Standards aimed towards protecting the health of the workers in pesticide production plants and the public in general against any adverse effects of pesticides. He is not only involved in assessment of pesticide but, also, of industrial chemicals, as a member of the Inter-agency Committee created for the implementation of the POPs Treaty. At present, he also serves as the Chairman of the Joint Technical Working Group on the Phase-out of Methyl Bromide in the country's compliance with the provisions of the Montreal Protocol. He represented the country in various conferences involving pesticides leading to the country's favorable standing in the international community in terms of compliance.

FROM : EMB-AGMS

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<u>Schools Attended</u>	<u>Year Graduated</u>	<u>Degree</u>
Michigan State Univ., U.S.A.	1982	Ph. D. Biochemistry
Univ. of Trondheim, Norway	1976	Diploma in Electron Microscopy Techniques
Univ. of the Philippines at Los Baños, Laguna, Philippines	1970	M. S. Ag. Chemistry
Univ. of the Philippines at Los Baños, Laguna, Philippines	1967	B. S. Ag. Chemistry
Civil Service Qualification		Registered Chemist, License No. 3630 May 1971, 10th Place (Chemistry Professional Board Examination)
Career Executive Service Eligibility		Career Executive Service Officer (CESO) IV September 2, 1998

EXPERIENCE

<u>Name/Address of Employers</u>	<u>Position</u>	<u>Year</u>
FPA	Deputy Executive Director III for Pesticides	Jan. 1999 to present
Fertilizer and Pesticide Authority, Quezon City	Officer-in-Charge Executive Director	November 3, 2003 to June 7, 2005
FPA	Deputy Executive Director III for Technical Services	Aug. 1, 1995 to Dec. 1998
FPA	Alternate Project Manager for the FPA Side on Pesticide Monitoring System Development Project (PMDP)	Mar. 1997 to 2002
College of Arts and Sciences (CAS), UPLB, Laguna	Associate Professor V	Jan. 1997 to July 31, 2000
UPLB, Laguna	Associate Professor III	Jan. 1995 to Dec. 1996

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<u>Name/Address of Employers</u>	<u>Position</u>	<u>Year</u>
UPLB	Associate Professor II	July 1, 1991 to Jan. 1995
UPLB	ESEP Coordinator	July 1992 to July 1995
FPA	Partial Detail as Registration Consultant for Pesticide	July 1994 to July 1995
Office of the Dean, CAS, UPLB	Assistant to the Dean for Planning and Development	July 1992 to Nov. 1994
Institute of Chemistry	Assistant Professor III→IV→V * Handles undergraduate and graduate biochemistry courses	Dec. 29, 1982 to July 1991
Institute of Chemistry	Officer-in-Charge	Sept. 19-27, 1983 Jan. 19-21, 1984 April 4-10, '84 May 27-June 1, '88 April 22-23, '87 Oct. 19-23, '87 May 9-11, '88 May 23-31, '88 Aug. 9-13, '88 Sept. 27-28, '88 April 22-May 3, '89 May 7-10, '89 Oct. 12-24, '89 March 27-May 20, '91
College of Medicine, UP, Manila	Division Head, Biochemistry and Ag. Chemistry Division Professorial Lecturer I - Lectured graduate biochemistry course	Dec. 1988 to Dec. 1990 Nov. 1988 to Oct. 1990
Michigan State University, USA	Teaching Assistant and Graduate Assistant - Lectured an undergraduate general biochemistry course and conducted research on the	Sept. 1981 to Dec. 1982

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CAS, UPLB, College, Laguna, Philippines	<p>enzyme inorganic pyrophosphatase: D-fructose-6-phosphate 1-phosphotransferase.</p> <p>Instructor I→II→III</p> <ul style="list-style-type: none"> - Handled undergraduate courses in general biochemistry, physical chemistry, general chemistry and chemical literature. - Developed instructional materials for training of high school chemistry teachers. 	June 1972 to Dec. 1982
Proctor and Gamble, Philippines	<p>Brand Manager, Product Development Department</p> <ul style="list-style-type: none"> - Conducted and directed product development on synthetic detergents 	Dec. 1971 to June 1972
Philippine Women's University (PWU), Manila	<p>Part-time Chemistry Instructor</p> <ul style="list-style-type: none"> - Handled undergraduate lecture and laboratory courses in organic and organic with biochemistry 	1971 to 1972
Agricultural Research Center (ARC), National Institute of Science and Technology (NIST), Manila, Philippines	<p>Scientist III</p> <ul style="list-style-type: none"> - Engaged in the development and improvement of research facilities of the ARC and conducted research on coconut cadang-cadang. 	Nov. 1970 to Dec. 1971
College of Forestry, UPLB, College, Laguna, Philippines	<p>Chemistry Instructor</p> <ul style="list-style-type: none"> - Handled general chemistry courses. 	June to Oct. 1970
College of Agriculture, UPLB, College, Laguna, Philippines	<p>Laboratory Instructor Graduate Fellow, UPLB-Cornell Program</p> <ul style="list-style-type: none"> - Conducted research on the application and modification of certain histochemical techniques to study the coconut endosperm. - Handled undergraduate laboratory courses in general chemistry. 	1967 to 1969

RESEARCHES UNDERTAKEN**Unpublished**

- Lysine Content of Mungo at Different Stages of Sprouting (B.S. Thesis, 1967, UP College of Agriculture).
- Histochemical Studies of Coconut Endosperm (M.S. Thesis, 1971, UP College of Agriculture).
- Protein Bodies of the Mature Endosperm of Cocos nucifera L. Research conducted at the University of Trondheim, Norway, 1976.
- Inorganic Pyrophosphate: D-Fructose-6-Phosphate 1-Phosphotransferase in Plants and its Regulation by a Naturally Occurring Activator, D-Fructose 2, 6-Biphosphate (Ph.D. thesis, 1982, Michigan State University).
- Nata de Coco as Solid Support for Dye-Ligand Affinity Chromatography, UPLB-IC Funded Research.

M. S. THESIS ADVISEES

- Loreto, M.T.P 1990. Sucrose Phosphate Synthase in Two Sweet Potato Cultivars. M.S. Agricultural Chemistry Thesis.
- Parayno, N.A. 1992. Preparation of immobilized invertase on a diazonium salt of p-aminobenzoyl-nata. M.S. Agricultural Chemistry Thesis.
- Borja, AM.J. 1992. Beaded Cellulose Gel from Nata de Coco as Matrix for Dye-ligand Chromatography. M.S. Biochemistry Thesis.

B. S. THESIS ADVISEES

- Mallari, A.C. 1986. Water Hyacinth as a Potential Source of Nutrients for Liquid Fertilizer Formulation. B.S. Chem. Undergraduate Thesis.
- Borja, A.M.S. 1987. Potential Steps in the Extraction and Purification of NADH from Baker's Yeast. B.S. Chem. Undergraduate Thesis.
- Buatis, M.L.P. 1987. Isolation and Purification of ADP and ATP from Baker's Yeast. B.S. Chem Undergraduate Thesis.
- See, F.S. 1987. Studies on the Acid-Base Indicator Properties of the Pigments from Pili (Canarium ovatum) Exocarp. B.S.

DGS: CV - 5 of 12 - July, 2005

Heradura, P.S. 1988. The tocopherol content of fresh coconut oil from mature coconut. Undergraduate Thesis, with Castillo, E.M. as co-adviser.

Cadid, R.B. 1989. Isolation and Characterization of polysaccharides in coconut "sapal." Undergraduate Thesis, with Castillo, E.M. as co-adviser.

Young, J.J. 1989. Determination and identification of acid sugars in the cell wall material isolated from coconut endosperm (*Cocos nucifera* L. var. (Oranga Dwarf) at three stages of maturity. Undergraduate Thesis with Castillo, E.M. as co-adviser.

Macatangay, R.G. 1991. Purification of malate dehydrogenase from beef heart using dye-ligand chromatography. B.S. Chem. Undergraduate Thesis.

Vinuya, J.V. 1991. Purification and partial characterization of adenylate kinase from germinating mung beans (*Vigna radiata*) B.S. Chem. Undergraduate Thesis.

Bebing, N.N. 1984. Optimization of Conditions for NaOH Extraction in *Saccharomyces cerevisiae*. B.S. Chem. Undergraduate Thesis.

PUBLICATIONS

Carpita, N., Sabularse, D., Motezinos, D., and Delmer, D.P. 1979. Determination of the pore size of cell walls of living plant cells. Science 205, 1144-1147.

Sabularse, D.C., and Anderson, R.L. 1981. Inorganic pyrophosphate: D-fructose-6-phosphate-1-phosphotransferase in mung beans and its activation by D-fructose, 1,6-bisphosphate and D-glucose, 1,6-bisphosphate. Biochemistry Biophys. Res. Commun. 100, 1423-1429.

Sabularse, D.C., and Anderson, R.L. 1981. D-fructose 2,6-bisphosphate: A naturally occurring activator for inorganic pyrophosphate: D-fructose-6-phosphate 1-phosphotransferase in plant. Biochem. Biophys. Res. Commun. 103, 848-855.

Anderson, R.L., and Sabularse, D.C. 1982. Inorganic pyrophosphate: D-fructose-6-phosphate 1-phosphotransferase from mung bean. Methods in Enzymology. Carbohydrate Metabolism part E 90, 91-97.

Sabularse, D.C. and Parayno, N.A. 1992. Immobilization of invertase on diazonium salt of p-aminobenzoyl-nata. Microbial Utilization of Renewable Resources 8: 77-104.

Lambio, A.L., Sevilla, C.C., Capitan, S.S., Kharal, M., and Sabularse, D.C. 1992. Genetic Polymorphism on Serum Proteins and Isoenzyme in Philippine Native Goats. Phil. J. Vet. Anim. Sciences 18 (3): 223-228.

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 DCS' CV - 5 of 12 - July, 2005

FROM : EMB-AQMS

FAX NO. : 9202263

Aug. 10 2005 10:24PM P1

Sabularse, D.C., and Kinoshita S. 1993. Immobilization of Invertase by Coupling to diazonium salt of p-aminobenzoyl-nata. Annual Reports of International Center of BIOTECH. Vol. 15.

Kang, E.T., Sabularse, D.C., and Kinoshita S. 1993. Immobilization of yeast invertase in alginate gel and on DEAE-sepharose A50. Annual Reports of International Center of Biotech. Vol. 15.

PAPERS PRESENTED IN CONFERENCES, ETC.

1. Inorganic pyrophosphate: D-fructose-6-phosphate 1-phosphotransferase in plants and its regulation by a naturally occurring activator D-fructose 2,6-bisphosphate. Phil. Biochemical Society Convention 1983, University of the Philippines, Diliman, Q.C.
2. Recent Trends in the Regulation of Phosphofructokinase and Fructose 1,6-Bisphosphate. Phil. Biochemical Society Convention 1985, University of Sto. Tomas, Manila.
3. Regulation of Carbohydrate Metabolism in Plants Symposium: Updates on Biochemical Regulation Phil. Biochemical Society, July 1988, University of Sto. Tomas, Manila.
4. Metabolism of Amino Acids. Phil. Biochemical Society Convention and Workshop, May 1989, University of Sto. Tomas, Manila.
5. Dye Ligand Chromatography for Separation and Purification of Enzymes, Diamond Jubilee Professorial Chair Lecture, December 19, 1990, Institute of Chemistry, UPLB.
6. National Methyl Bromide Phase-out Strategy, 20th Philippine Chemistry Congress, April 11-13, 2005, Baguio Country Club, Baguio City.

RESEARCHES

Preparation and Characterization of Carboxymethyl-nata for use as food additive and chromatography matrix in protein purification. (DOST-Funde 1 P201,000.00).

Production of Some Important Biomolecules - IC-UPLB Funded - Study Leader.

Production of Micronutrient Concentrate for liquid fertilizer formulation.

Product Formulation

Greenex All-Purpose Liquid Fertilizer - Approved 1995 by Fertilizer and Pesticide Authority, Given the FPA Control No. 01-253.

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12**PARTICIPATION IN TRAINING / STUDY VISIT / CONFERENCE**

Electron Microscopy Techniques, Norwegian Agency for International Development, Norges Tekniske Hogskole, Trondheim, Norway. August 1975 to July 1976.

Study visit to University of La Trobe, Melbourne, Australia. August to October 1991.

Attendance to Biotechnology Conference, Bangkok, Thailand. October 29 to November 2, 1992.

Study visit to Hokkaido University, Japan. March 27 to June 29, 1993.

Attendance to the 10th Session of the Codex Coordinating Committee for Asia, Tokyo, Japan. March 5 to 8, 1996.

Attendance to International Seminar on Recent Development of Mosquito Coils: Efficacy, Toxicology, Environmental Impact and Legislation, Universiti Sains Malaysia, Penang, Malaysia. 5 to 7 December 1996.

Attendance to First International Conference of the Asian Society of Toxicology, Yokohama, Japan. 29 June to 2 July 1997.

Attendance to The Project Planning and Management Seminar for Project Managers, Japan International Cooperation Agency, Tokyo, Japan. 31 March to 9 April 1998.

Attendance to Regional Network on Safe Pesticides Production and Information for Asia and the Pacific, Kathmandu, Nepal. 16 to 17 February 1999.

Attendance to the 4th Session of the Intergovernmental Negotiating Committee for an International Action on Certain Persistent Organic Pollutants (INCA-POPs), Bonn, Germany. 20 to 25 March 2000.

Attendance to the 6th Training Workshop on Use of Nuclear Techniques in Studies of Agriculture, Beijing, China. 18 to 28 October 2000.

Attendance to JICA Technical Exchange Program, Vietnam. 21 to 25 May 2001.

Attendance to FAO Regional Workshop on Obsolete, Banned Pesticide Stocks and Persistent Organic Pollutants, Bangkok, Thailand. 4 to 8 June 2001.

Attendance to COCHRAN Workshop on Biotechnology, U.S.A., 13 to 24 September 2001.

Attendance to the JICA Training Course on Establishment of Pesticide MRL, Japan, 18 November to 4 December 2001.

13

Attendance to the Pesticide Regulatory Harmonization Workshop for SouthEast Asia, Bangkok, Thailand 28-30 January 2002.

Attendance to the 3rd Int'l Conference on Biopesticides, Kuala Lumpur, Malaysia, 22 to 26 April 2002.

Attendance to the Int'l Workshop on Methyl Bromide Alternatives, Pattaya, Thailand, 25 to 27 September 2002.

Attendance to: (held in Hanoi, Vietnam)

- Int'l Agrochemical Residue Workshop, 28-29 October 2002
- 7th Meeting of the Expert Working Group on Harmonization of MRLs of Pesticides Among ASEAN Countries, 30 October to 1 November 2002

Attendance to 2nd Pesticide Harmonization Workshop for ASEAN Countries, Kuala Lumpur, Malaysia, 25 to 28 August 2003.

Attendance to International Conference of Pesticide Registration and Management, Beijing, China, 17 to 21 November 2003.

Attendance to the 8th Expert Working Group Meeting on the Harmonization of Maximum Residue Limit of Pesticides Among ASEAN Member Countries, Brunei, Darussalam, 1 to 5 March 2004.

Attendance to the Extraordinary Meeting of the Parties to the Montreal Protocol, Montreal, Canada, 24 to 26 March 2004.

Attendance to the East Asian Regional Workshop on National CFC Phase-out Plan, Hanoi, Vietnam, 4 to 5 May 2004.

Attendance to: (held in Geneva, Switzerland)

- AdHoc Working Group on MBTOC, 10 to 12 July 2004
- 24th Open-Ended Working Group Meeting of the Parties to the Montreal Protocol, 13 to 16 July 2004
- 32nd Implementation Committee Meeting under the Non-Compliance Procedures of the Montreal Protocol, 17 to 19 July 2004

Attendance to the 33rd Implementation Committee Meeting of the AdHoc Working Group and the 16th Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, 18-26 November 2004, Prague, Czech Republic

Attendance to the First Meeting of the Conference of the Parties of the Stockholm Convention on Persistent Organic Pollutants (POPs-1st COP), Punta del Este, Uruguay on 2-6 May 2005

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SCHOLARSHIP, HONORS AND AWARDS

Class Valedictorian, 1962 - Student Leader, Orator, and Future Farmer of the Year - High School, Camarines Sur National Agricultural School.

Entrance Scholar, 1962 - College of Agriculture, University of the Philippines (UPCA).

College Scholar - 3 semesters, UPCA

Honor Roll - 6 semesters, UPCA

Philippine Banking Corporation Scholar, 1962-1963, UPCA

Undergraduate Fellow, 1963-1965, UPCA

L.L. Vincent Memorial Fund Scholar, 1965-1966, UPCA

U. P. Cornell Graduate Research Fellow, 1967-1969, UPCA

Honor Cadet, UPCA ROTC, 1964.

Most Outstanding Senior Student in Leadership, 1966, UPCA.

Best Parliamentarian, 1966 and 1967 - National Convention Agricultural College Student Association of the Philippines.

Top Ten - Chemistry Professional Board Examination - taken Mar 1971.

Norwegian Agency for International Development (NORAD) Fellowship, August 1975 to July 1976, University of Trondheim, Norway.

PCARRD-U.S. AID Fellowship, January 1978 to December 1980, Michigan State University, East Lansing, Michigan.

Achievement Award - UPLB Chemical Society, 25th Anniversary, October 7, 1989.

Outstanding Alumnus in Extension Awardee for the Year 2000, UPLB.

MEMBERSHIP IN HONOR AND SCIENTIFIC SOCIETIES

Phi Kappa Phi, International Honor Society, 1967 to date

Gamma Sigma Delta, the Honor Society of Agriculture (UP Chapter), 1967 to date (Life Member)

Society for the Advancement of Research, 1967 to date

Chemical Society of the Philippines, 1971 to date (Life Member)

Philippine Biochemical Society, 1976 to date (Life Member)

National Research Council of the Philippines, 1983 to date (Regular Member)

Philippine Association for the Advancement of Science, 1984 to date.

N

LEADERSHIP IN ORGANIZATIONS

Vice President, Sophomore Class, 1963-1964, UPCA

President, Junior Class, 1964-1965, UPCA

Vice President, Student Body Organization, 1965-1966, UPCA

President, Student Body Organization, 1966-1967, UPCA

President, Agricultural College Student Association of the Philippines, 1967-1967, National

President, Kapisanan ng Mga Kimiko sa Pilipinas, Los Baños Chapter, 1963-1984

Adviser, UP Beta Sigma, Los Baños, Laguna, 1985-1988

Auditor, Kapisanan ng Mga Kimiko sa Pilipinas, Laguna 1988-1989.

Board Member, Kapisanan ng Mga Kimiko sa Pilipinas, National, 1989-1990.

Board Member, Kapisanan ng Mga Kimiko sa Pilipinas, Los Baños Chapter, 1988 to 1990.

Adviser, UPLB Chemical Society, 1992 to 1995.

Board Member, Integrated Chemist of the Philippines, 2004 to present

OTHER DUTIES IN THE UNIVERSITY

<u>Position</u>	<u>Committee</u>	<u>Level</u>	<u>Inclusive Date</u>
Chairman	Graduate Instruction	Department	1983-1988
Chairman	Sports	Department	1984-1986
Chairman	Sports	College	1986-1987
Member	Academic Personnel	Department	1984-1986
Member	Academic Personnel	Department	1988-1990
Member	Curriculum	Department	1985-1995
Representative at Large	UPLB Admission	University	1984-1986
Member	Loyalty Day Sports	University	1986, 1987, 1988
Member	Biomedical Science Program Review	University	1987 (July to Oct)
CAS Representative at Large	UREC Executive	University	1989
Member	IMSP Director Search	University	1989
Member	Maini Case Investigating	Chairman	1986
Chairman	FQR Case Investigating	Department	1989

DCS' CV - 11 of 12 - July, 2005

FROM : EMB-ADMS

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Member	Gamma Sigma Delta Best Thesis Award	University	1990
Member	Scholarship and Award	University	1988 to 1990
Chairman	KKP Annual Award	Los Baños	1985-1986
Chairman	PNSS Chemistry Division Award	National	1987
Member	- do -	National	1988, 1989
Member	Graduate School Physical Sciences	University	1990 to Nov. 1994
Chairman	- do -	University	1994-1995
Member	UPLB CBA	University	1991 to 1995
Member	UPLB Foundation CBA	University	1992 to Feb. 1994
Member	UPLB Nata de Coco Task Force	University	1993 to 1995

Dario C. Sabularse
DARIO C. SABULARSE, Ph. D.

myd/m: dcsresum.doc

DCS' CV - 12 of 12 - July, 2005

CURRICULUM VITAE

Name: Hala Sultan Saif Al-Easa

Nationality: Qatari

College: Arts and Sciences

Department: Chemistry and Earth Sciences

General Specialization: Organic Chemistry

Specific Field: Natural Products (Phytochemistry)

Current Position: Associate Professor of Organic Chemistry

Professional History of the Applicant

1- SCIENTIFIC QUALIFICATIONS IN CHRONOLOGICAL ORDER

University Degree	Dates Attending		Specific Field	Date Awarded Degree	Name of University & Country
	From	To			
Bachelor	1978	1982	Chemistry- Physics	1982	University of Qatar
Master	1982	1985	Inorganic Chemistry	1985	State University College of New York at Buffalo
Ph. D	1987	1990	Natural Products	1990	Reading University, U. K

TITLE OF M.SC. THESIS:

"The Synthesis and Characterization of N-(2-mercaptophenyl) salicylaldamine and its Complexes"

TITLE OF PH.D. THESIS:

"An Investigation of the Plant Centaurea sinaica"

2- ACADEMIC EXPERIENCE OBTAINED AFTER APPOINTMENT AT UNIVERSITY OF QATAR:

Academic Rank	Date Awarded	Period of Work/Year
Research Assistant	1986	4
Assistant Professor	1990	7
Associate Professor	1997	To date

3- MEMBERSHIP IN SCIENTIFIC SOCIETIES:

Society	Type of Membership	Activity	Date	Place
American Chemical Society	Member	Chemistry	Since 1986	USA
Royal Chemical Society	Member	Chemistry	Since 1992	UK
Alexander von Humboldt	Fellowship	Science	Since 1994	Germany

4- LIST OF PUBLICATIONS

- 1- A. M. Rizk, H. I. Heiba and H. S. Al-Easa, "Chemical Survey of Some Plants Growing in Qatar", *Fitoterapia*, Vol. 60, No. 4, 367-372 (1989).
- 2- Hala S. Al-Easa, John Mann and Abdel-Fattah Rizk, "Guaianolides from *Centaurea sinaica*", *Phytochemistry*, Vol. 29, No. 4, 1324-1325 (1990).
- 3- Hala S. Al-Easa, Alaa Kamel and Abdel-Fattah M. Rizk, "Flavonoids from *Centaurea sinaica*", *Fitoterapia*, Vol. 63, No. 5, 468-469 (1992).
- 4- H. S. Al-Easa and A. M. Rizk, "Constituents of *Centaurea sinaica*", *Qatar Univ. Sci. J.*, Vol. 12, 27-57 (1992) (Review)
- 5- Maurizio Bruno, Rosario Ciriminna, Hala S. S. Al-Easa, Abdel-Fattah M. Rizk, "Triterpenoids from *Salvia aegyptiaca*", *Fitoterapia*, Vol. 64, No. 3, 275-276 (1993).
- 6- Hala S. Al-Easa, Alaa Kamel and Hussiney A. Hussiney, "Flavonoids of *Picris radicata*", *Qatar Univ. Sci. J.*, Vol. 14 (C), 158-160 (1994).
- 7- T. Deyama, K. Yahikozawa, H. S. Al-Easa and A. M. Rizk, "Constituents of *Cistanche phelypaea*", *Qatar Univ. Sci. J.*, Vol. 15, No. 1, 51-55 (1995).
- 8- Hala S. Al-Easa, Hussiney A. Hussiney and Abdel-Fattah M. Rizk, "Chemical Investigation of *Rumex vasicarius*", *Int. J. of Chem.*, Vol. 6, No. 2, 21-25 (1995).
- 9- Hala S. Al-Easa, Jean-Michel Kornprobst and A. M. Rizk, "Major Sterol Composition of Some Algae from Qatar", *Phytochemistry*, Vol. 39, No. 2, 373-374 (1995).
- 10- T. Deyama, K. Yahikozawa H. S. Al-Easa and A. M. Rizk, "New Iridoid From *Cistanche Phelypaea* (L) COUT", *Int. J. of Chem.*, Vol. 6, No. 4, 107-112, (1995).
- 11- Hala S. Al-Easa, Abdel-Fattah M. Rizk and Ahmed A. Ahmed, "Two New Guaianolides from *Picris radicata*", *Phytochemistry*, Vol. 43, No. 2, 423-424, (1996).
- 12- Arnaud Briand, Jean-Michel Kornprobst, Hala S. Al-Easa, and Abdel Fattah M. Rizk, "(-)-Paniculatol, a New ent-Labdane Bromoditerpene from *Laurencia paniculata*", *Tetrahedron Letters*, Vol. 38, No.19, 3399-3400 (1997).
- 13- Helmi I. Hieba Hala S. Al-Easa and Abdel-Fattah M. Rizk, "Fatty Acid Composition of Twelve Algae from the Coastal Zones of Qatar", *Plant Food for Human Nutrition*, 1-8, (1997).
- 14- A. Rizk, H. S. Al-Easa and J. M. Kornprobst, "The Phytochemistry of the Macro and Blue-Green Algae in the Arabian Gulf", Faculty of Science, University of Qatar, The Doha Modern Press Ltd., 746 pp. (1999). (Book, 746pp)
- 15- H. S. Al-Easa, A. M. Rizk and H. I. Hieba "Lipid Constituents of Seventeen Range Plants Growing in Qatar", *Int. J. Chem.*, Vol. 12, No. 1, 61-66, (2002).

- 16- **H. S. Al-Easa**, "Proximate Composition of Thirty Four Food and Feed Plants Growing in Qatar", *Int. J. Chem.* Vol. 13, No. 2, 99-103 (2003).
- 17- **J.M. Kornprobst, H. S. Al Easa**, "Brominated Diterpenes from Marine Origin", *Current Org. Chem.* Vol. 7, 1181-1229 (2003). (Review)
- 18- **H. S. Al-Easa, A. M. Rizk and E. M. Abdel Bari**, "Chemical Constituents and Nutritive Values of Range Plants in Qatar", *Scientific and Applied Research Center, Qatar University, the Doha Modern Press Ltd.*, (2003). (Book, 746 pp)
- 19- **H. S. Al-Easa**, "Fatty Acids Composition of Fifty One Plant Species Growing in Qatar", *Int. J. Chem.* Vol. 14, No. 4, 195-204 (2004).
- 20- **H. S. Al-Easa**, "Relationship of Plant Proteins and Amino Acids within Taxonomic Categories in Qatari Range Plants", *Asian J. Chem.*, Vol. 17, No. 2, 1185-1198 (2005).
- 21- **Mohamed El Hattab, Hala Sultan Saif Al-Easa, Anni Tabaries, Jean-Michel Kornporobst and Louis Pioveti**, "Volatile Components of *Hormophysa cuneiformis* Growing in Qatar", *Qatar Uni. Sci. J.* (Accepted).
- 22- **Jean-Michel Njinkoué, Gilles Barnathan, Jean-Michel Kornprobst, Hala Sultan Saif Al-Easa, Abdulrahman Al-Muftah and Jean Vacelete.** "Phospholipid Fatty Acid Composition of six *Haplosclerids* Sponges from Qatar", *Qatar Uni. Sci. J.* (Accepted).

6- CONTRIBUTION IN CONFERENCES

- 1- "Constituents of Plants Growing in Qatar, Part XXII: Constituents of *Cistanche phelypaea*", **H. S. Al-Easa, A. M. Rizk and T. Dayama**, 18th International Conference on Natural Products Strasbourg, France, (Aug. 30 - Sept. 4, 1992) (Poster).
- 2- "Study on Some Plants in Qatar", **H. S. Al-Easa**, First Arab Conference on the uses of Medicinal Plants as Healing Drugs According to Modern Scientific Methods, Damascus, Syria, (Oct. 5-8, 1993) (Paper).
- 3- "From Natural Gas to Liquid Hydrocarbons - Results of Investigations in Semi Industrial Scale", **H. S. Al-Easa, K. Hedden and Andreas A. Jess**, First International Conference in Chemistry and its Applications, University of Qatar, (Dec. 1993) (Oral- Paper).
- 4- "Sterol Composition of Some Algae from Qatari Waters", **H. S. Al-Easa, J.M. Kornprobst and A. M. Rizk** First International Conference in Chemistry and its Applications, University of Qatar, (Dec. 1993) (Oral- Paper).
- 5- "Flavonoids from *Picris radicata*", **H. S. Al-Easa**, First International Conference in Chemistry and its Applications", University of Qatar, Dec., 1993 (Poster).
- 6- "Phospholipid Fatty Acid Composition of Four Qatari Marine Sponges of the Order *Haplosclerida*", **J. M. Njinkoue, G. Barnathan, H. S. Al Easa, A. R. Al Muftah, J. Vacelet and J.M. Kornprobst.** 1st Euroconference on Marine Natural Products, Athens, November 1997 (Poster).

- 7- "Phospholipid Fatty Acid Composition of Nine Sponges from Qatar, Marine Lipids" J.M. Njinkoué, G. Barnathan, A.R. Al Mufath, H. S. Al Easa, J. Vacelet and J.M. Kornprobst., **European Society for Marine Biotechnology-ADEBIO**, Brest, November 1998 (Poster).
- 8- "Glycolipides D'éponges Marines : Isolement, Etude Structurale et Evaluation Pharmacologique" G. Barnathan, S. Maillard, J.M. Njinkoué, S. Markai, E. Genin, H. S. Al Easa, A.R. Al-Muftah, J.M. Kornprobst et J. Vacelet. **VI èmes AECCPCM**, Angers, April, 2001 (Poster).
- 9- "Paniculato and Related Bromoditerpenes from the Red Alga *Laurencia paniculata* Collected Along Qatar Coasts", F. Dumezy, H. S. Al Easa and J-M. Kornprobst. **QUEST 2002 (Qatar United for Environment, Science and Technology)**, Doha, January 2002 (Poster).
- 10- "Unusual Sterols from the Brown Alga *Hormophysa triquetra* Collected Along Qatar Coasts" A. Chérel, G. Barnathan, H. S. Al Easa and J-M. Kornprobst, **QUEST 2002 (Qatar United for Environment, Science and Technology)**, Doha, January 2002 (Poster).
- 11- "Isolation and Characterization of Fucoïdan from *Hormophysa triquetra* Harvested along Qatar Coasts", S. Collic Jouault, J. Ratiskol, C. Siquin, J-P. Busnel, H. S. Al Easa and J-M. Kornprobst, **QUEST 2002 (Qatar United for Environment, Science and Technology)**, Doha, January 2002 (Poster).
- 12- **Biannual Conference on Chemistry, Chem. 02**, Faculty of Science, Department of Chemistry, Cairo University, Cairo – Egypt (March 4-7, 2002) Session Chairperson.
- 13- "Isolation and Characterization of Fucoïdan Extracted from *Hormophysa cuneiformis* Harvested along Qatar Coasts", S. Collic Jouault, J. Ratiskol, C. Siquin, J-P. Busnel, H. S. Al Easa and J-M. Kornprobst, **IXth European Meeting of Marine Biotechnology**, Nantes, May 2002 (Poster).
- 14- "Mineral Composition of Wild Plants Growing in Qatar", Hala S. Al-Easa, **2nd International Conference on Chemistry and its Applications**, Doha – Qatar, Dec. 6-9, 2003.
- 15- "Fatty Acid Composition of 51 Wild Plant Species Growing in Qatar", Hala S. Al-Easa, **2nd International Conference on Chemistry and its Applications**, Doha – Qatar, Dec. 6-9, 2003.
- 16- "Relationship of Plant Proteins and Amino Acids within Taxonomic Categories in Qatari Range Plants", Hala S. Al-Easa, **2nd International Conference on Chemistry and its Applications**, Doha – Qatar, Dec. 6-9, 2003.
- 17- "Study of Volatile Compounds from the Brown Alga *Hormophysa cuniformis* Using Supercritical Carbon Dioxide Extraction", Mohamed El-Hattab, Hala S. Al-Easa, Louis Piovetti and Jean-Michel Kornprobst, **2nd International Conference on Chemistry and its Applications**, Doha – Qatar, Dec. 6-9, 2003.
- 18- "Isolation and Characterization of Fucoïdan Extracted *Hormophysa cuniformis* Harvested along Qtar Coasts", Sylvia Collics-Jouault, Hala S. Al-Easa, Jacqueline Ratisko, Corinne Siquin, Jean-Pierre Busnel and Jean-Michel Kornprobst, **2nd International Conference on Chemistry and its Applications**, Doha – Qatar, Dec. 6-9, 2003.

- 19- "Paniculatol and Related Bromoditerpenes from the Red alga *Laurencia paniculata* Collected along Qatar Coasts", Florent Dumezy, Hala S. Al-Easa and Jean-Michel Kornprobst, 2nd International Conference on Chemistry and its Applications, Doha – Qatar, Dec. 6-9, 2003.
- 20- "Unusual Sterols from the Brown Alga *Hormophysa Cuniformis* Collected Along Qatar Coasts", Auerlie Chereh, Hala S. Al-Easa, Gills Barnathan and Jean-Michel Kornprobst, 2nd International Conference on Chemistry and its Applications, Doha – Qatar, Dec. 6-9, 2003.
- 22- Vice Chair, 2nd International Conference on Chemistry and its Applications, Doha – Qatar, Dec. 6-9, 2003.
- 23- Coordinator, 2nd International Conference on Chemistry and its Applications, Doha – Qatar, Dec. 6-9, 2003.

7- SCIENTIFIC SYMPOSIA & WORKSHOPS

- 1- Chromatographic Analysis (Workshop), Chemistry Department (Qatar University), 1-3/12/1990
- 2- Metal Corrosion (Workshop) Chemistry Department (Qatar University), April, 1992
- 3- Gas Chromatography Analysis (workshop) College of Science (Qatar University), 26-29/4/1993
- 4- First safety workshop, Ministry of Interior (Qatar), 20/4-4/5/1995
- 5- Carbohydrates in Marine Algae (Workshop), Chemistry Department (Qatar University), 18-27/4/1995
- 6- Sponge Chemistry (Workshop), Chemistry Department (Qatar University), 3-4/4/1996
- 7- Catalytic Oxidation and its Applications (Workshop), Chemistry Department (Qatar University), 18-19/12/1996
- 8- Application of Herbal Plants in Folk Medicine (Symposia), College of Science (Qatar University), 12/4-12/5 1997
- 9- Secondary Metabolites from Marine Algae and Sponges (workshop), College of Science (Qatar University), May, 1998
- 10- First Aid and Fire Distinguishing in Chemistry Laboratories Training Course, Chemistry Department (Qatar University), 10/5/2001.
- 11- University Assessment (workshop), Qatar University, 16/5/2001
- 12- Woman and Politics and her Role in Society Development, Supreme Family Council, 21-23/4/2002
- 13- The General Strategy fro the College of Science (workshop), College of Science (Qatar University), 21-23/4/2002.
- 14- The Peer Review (workshop), Qatar University, December, 2004
- 15- Preparing a Course Portfolio (workshop), Qatar University, December, 2004
- 16- Strategies and Methods for College Students Evaluations, Qatar University, 11-12/5/2005

8- SEMINARS GIVEN

No.	Seminar Title	Date	Place
1	<i>Chemical constituents of Centaurea sinaica</i>	24/4/1994	Chemistry Department, Qatar University
2	<i>Chemistry is the Language of Living Organisms</i>	6/5/1992	College of Science
3	<i>Natural Pigments Separation by HPLC</i>	17/5/1995	Chemistry Department, Qatar University
4	<i>Active Constituents in Medicinal Plants</i>	12/4-12/5 1997	College of Science, Qatar University
5	<i>Methods for the Isolation and Separation of Pure Compound from it's Natural resource</i>	12/4-12/5 1997	College of Science, Qatar University
6	<i>Plants are Nature's Medicine</i>	12/4-12/5 1997	College of Science, Qatar University
7	<i>Healing Plants of the Middle East</i>	12/4-12/5 1997	College of Science, Qatar University
8	<i>Uses of Plants in Folk Medicine</i>	12/4-12/5 1997	College of Science, Qatar University
9	<i>Plants Used in Qatari Folk Medicine and Their Active Constituents</i>	12/4-12/5 1997	College of Science, Qatar University
10	<i>Carbohydrates and Polysaccharides of Marine Algae</i>	6/5/1998	Chemistry Department, Qatar University
11	<i>Primary Metabolites of Marine Algae</i>	10/5/2001	Chemistry Department, Qatar University
12	<i>Medicinal Plants in Qatar</i>	4/5/2005	Chemistry Department, Qatar University

9- TEACHING ACTIVITIES:

A) LIST OF COURSES TAUGHT

No.	Course Number	Course Title	Course Taught to	No. of Semesters	No. of Students
1	105899A	General Chemistry (A)	Remedial	1	16
2	105899 B	General Chemistry (B)	Remedial	1	5
3	1058103	General Chemistry	Home Economics	4	130
4	1058201	Organic Chemistry (1)	Chemistry (Science, Education)	6	163
5	1058202	Organic Chemistry	Home Economics	6	166
6	1058203	Organic Chemistry (2)	Chemistry (Science, Education)	4	84
7	1058211	Organic Chemistry (1)	Chemistry, Biology, Food and Nutrition, Biomedical, Food and Nutrition	4	59
8	1058212	Organic Chemistry (2)	Chemistry (Science)	2	8
9	1058261	General Organic Chemistry	Chemistry, Biology, Food and Nutrition, Biomedical, Agricultural Sciences	10	280
10	1058301	Advanced Organic Chemistry (1)	Chemistry (Science, Education)	1	33
11	1058311	Organic Chemistry (3)	Chemistry (Science)	1	2
12	1058364	Chemistry of Preparations	Chemistry (Education)	4	69
13	1058401	Heterocyclic Chemistry	Chemistry (Science)	5	94
14	1058402	Natural Products Chemistry (1)	Chemistry (Science)	7	89
15	1058469	Natural Products Chemistry	Chemistry (Science, Education)	1	10
16	1058499	Graduation Project	Chemistry (Science)	1	2

B) LIST OF PRACTICAL LAB TAUGHT

No.	Course Number	Course Title	Course Taught to	No. of Semesters	No. of Students
1	1058202	Organic Chemistry	Home Economics	6	166
2	1058203	Organic Chemistry (2)	Chemistry (Science, Education)	4	68
3	1058211	Organic Chemistry (1)	Chemistry, Biology, Food and Nutrition, Biomedical, Food and Nutrition	4	35
4	1058213		Chemistry (Science)	1	5
5	1058261	General Organic Chemistry	Chemistry, Biology, Food and Nutrition, Biomedical, Agricultural Sciences	12	251
6	1058303	Spectroscopic and Practical Organic Chemistry	Chemistry (Science)	2	11
7	1058364	Chemistry of Preparation	Chemistry (Education)	4	69
8	1058402	Natural Products Chemistry (1)	Chemistry (Science)	7	89
9	1058411	Organic Spectroscopy	Chemistry (Science, Education)	2	10
10	1058469	Natural Products Chemistry	Chemistry (Science, Education)	1	10
11	1058499	Graduation Project	Chemistry (Science)	1	2

10- ACADEMIC ADVISING:

Had advised chemistry major students for the period 1996-2001 and since 2005 advising chemistry major students.

11- SCIENTIFIC MISSIONS:

1-University of Karlsruhe, Germany, for the Liquefaction of Natural Gas Project during the following periods:

a- May 2-9 (1992)

b- July 28 - Oct. 4 (1992)

2. University of Nantes, College of Pharmacy, France, to conduct research on marine algae

a- July 22-29 (1994)

b- July 1st - August 1st (2000)

3. Institute of Organic Chemistry, the University of Ludwig Maximilian, Munich, Germany, as an Alexander von Humboldt fellow, (Feb. 1, 1994 - March 31, 1995).

12- SERVICES & CONSULTATION WORK:

- 1- *Qatar Science & Technology Park, QSTP, Qatar Foundation, Nov., 2003 to May, 2003, Member of the Advisory Committee*
- 2- *Science Park Development Company, SPDCo, Qatar Foundation, Jan., 2003 to June, 2003, Member of Board of Directors*
- 3- *Scientific Forum on Medical Culture (Folk Medicine), National Council for Culture, Arts and Heritage, 27-30/12/2004 Lecturer)*

13- COMMITTEE'S MEMBERSHIP:

A) UNIVERSITY COMMITTEES

No.	Committee Name	Period	Participation Type
1	Laboratory and Scientific Committee	1997-1999	Member
2	The Organizing Symposium on The International Conference of UNESCO on Higher Education Between Reality and Application in Arab Gulf Countries	1999	Member

B) COLLEGE COMMITTEE'S

No.	Committee Name	period	Participation Type
1	Continuing Education and Community and Service	1995-1996	Member
2	Human Resources for Technician in College of Science	1995-1996	Member
3	College Council	1995-1998 2001-2004	Member
4	Scientific Seminars	1993-1994 1996-1997	Member
5	General and Students Activities	1995-1996 1997-1998	Member Coordinator
6	College of Science Annual report	1997-1999	Member
7	The Organizing Committee of Regional Conference on the Marine Environment of the Gulf	1998	Member
8	Graduate Program on Ecological Sciences	2000-2002	Member

C) DEPARTMENT COMMITTEES

No.	Committee Name	period	Participation Type
1	Departmental Chemical Society	1995-1996	Member
2	Training and continuing Education	1995-1996	Member
3	Curricula Development	1995-1999 2000-2001	Member Coordinator
4	Academic Advising	1995-1997	Member
5	Schedule	1995-1996 1998-1999	Member Coordinator
6	Training and Teaching Technique	1995-1996	Member
7	Editing and Arabization	1995-1996	Member
8	Teaching Chemistry by Computer Committee	1995-1996 1998-1999	Member Coordinator
9	Department Council Secretary	1997-1998	Secretary
10	Coordination Committee between Chemistry Departments in the GCC	1998-1999	Coordinator
11	Examination	1998-2001	Coordinator
12	Laboratory Equipment	1998-1999	Member
13	New College of Science Building Evaluation	2000-2001	Member
14	Seminars, Workshops and Social Committee	Since 2004	Member
15	The Investigation of Student Defraining from Specializing in Chemistry	Since 2004	Member
16	Recruiting Distinguished Professor	Since 2004	Member
17	Research Laboratory	Since 2004	Member

16- ADMINISTRATIVE ACTIVITIES:

- 1- Chairperson of the Chemistry Department, college of Science, Qatar University, 13/3/2001-9/3/2004.
- 2- Chairperson of the Cultural and Scientific Unit, Qatar University, November 2001- January, 2005.

1. PERSONAL HISTORY

Name: Thomas Brima Rick Yormah
Current Address Postal: Department of Chemistry, Fourah Bay College, University of Sierra Leone, Freetown, Sierra Leone.
 Tel. +232 76 626 488 or +232 33 311910
E-mail: tom_yormah@yahoo.com
Date of Birth: 3rd September, 1952

2. EDUCATIONAL STATUS:2.1 University Education

1977-1981 University of Birmingham, England, UK

Ph. D., (Soil) Chemistry

Thesis Title: "The Composition and Properties of Selected Samples from a Tropical Soil Profile"

1975-1977 University of Sierra Leone, Fourah Bay College, Sierra Leone

M. Sc. Chemistry

1970-1974: University of Sierra Leone, Fourah Bay College, Sierra Leone

B. Sc. (Hons.), Chemistry; studied in addition to chemistry, **Botany and Zoology for 3 years prior to entering Honours School of Chemistry.**

3. **PROFILE:** A keen believer and an active participant in the promotion of the emancipating power of education and in the potency of science, education and innovation as crucial tools for the empowerment of individuals and nations. An able negotiator with strong inter-personal and communication skills.

4. **EXPERTISE:** Surface chemistry applied to soil and environmental sciences; soil chemical and physical fertility studies. Other assets include the ability to manage resources – human, time and material.

5. EMPLOYMENT HISTORY:5.1 **Title of post: Lecturer and Senior Lecturer**

April 1981-Sep.1992 Fourah Bay College, University of Sierra Leone, Private Mail Bag,
and Sept. 1992 to date Freetown, Sierra Leone.

5.2 **Title of post: Research/Teaching Assistant; Academic Support Staff**

Sept 1974-April 1981 (October Employer: University of Sierra Leone
1976-April 1981 on study leave at
University of Birmingham, U.K.)

6. FELLOWSHIPS

1. IAEA Fellowship on the "Application of isotope and Radiation Techniques in Soil Fertility Studies". Realized at: The Macaulay Institute for Soil Research, Aberdeen, U.K. (July – October 1983).

2. IAEA Fellowship on "Training in the use of Energy-Dispersive X-ray Fluorescence Technique in Elemental Analysis". Realised at: Micro & Trace Analysis Centre (MiTAC) in the Department of Chemistry on UIA Campus of University of Antwerp, Belgium (17 May-16 December, 1997).

6. SOME CONFERENCES, SEMINARS, WORKSHOPS, ETC. ATTENDED

- 29 August – 23 September 1994** International Atomic Energy Agency (IAEA). Interregional Training Course on Nuclear and Related Techniques in Environmental Research and Monitoring, Vienna, Austria.
- 11-29 September 1995** ICTP. College on Soil Physics. Trieste, Italy.
- 5-8 September 2001** UNESCO & International Bureau of Education: "International Conference on Education – 46th Session" Geneva, Switzerland.
- 15-17 October 2002** United Nations Commission on Science and Technology for Development (UNCSTD) Panel on "Linking FDI, Technology Development for Capacity Building and Strategic Competitiveness". Colombo, Sri Lanka.
- 24 – 28 May 2004** UNCSTD 7th Session, Geneva, Switzerland; Theme "Promoting the application of Science & Technology to meet the Development goals contained in the Millennium Declaration"
- 4 – 8 November 2004** UNCSTD Panel on "Promoting the application of Science & Technology to meet the Development goals contained in the Millennium Declaration", Vienna, Austria.

8. IMPORTANT ACTIVITIES AND POSTS HELD.

- 1982-1986: Executive member, Senior Staff Association, University of Sierra Leone, (USL).
- 1982-1986: Examiner, A Level Chemistry, West African Examinations Council.
- 1984-1990: Member, Fourah Bay College Students Discipline Committee, USL.
- 1986-1994: Member, Fourah Bay College Senior Common Room Committee.
- 1989-date: Chevalier de 1^{er} Ordre Du Mono (National Award of the Republic of Togo).
- 1988-1993: Honorary Executive member, Sierra Leone Science Association.
- 1990-1995: Member, Fourah Bay College School Management Committee.
- 1992-1993: Member, Appeals Committee, Sierra Leone Football Association
- 1992-1996: Member, Board of Directors, National Insurance Company, Sierra Leone.
- 1992-date: Member, Senate of University of Sierra Leone.
- 1993-date: Member, Board of Institute of Public Administration and Management (IPAM), USL; representing the University Senate.
- Sept. 1997 Consultant Soil Scientist to the ESCaPP Project, Plant Health Management Division, International Institute of Tropical Agriculture, Cotonou (Rep of Benin)
- 1998-date: Member, Board of Directors, The Albert Academy Freetown, Sierra Leone.
- 1999-date: Member, Governing Council, West African Examinations Council.
- 1999-2004: President, Academic Staff Association, University of Sierra Leone.
- 2000-date: Member, United Nations Commission on Science & Technology for Development; based at UNCTAD, Geneva, Switzerland.
- 2003 National Expert and Member, UNDP/UNESCO/MEST sponsored Steering Committee for Development of National Policy on Science & Technology.
- 2003-date: Head, Department of Chemistry, Fourah Bay College, Univ. of Sa. Leone
- 2005 – Date: Chairman, National Environment Protection Board (of Sierra Leone).

8. MEMBERSHIP OF PROFESSIONAL SOCIETIES

1. Regular Associate, International Centre for Theoretical Physics (Trieste, Italy).
2. Honorary Executive member, Sierra Leone Science Association
3. Member, New York Academy of Sciences

9 LIST OF SOME PUBLICATIONS, TECHNICAL REPORTS & CONFERENCE PAPERS

9.1 Journals and Proceedings

- 1984: Hayes, M. H. B., P. J. Isaacson, A.M. Lees and **T. B. R. Yormah**. *Vapor phase sorption and desorption of monomethyl-hydrazine by homoionic-exchanged clays*. Journal of Colloid and Interface Science vol. 94 (no. 1) January 48-54.
- 1987: Hayes, M. H. B., **T. B. R. Yormah**, and K. Y. Chia: *Interactions of hydrazines with colloidal constituents of soils*. In the *Third Conference on the Environmental Chemistry of Hydrazine fuels*. D. A. Stone and F. L. Wiseman (eds.) Air Force Engineering and Services Laboratory, Tyndal Air Force Base, Florida (USA), pp. 94-107.
- 1995: **Yormah, T. B. R.**, and P. O. Egbenda. *An assessment of the soil-conditioning capacity of gums exuded by some trees in Sierra Leone: I. Hydraulic conductivity measurements*. Int. Agrophysics, 9: 55-65.
- 1993: **Yormah, T. B. R.** and M. H. B. Hayes. *Organic matter contribution to the sorption of water vapour by Na⁺-exchanged clay-sized fraction of some tropical soils*. Afr. J. Sci. Technol., ser. B, 7 (No.1): 1-6.
- 1997: **Yormah, T. B. R.** and M. H. B. Hayes. *Humic substances from a tropical soil*. In Humic Substances, Peats, and Sludges: Health and Environmental Aspects. M. H. B. Hayes and W.S. Wilson (eds.) The Royal Society of Chemistry, Cambridge (UK), pp. 176-186.
- 1999 **Yormah, T. B. R.**, A. B. Karim, and S. E. Berewa. *Soil Mineral nitrogen accumulation resulting from decomposition of legumes*. J. Pure & Appl. Sci. (USL), 6:19-26.
- 2002 **Yormah, T. B. R.**, D.V.A. Fode and M. K. Kormoh. *Kinetics of the acid hydrolyses of potassium trans-dioxalato-bis (ethylnicotinate) chromium (III)*. Afr. J. Sci. Technol., ser. B Vol. 3 No. 1 pp 108-112
- 2002 **Yormah, T. B. R.** and Hayes, M. H. B. Considerations of the compositions of organic matter in a tropical soil. Abstracts, 17th World Congress of Soil Science, Bangkok, 2002, Vol. 1, pp184.
- 2005 **Yormah, T. B. R.** and P. O. Egdenda. *An assessment of the soil-conditioning capacity of gums exuded by some trees in Sierra Leone: II Raindrop Experiments*. In press. AJST Nairobi, Kenya.
- 2005 **Yormah, T. B. R.** and E. H. Sandy. Protecting the Ozone Layer – Sierra Leone's Contribution.. Submitted for publication: J. Pure & Appl Sci. (USL)

9.2 Technical Reports

- 1984: Hayes, M. H. B., P. J. Isaacson, A.M. Lees, K Y. Chia, and **T. B. R. Yormah**. *Interactions of hydrazine derivatives with soil constituents*. Report AFOSR-80-0032, European Office of Aerospace Research and Development, London, 1984.

10.4 Books

- 1996 Foundation Chemistry - Textbook for 1st and 2nd Year Students in African Universities; commissioned by UNESCO-ROSTA, Nairobi, Kenya, (Status of project: manuscript technical edition being done – awaiting funds to purchase special software).

11 Referees

Professor M. H. B. Hayes

School of Chemistry, University of Birmingham, P.O. Box 363, Birmingham B15 2TT, U.K.

Current Address: Chemical and Environmental Sciences, University of Limerick, Republic of Ireland. Email: michael.h.hayes@ul.ie

Slovenia

CURRICULUM VITAE

Personal data	
<p>Name: Ms Evelin Fabjan Date and place of birth: 18th May 1974, Postojna, Slovenia Citizenship: Slovene Permanent residence: Kidričeva 3, 6210 Sežana, Slovenia Temporary residence: Cambridgelaan 251, K3026, 3584 DZ Utrecht, The Netherlands</p> <p>Phone no. 030 201 9718 064 924 2744 E-mail: E.Fabjan@rivm.nl, E.Fabjan@students.uu.nl</p>	
Education	
2004-	Utrecht University, Faculty of Veterinary Medicine, Institute for Risk Assessment Sciences: MSc programme "Toxicology and Environmental Health" (Utrecht Excellence Scholarship); involved in projects at the National Institute of Public Health and the Environment (RIVM), Bilthoven, the Netherlands
1993-2001	University of Ljubljana, Biotechnical Faculty, Department of Biology: Biology study – Research Technological main course, Systematics-Ecology module; <ol style="list-style-type: none"> 1. December 1996 – June 1997: Interruption of the studies to spend six months in the United Kingdom. 2. 1998 – 2000: experimental work for the thesis entitled "Contribution to the taxonomy of cave shrimps <i>Troglocaris</i> (Crustacea : Decapoda : Atyidae)". The goal of the thesis was the comparison of morphology of the cave shrimps from several different caves in Slovenia and identification possible subspecies of the species <i>Troglocaris anophthalmus</i>. Graduation: January 2001
1989-1993	Postojna Secondary school (programme of natural sciences and mathematics)
Training	
2003-2004	<ul style="list-style-type: none"> - May 2004: One week course "Basic toxicology" organised by EUROTOX in Ljubljana. - April 2004: two weeks training in risk assessment of plant protection products within the TAIEX project at Pesticide Safety Directorate, York, United Kingdom - March 2003: two weeks training on toxicology and operator exposure

2000-2001	<ul style="list-style-type: none">- lecturing for the representatives of importers and producers of chemicals in Slovenia.- Postojna Secondary School; Biology teacher.
Publications	
<p>Fajfar S, Fabjan E. (2003). Risk Assessment of plant protection products. Lectures and papers presented at the 6th Slovenian conference on plant protection, Zreče 4.-6.3.2003. Plant Protection Society in Collaboration with Biotechnical Faculty: 1-5 (in Slovene).</p> <p>Fabjan E. (2001). Graduation Thesis: Contribution to the taxonomy of cave shrimps <i>Troglocaris</i> (Crustacea : Decapoda : Atyidae). University of Ljubljana, Biotechnical Faculty, Department of Biology: 1-80 (in Slovene).</p>	
Languages	
<ul style="list-style-type: none">- Slovenian: native language,- English: fluent speaking, very good understanding, very good writing,- Italian: fluent speaking, very good understanding, very good writing,- French: fair speaking, good understanding, fair writing,- Croatian: fluent speaking, very good understanding, good writing	

Place and date: Utrecht, 22th July, 2005

South Africa

ABBREVIATED CURRICULUM VITAE

October 2005

HINDRIK BOUWMAN

DATE OF BIRTH : 27/04/58
PLACE : JOHANNESBURG
AGE : 47
NATIONALITY : RSA
MARITAL STATUS: MARRIED
CHILDREN : 1 SON (18)

ADDRESS / ADRES

School of Environmental Sciences and Development
North-West University (Potchefstroom)
P Bag X6001 Tel +27 18 2992377
Potchefstroom 2520 Fax +27 18 2992370
South Africa drkhh@puk.ac.za

EXPERIENCE

- 1981-1985** Part-time research assistant at the Dept of Zoology, NWU, in charge of the bio-assay laboratory.
- 1986-1987** Bursar of the MRC at the Research Institute for Diseases in a Tropical Environment of the Medical Research Council in Durban. Completed experimental work for my thesis on the risks and dynamics of DDT in a human population.
- 1988-1990** Medical Researcher and Senior Medical Researcher at the newly formed Research Institute for Environmental Diseases of the MRC in Pretoria. Initiated, supervised and participated in various projects (see next section).
- 1990-1995** Senior Lecturer in the Dept. of Zoology at the NWU. Also responsible for UNISA lecturing in the Dept of Life Sciences. Teaching evolution and animal behaviour on 1st and 2nd level.
- 1996-1996** Division Manager, Pesticide Dynamics Division, Plant Protection Research Institute, Agricultural Research Council. Participated and initiated various projects, especially of an interdisciplinary nature.
- 1997-1999** Specialist Scientist, Unit for Pesticide Impact, Plant Protection Research Institute, Agricultural Research Council. Participated and initiated various projects. Expert for Criteria Expert Group on the Persistent Organic pollutant Convention for DEAT. Independent expert for UNEP/GEF project development on persistent toxic substances.
- 2000-present** Professor in the School of Environmental Sciences and Development: Zoology, NWU. Manager: Water Research Sub-programme of the Environmental Science and Planning research programme. Accredited member of SA negotiating team tot INC 4, 5 and 7, and COP1 of the POPs convention. STAP/GEF roster expert on POPs

CURRENT APPOINTMENTS / HUIDIGE AANSTELLINGS

- **Professor (Zoology)** Potchefstroom University for Christian Higher Education from 2000.
- **Independent Expert and Regional Task Team Member** - United Nations Environment Programme - Regionally Based Assessment of Persistent Toxic Substances Project.
- **Expert** - on the Roster of Experts for Persistent Organic Pollutants of the Scientific and Technical Advisory Panel (STAP) of the Global Environment Facility (GEF)
- **Coordinator** - Coordinated Waterfowl Census (CWAC), for Barberspan and Leeupan, North-West Province
- **Steering Committee member** – DDT in Africa (multi country WHO/UNEP/GEF project)

BIOGRAPHY

Henk Bouwman was born in 1958 in Johannesburg. Part of his schooling was three years in Holland. After matriculating at Middelburg High School (Mpumalanga), he obtained his B.Sc (1981), B.Sc Hons (1982), M.Sc (1984) and Ph.D (1990) at the PU vir CHO. For his Ph.D he was a Medical Research Council bursar, working on the levels and dynamics of DDT, as used in malaria control, in humans, fish, birds and the environment. He started his career as a Medical/Senior Medical Researcher at the MRC (Environmental Diseases 1988-1990), Senior Lecturer (PU vir CHO, 1990-1995), Assistant Director and Specialist Scientist, Agricultural Research Council, 1996-1999), and Professor (PU vir CHO, 2000-current).

He has published 32 refereed papers in scientific journals, and is involved in a number of projects, both as leader / co-ordinator, or as collaborator or advisor, with local and international research organizations (e.g. United Nations Environment Programme / Global Environment Facility, SIDA, Swedish University of Agricultural Sciences and ARC). He has travelled extensively overseas. His work concentrates mainly on the ecology of birds and the so called Persistent Organic Pollutants (POPs). He has acted as advisor to the Government on POPs and has also been an accredited member of the South African team in international negotiation fora. Other aspects of his work relates to endocrine disruptors and the effects of pollutants on earthworms and birds.

In 2000 he was appointed by the NWU as Professor in the School of Environmental Sciences and Development, and his research is conducted in the research focus area: Environmental Science and Management. His current teaching includes evolutionary theory, zoogeography and animal behaviour at the pre-graduate level, and various aspects of pollution and impact on the post-graduate level. He is currently leader and a co-leader for more than 10 M.Sc and Ph.D students on various aspects of pollution, POPs and birds.

He is now serving his second term as project evaluator for the Scientific and Technical Advisory Panel (STAP) of the Global Environment Facility with the responsibility of evaluating national and international applications for GEF sponsored projects.

Recent Papers

Lötter, L. & Bouwman, H. 2001 Organochlorine pesticide residues in Helmeted Guineafowl (*Numida meleagris*), South Africa. Bulletin of Environmental Contamination and Toxicology. 66:162-170.

Bouwman, H. 2003. POPs in Southern Africa. The handbook of environmental chemistry. Persistent organic pollutants. Vol 3. Part 0. 297-320.

Bouwman, H. 2004. South Africa and the Stockholm Convention on Persistent Organic Pollutants. South African Journal of Science. 100:323-328.

Curriculum vitae

Bo Wahlström Born in 1942 in Gothenburg, Sweden, married, five children.
Baccalaureate, 1960

Academic career

- Bachelor of Science in Biology and Chemistry at the University of Gothenburg, 1965
- Master of Science in Zoophysiology at the University of Gothenburg, 1969
- Doctor of Philosophy in Zoophysiology at the University of Gothenburg, 1971
- Associate Professor in Zoophysiology at the University of Gothenburg, 1976
- Masters degree in Toxicology at Karolinska Institute, Stockholm, 1980

Professional career

- Teacher at the Department of Zoophysiology, University of Gothenburg, 1965-1976
- Post-doctorate Fellow of the Royal Society, London at the Department of Pharmacology, Oxford University 1971-1972
- Teacher at l'Université de Genève 1974-1976
- Scientific Officer at the Swedish National Food Administration 1976-1980
- Head of Pesticide Division (Pesticide Registrar), Swedish EPA, 1980-1985
- Head of the Department of Chemicals Assessment, Director of Supervision, Director of International Activities and Senior International Advisor at the Swedish Chemicals Inspectorate 1986-1998
- Senior Scientific Advisor at UNEP Chemicals June 1998 - July 2004
- Senior International Advisor, Swedish Chemicals Inspectorate, August 2004-present

Other activities

- Swedish Society for Toxicology, Member since 1976, Member of the Governing Board, 1987-1994, President of the Society, 1991-1992
- Swedish Collegium on Risk Evaluation and Management, since 1994
- Secretary-General for EUROTOX'93
- Member of Local Organising Committee for DIOXIN'98
- Vice-President of the Swedish Environmental Research Council, 1991-1997

International activities**OECD**

- Chair of the Joint Meeting of the Chemicals Group and the Management Committee, 1995-1998
- Co-chair of the German-Swedish clearinghouse for high volume production chemicals, 1988-1990
- Initiator of OECD risk reduction, later risk management activity, 1989
- Chair of the Existing Chemicals Steering Group, 1990-1994
- Chair of various workshops, sub-groups etc. 1988-1998

UNEP

- Responsible for the Criteria Experts Group and questions related to the POPs Review Committee, POPRC, (Article 8 and Annexes D, E and F) during the negotiations of the Stockholm Convention on POPs, 1998-2001
- Manager for the PDF-B phase of the GEF Regionally Based Assessment of Persistent Toxic Substances project and for the development of the full project brief, 1998-2000
- Manager for the GEF Medium-Sized Project Support for the Implementation of the Stockholm Convention on POPs, 2001-2004
- Manager for the POPs Global Monitoring Network, 2000-2004
- Manager for UNEP Chemicals assessment activities, 1998-2004

Other POPs-related work

- Responsible for the Swedish input to the Manila meeting, "Alternatives to POPs"

IFCS

- Organiser of the 1st Forum meeting in Stockholm, April 1994

Publications and reports

Published numerous scientific papers and reports on chemicals assessment, including POPs.

CURRICULUM VITAE

Name : JARUPONG BOON - LONG
 Date of Birth : September 1, 1941
 Nationality : Thai
 Education : B.Sc. Plant Pathology, Kasetsart University, Thailand, 1964
 M.Sc. Plant Pathology, Oklahoma State University, U.S.A. 1976
 Ph.D Microbiology, Oklahoma State University, U.S.A. 1979

Professional Positions :

1998-2001 : Deputy Director – General
 Pollution Control Department
 Ministry of Science, Technology and Environment
 1988-1991, 1991-1994 : Committee Member of the WHO Expert Advisory
 Panel on Environmental Pollution and Hazards
 1998-2001 : Focal Point for UNEP's Persistent Organic
 Pollutants (POPs) Activities for Thailand
 1998-2001 : Chairman of the ASEAN Working Group on Coastal and
 Marine Environment
 1999-present : National Expert on Technical Issues for the Stockholm
 Convention on Persistent Organic Pollutants (POPs)
 2001-present : Project Consultant/GTZ; Crematoria Thailand;
 Steel Industry (BSI);
 Improvement of Municipal Waste Management
 2003-2004 : National Project Coordinator; "Strategic Guidelines for Privatization
 of Urban Solid Waste Management, Thai-Germen Project"
 2004-present : Project Manager; National Implementation Plan of Stockholm
 Convention on Persistent Organic Pollutants

Training :

27 May – 5 June 1973 - Pesticide Applications, Washington DC. USA.
 8 June – 14 Jan. 1974 - Pest Control, Texas A & M, USA.
 Mar. – April 1984 - Pesticide Manufactures, Netherlands And UK.
 Sep. 1988 - Poison Control Center, London UK.

- July-December 1990 - Psychological Warfare Operation Institute
- March-May 1997 - ISO 14001 Environmental Management System Auditing and Practical Training Course
- March-May 1997 - Environmental Management System Lead Auditor and Assessor Training Course
- July-December 1999 - High Rank Administrator Training Course
- May-July 2000 - Chief Information Officer (CIO) Training Course

Professional Experiences:

- 1974 – 1976 - Research Technician, Oklahoma State University, USA.
- 1976 – 1979 - Administrative and Professional (AP) OSU, USA.
- 1976 – 1983 - Project Leader of Thai-German Plant Protection Programme
 - Committee Member of Joint Thailand-Malaysia Plant Quarantine Committee
 - Project Leader of the Maize and Sorghum Diseases
 - Committee Member of the Project : Strengthening Plant Protection Services of Thailand UNDP/FAO, THA/74/019
 - Project Committee of the Australian Center for International Agriculture Research (ACTAR)
 - Project Committee of ANRDC Technical Committee on South American Leaf Blight
 - Coordinator of Rockefeller Foundation and CYMMIT Project, Thailand
- 1984 – 1987 - Chief of Toxic Substances Section
 - Secretariat of Environmental Committee on Toxic Substances
 - Project Director of “Studies for Toxic Substances Control Project”
 - Project Director of “Training for the Efficient and Safe Uses of Pesticides”
 - Counter Part of USAID for the Project “Emerging of Environment Programme in Development”
 - As a Committee Members of 25 Committees at National Level concerning hazards in Industries, Agriculture and Health
- 1988 – 1991 - Director of Hazardous Substances Sub-Division
 - Environmental Quality Standard Specialist
 - Acting Director of Environmental Quality Standard Division

- As Lecturer and Instructor in Hazardous Substances Field for several universities, colleges, government agencies, private sectors and others
- Director of Agrochemical Sub-Division
- Member of the WHO Expert Advisory Panel on Environmental Pollution and Hazards
- 1992 – 2001
 - Acting Director of Hazardous Substances and Waste Management Division
 - Environmental Specialist
 - Committee Member on Reviewing Appropriate Technology and Safety Measures for Nuclear Power Plant
 - Expert Committee Member on ECO-Tourisms
 - Expert Committee Member on Environmental Health and Safety
 - Member of WHO Expert Advisory Panel on Environmental Pollution and Hazards
 - Expert Review Committee Member of the Environmental Impact Assessment for Industrial Projects
 - Expert Review Committee Member of the Environmental Impact Assessment for Infrastructure and Transportation Projects
 - Member of Pollution Control Committee
 - Member of Environment Funds Committee
 - Chairman of Committee Members on Tax Exemption Consideration for Environmental Friendly Equipments and Facilities
 - Chairman of the ASEAN Working Group on Coastal and Marine Environment
 - Focal Point for UNEP's Persistent Organic Pollutants (POPs) Activities for Thailand
 - Rapporteur of the UNEP's Criteria Expert Group for Persistent Organic Pollutants
 - Deputy Director General of Pollution Control Department
 - etc.

Language & Degree of Proficiency:

Thai : native language

English : written and spoken in acceptable way

Membership of Profession Societies :

- Advisor of Toxicological Society of Thailand
- Vice – President of Thai Oklahoma State University Alumni
- etc.

International Experiences :

- 1972 – present-
- Presented paper on Maize Diseases in Thailand, Jog Jarkarta, Indonesia, 11-15 September 1972
 - Represented Country in several International Meetings :
 - International Maize Diseases Nursery, India, 13–19 March 1981
 - Joint Thailand – Malaysia Plant Quarantine, Malaysia, 13–17 December 1982
 - Second Meeting of Experts on Toxicological and Safety Data for Chemicals Substances in International Trade, Moscow, USSR, 5–9 December 1983
 - First Session of the Ad Hoc Working Group of Experts for the Exchange of Information on Potentially Harmful Chemicals (in Particular Pesticides) in International Trade, Netherlands, 26–30 March 1984
 - First Session of the Group of Developing Countries in Asia Concerning Pesticide Residues Problems, Thailand, 24–27 February 1984
 - Second Session of Ad Hoc Working Group of Experts for the Exchange of Information on Potentially Harmful Chemicals (in Particular Pesticides) in International Trade, Rome, Italy, 28 January – 1 February 1985
 - Ad Hoc Working Group of Experts on the Environmental Sound Management of Hazardous Wastes, Cairo, Egypt, 4–10 December 1985
 - “Regional Workshop on Environmental Toxicity and Carcinogenesis” Thailand, 15–17 January 1986
 - Third Session of Ad Hoc Working Group of Experts for the Exchange of Information on Potentially Harmful Chemicals (in Particular Pesticides) in International Trade, London, UK, 4–10 February 1987
 - Joint FAO/WHO/UNEP International Conference on Mycotoxins, Thailand, 28 September – 3 October 1987

- Advisory Panel of Experts in Preparation for the First Meeting of the Ad Hoc Working Group of Experts on Prior Informed Consent, Geneva, Switzerland, 14-16 December 1987
- Ad Hoc Working Group of Experts on Prior Informed Consent and Other Modalities to Supplement the London Guidelines for the Exchange of Information on Chemicals in International Trade, Senegal, 19-23 September 1988
- International Workshop on the Future Development of the IRPTC Legal File, Germany, 27-30 March 1990
- ASEAN Workshop on Risk Assessment and Management of Chemical Hazards, Singapore, 12-15 November 1990
- Workshop on the Implementation of PIC for Decision Makers in Chemical Management, K.L., Malaysia, 9-13 December 1991
- First Steering Committee Meeting on Expert Validated Data, Geneva, Switzerland, 28-29 November 1994
- Consultative Meeting on Needs of Countries for Chemical Risk Management Advice, Geneva, Switzerland, 30 November 1994
- Informal Consultative to Consider Major Issues Related to the Development of a Legally Binding Instrument for the Application of the Prior Informed Consent Procedure, Geneva, Switzerland, 1-2 December 1994
- Meeting of Expert on International Environmental Agreement and Trade, New York, USA, 30-31 March 1995
- Expert Meeting to Review The Guidance Document to Prepare National Profiles to Assess the National Infrastructure for Management of Chemicals, Geneva, Switzerland, 3-4 July 1995
- Conference on International Trade in Dangerous Chemicals, Brussels, Belgium, 5-7 July 1995
- First Asian - Pacific Regional Meeting on Establishing of Regional Centres for Training and Technology Transfer for Environmentally Sound Management of Hazardous Waste, Beijing, China, 9-11 July 1996
- Expert Meeting on Strengthening National Capabilities and Capacities for the Sound Management of Chemicals, Montezillon, Switzerland, 26-30 August 1996

- Second Session of the Intergovernmental Forum on Chemical Safety, Ottawa, Canada, 8–14 February 1997
- Seven Meeting of the ASEAN Working Group on Transboundary Pollution, Phuket, Thailand, 27–29 May 1997
- ASEAN Meeting Seminar on the Development of a Legally Binding Instrument for the Application of the Prior Informed Consent (PIC) Procedure on Chemicals and Pesticides, Bangkok, Thailand, 18–19 August 1997
- International Conference on the Safe and Responsible Use of Chrysotile Fibres, Montreal, Canada, 16–19 September 1997
- Regional Awareness Raising Workshop on Persistent Organic Pollutants (POPs), Bangkok, 25–28 November 1997
- First Session of Intergovernmental Negotiating Committee (INC) for an International Legally Binding Instrument for Implementing International Action on Certain Persistent Organic Pollutants (POPs), Montreal, Canada, 26 June – 6 July 1998
- Visited the Ministry of Environment, Nature Conservation and Nuclear safety, and GTZ Headquarter in Germany for funding negotiation on the dioxins and Furans Project, Germany, 7–11 September 1998
- Seventh Session of the Ad Hoc Working Group of Legal and Technical Experts to Consider a Draft Protocol on Liability and Compensation for Damage Resulting from Transboundary Movement of Hazardous Wastes and their Disposal, Geneva, Switzerland, 5–11 October 1998
- First Session of the Criteria Expert Group for Persistent Organic Pollutants, Bangkok, Thailand, 26–30 October 1998
- Loan Negotiation with Asia Development Bank (ADB), Philippines, 5–7 November 1998
- Visited the Ministry of Environment and Swedish International Development Cooperation Agency (SIDA), Sweden, 13–19 November 1998
- Workshop on Persistent Manufactured Chemicals for Non-pesticide Applications and Persistent By-products of Industrial and Combustion Processes, Geneva, Switzerland, 11–15 January 1999
- Second Session of the Intergovernmental Negotiating Committee (INC) to prepare an International Legally Binding Instrument for Implementing

International Action on Certain Persistent Organic Pollutants (POPs),
Nairobi, Kenya, 25–29 January 1999

- Governing Council of the United Nations Environment Programme,
Twentieth session, Nairobi, Kenya, 1–5 February 1999
- Second Session of the Criteria Expert Group for Persistent Organic
Pollutants, Vienna, Austria, 14–18 June 1999
- Sixth Session of the Intergovernmental Negotiating Committee (INC) for
an International Legally Binding Instrument for the Application of the
Prior Informed Consent Procedure for Certain Hazardous Chemicals and
Pesticides in International Trade, Rome, Italy, 12-16 July 1999
- Third Session of the Intergovernmental Negotiating Committee (INC) for
an International Legally Binding Instrument for Implementing International
Action on Certain Persistent Organic Pollutants (POPs), Geneva, Switzerland,
6–11 September 1999
- Planning Workshop for the Joint Project of Countries with more advanced
Programmes for Regulating Chemicals to Provide Technical Assistance for
the Implementation of the Rotterdam (PIC) Convention in Developing
Countries and Countries with Economies in Transition, Bonn, Germany,
7–9 October 1999
- Visited sanitary landfill, UK and France, 15–21 November 1999
- 1st Expert Group Meeting : Preliminary Assessment of National
Management Needs of Persistent Toxic Substances : GEF Pilot Study PDF-B,
Geneva, Switzerland, 6-10 March 2000
- Fourth Session of the Intergovernmental Negotiating Committee (INC) for
an International Legally Binding Instrument for Implementing International
Action on Certain Persistent Organic Pollutants (POPs), Bonn, Germany,
20-25 March 2000
- ASEAN Environment Year 2000 (AEY) and The Fifth Informal ASEAN
Ministerial Meeting on the Environment (IAMME), Bandar Seri Begawan,
Brunei Darussalam, 3-5 April 2000
- 2nd Expert Workshop : Framework for a National Persistent Toxic
Substances Management Plan : GEF Pilot Study PDF-B, Geneva,
Switzerland, 1-5 May 2000

- The Second Meeting of ASEAN Working Group on Coastal and Marine Environment, Hanoi, Vietnam, 8-9 June 2000
- The 20th annual International Ocean Institute-Canada Training Programme on the Law of the Sea : Its Implementation and Agenda 21, Halifax, Canada, 2-3 August 2000
- Third Session of the Intergovernmental Forum on Chemical Safety (Forum III), Salvador de Bahia, Brasil, 15-20 October 2000
- Seventh Session of the Intergovernmental Negotiating Committee (INC) for an International Legally Binding Instrument for the Application of the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, Geneva, Switzerland, 30 October –3 November 2000
- Fifth Session of the Intergovernmental Negotiating Committee (INC) for an International Legally Binding Instrument for Implementing International Action on Certain Persistent Organic Pollutants (POPs), Johannesburg, South Africa, 4-9 December 2000
- First Intergovernmental Negotiating Committee Meeting for the ASEAN Agreement on Transboundary Haze Pollution, 19-21 March 2001, Malaysia
- Commission on Sustainable Development (CSD), Ninth session, High Level Segment, New York, USA., 19-20 April 2001
- Second Intergovernmental Negotiating Committee Meeting for the ASEAN Agreement on Transboundary Haze Pollution, Kuala Lumpur, Malaysia, 9-11 May 2001
- 6th Informal ASEAN Ministerial Meeting on the Environment (IAMME), Phnom Penh, Cambodia, 15-16 May 2001
- Conference of Plenipotentiaries on the Stockholm Convention on Persistent Organic Pollutants, Stockholm, Sweden, 21 - 23 May 2001
- Visited incineration technology for crematory, waste incinerator and recycling technology plants, Japan and Germany, 21-29 June 2001
- The Third Meeting of ASEAN Working Group on Coastal and Marine Environment, Bandar Seri Begawan, Brunei Darussalam, 9-12 July 2001
- 4th Steering Committee Meeting of the ASEAN Regional Center For Biodiversity Conservation, Bandar Seri Begawan, Brunei Darussalam, 2 August 2001

- 12th Meeting of ASEAN Senior Officials on Environment, Bandar Seri Begawan, Brunei Darussalam, 3-4 August 2001
- Visit and Discussion on Incineration Technology for Crematory, Hong Kong, 24-25 November 2002
- First Conference of the Parties of the Stockholm Convention on Persistent Organic Pollutants, Punta del Este, Uruguay, 2-6 May 2005

Trinidad and Tobago**CURRICULUM VITAE**

NAME: Wayne Simon Rajkumar

DATE OF BIRTH: May 2nd, 1965

NATIONALITY: Trinidadian

MARITAL STATUS: Married with children

EDUCATION: BSc. General (Hons.)
University of the West Indies
St. Augustine
1987

M.Phil. Chemistry,
University of the West Indies
St. Augustine
1994

WORK EXPERIENCE: Chemistry Lab Demonstrator
University of the West Indies
St. Augustine,
1987 - 1988

Science Teacher II
Ministry of Education
Alexander St.,
St. Clair
1988 - 1991

Research Chemist
Institute of Marine Affairs
Hill Top Lane
Chaguaramas
1991-1997

PRESENT EMPLOYER: Environmental Management Authority (EMA)
8 Elizabeth Street St. Clair
Port of Spain

POSITION HELD: Technical Co-ordinator - Water/Waste/GIS
Department of Environmental Resource Management
1997- present

DUTIES AND RESPONSIBILITIES:

- Develop and implement a policies/programmes/projects in Water and Waste Management incorporating the use of Geographical Information Systems (GIS).
- Provide advocacy in Environmental Impact Assessments, Risk Assessment, Pollution Prevention, Control and Remediation;
- Provide technical and managerial support on compliance monitoring and inspections in all areas;
- Publish reports and scientific papers based on research;
- Assist in environmental education and public awareness programmes;
- Meet with legislators and other state agencies to solve critical problems and develop relationships for implementation of policies;

- Represent EMA/Government at local, regional and international conferences, workshops and meetings;
- Attend enforcement and settlement hearing and testify as necessary;
- Assist in investigating complaints and provide technical input during emergencies and disasters;
- Enforce established standards and laws including the development and issuance of permits and certificates; and
- Manage unit as required and assist in departmental workplan and budget preparation.

MAJOR PROJECTS WORKED ON:

- Ambient and end of pipe environmental standards
- Environmental impact assessments (pollution assessment of groundwater, surface water, terrestrial soil, biota and marine sediment)
- Engineering and monitoring solutions for petroleum and petrochemical industries
- Pollution estimation using the WHO Rapid methodology
- Management of contaminated bays and coastal areas
- Surface and groundwater quality assessment from conventional pollutants, MTBE, BTEX and other contaminants
- Pollutant Inventory Study for Trinidad and Tobago
- Ambient PM₁₀ Study along the East/West Corridor, Trinidad
- Water Pollution Management Programme for Trinidad and Tobago
- Technical Instructions and Administrative Procedures for Implementation of Water Pollution Rules
- Technical Instructions for Proposed Waste Management Rules
- Training Workshops on Water Pollution Management and Control, Pollution Prevention Opportunities, and Geographic Information System (GIS)
- Baseline Survey of Blood Lead Level in Primary School Children Ages 5-7 Years Old in Trinidad and Tobago
- Shoreline Management Plan and Wastewater Management Strategy for the North Coast of Trinidad
- Synoptic Study of Persistent Bioaccumulative Toxins in Human Biomarkers and Foodstuff (developed project proposal)
- Hazardous Waste Inventory for Trinidad and Tobago (initiated 2005)
- In Situ Stabilization of Contaminated Lead Soil at two Locations in East Trinidad Using In-place inactivation and revegetation techniques (initiated 2005)
- Site Characterization and Clean Up at Cuchawan Traca, Debe (2005 ongoing)

PUBLICATIONS:

- Rajkumar, W., Chang-Yen, I. and Garcia, G.W. 1985. Production of ruminant feeds from agricultural wastes and by-products in Trinidad and Tobago. *U.W.I. Biospectrum*, 1:17-20.
- Rajkumar, W. 1991. Report on Rapid Assessment of Industrial Effluents in Trinidad and Tobago using the WHO Rapid Assessment Methodology. Project document prepared for UNEP.
- Rajkumar, W. 1992. Report on Rapid Assessment of Solid and Liquid Wastes from Agricultural and Domestic Activities using the WHO Rapid Assessment Methodology. Project document prepared for UNEP.
- Rajkumar, W.S., Mungal, R., and Bahadoorsingh, V. 1992. Heavy metal concentration in seawater, sediment and biota (*Donax striatus*) along the east coast of Trinidad. *J. of Caribb. Mar. Stud.*, 3: 26 - 32.
- Rajkumar, W. and Persad, D. 1994. The levels and distribution of heavy metals and petroleum hydrocarbons in the nearshore areas of Tobago, W. I. *Mar. Poll. Bull.*, 28: 701-703.
- Persad, D. and Rajkumar, W. 1995. A synoptic view of the levels of dissolved/dispersed petroleum hydrocarbons and heavy metals in the southeastern Caribbean Sea. *Mar. Pollut. Bull.* 30, 487-489.
- Rajkumar, W. 1995. Rapid Assessment of Air Pollution in Trinidad and Tobago. Report prepared for PAHO.
- Rajkumar, W., Persad, D. and Kumarsingh, K. 1995. Baseline heavy metals in shelf waters of northern Trinidad and Tobago using ion chromatography. *Caribb. Mar. Stud.*, 4: 76-77.

- Rajkumar, W. 1997. Rapid Assessment of Air, Water and Land Pollution in the Point Lisas Industrial Estate. Document prepared for PAHO.
- Rajkumar, W. et al 1998. Report on Planning and Environmental Management of Heavily Contaminated Bays and Coastal Areas at Point Lisas, Trinidad. Document prepared for UNEP/IFID.
- Rajkumar, W. and Siung Cheng, A. 2000. Suspended Particulate Matter Concentrations along the East-West Corridor, Trinidad, W.I. *Atm. Env.* 34(2000)1181-1187.
- Rajkumar, W. 2002. Report on the Sources and Environmental Levels of Persistent Toxic Substances in Trinidad and Tobago. Document prepared for UNEP.
- Rajkumar, W. 2004. Analysis of Water Quality Parameters at Selected Surface and Ground Water Sources in North Trinidad. In proceedings of the 12th Annual Caribbean Water and Wastewater Conference and Exhibition, 2003.
- Rajkumar, W. 2004. Report on Baseline Survey of Blood Lead Levels in Primary School Children Ages 5-7 in Trinidad and Tobago. Document prepared by the EMA.
- Rajkumar, W., Manchar, J., Doon, R., Siung-Cheng, A., Chang-Yen, I., Montell. Blood Lead Levels in Primary School Children in Trinidad and Tobago. *Science of the Total Environment* (in press).

COMPUTER LITERACY:

Considerable experience and training in the use of all Microsoft Office 2000 programmes, statistical and graphic software programmes including ArcView GIS 3.2x.

INSTRUMENTAL EXPERIENCE:

Listed below are the instruments for which I am trained to operate:

- High Performance Liquid Chromatograph
- Capillary Gas Chromatograph
- Ion-Chelation Chromatograph
- UV-VIS Spectrophotometer
- Infra-red Spectrophotometer
- Flame Atomic Absorption Spectrophotometer
- Fluorescence Spectrometer
- Flow-Injection analysis
- Selective Ion Electrodes
- LeadCare® Blood Lead Testing System
- Portable Water Quality Meters
- Portable X-ray Fluorescence Analyzer

REFERENCES:

Dr. Ivan Cheng Yen
Senior Lecturer
Chemistry Department
UWI, St. Augustine Campus
Tel: 662-2002
Email: icheng-yen@facs.uwi.tt

Dr. Avril Siung Chan
Environmental Health Coordinator
Pan American Health Organization
49, Jerningham Ave.
Belmont, Port of Spain
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CURRICULUM VITAE

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Telephone: tel: +32 2 299 35 30; fax: +32 2 295 61 17
Date of birth: 13 August 1963
Place of birth: Pohjaslahti, Finland
Nationality: Finnish

EDUCATION / PROFESSIONAL QUALIFICATIONS

Master of Science (environmental science), 1989. University of Helsinki, Faculty of Agriculture and Forestry, Department of Environmental Conservation (1983-1989); Main subjects: Environmental protection; ecotoxicology; limnology; chemistry.

PROFESSIONAL EXPERIENCE

Main areas of specialisation:

- Chemicals risk management
- Environmental risk assessment of chemicals

Employment record:

6/2004 -> : **Desk Officer**, European Commission, DG Environment: Persistent Organic Pollutants; REACH interim strategy.

3/2002- 5/2004: **Seconded National Expert**, European Commission, DG Environment: Persistent Organic Pollutants (POP); implementation of the Biocides Directive (98/8/EC).

8/1998 – 2/2002: **Senior adviser**, Finnish Environment Institute; Implementation of the Biocides Directive 98/8/EC, Persistent Organic Pollutants, environmental assessment of pesticides; chemicals management.

1/1997 – 11/1997: **Senior adviser**, Ministry of the Environment; Supreme management of the Chemicals Act and development of the chemicals legislation.

10/1996 – 12/1996: **Senior adviser**, Finnish Environment Institute; Authorisation of biocidal products, environmental assessment of pesticides; chemicals management.

6/1990 – 2/1995: **Senior adviser**, National Board of Waters and the Environment (the current Finnish Environment Institute); Supervision and expert tasks related to Chemicals and Pesticides Acts.

8/1989 – 5/1990: **Researcher**, National Board of Waters and the Environment; Environmental risk assessment of pesticides.

4-7/1989; 5-8/1988: **Researcher**, University of Helsinki; Research projects on heavy metals and organic tin compounds.

INTERNATIONAL ACTIVITIES

Representative in various international meetings and expert working groups related to Persistent Organic Pollutants, pesticides and chemicals in general, including UNECE Task Force on POPs and UNEP/INC POP Criteria Expert Group.

KNOWLEDGE OF LANGUAGES

Main languages: Finnish (mother tongue); English

Other languages: French; Swedish, German (basic)

Uruguay

Ms. Jacqueline Alvarez is a chemist that has built skills in environment during the last 11 years, specially in chemicals management. She is fully proficient in Spanish and English. She can understand, read and speak Portuguese, and she can read French.

She is the Head of Hazardous Substances Department for the Ministry of House, Land Planning and Environment in Uruguay, a position held since August 1999. She is therefore responsible for developing and implementing criteria, strategies, methodologies and plans for chemicals management and risk reduction derived from them. She collaborates in the development of regulations and she is also responsible for the monitoring and control of chemicals.

At the moment, she manages a staff of 16 young professionals who undertake work in promoting national chemical management related to persistent organic pollutants and other priority chemicals during their life cycle. She leads the group within the Ministry of House, Land Planning and Environment of Uruguay and coordinates at national level with relevant stakeholders having diverging interests and perspectives. These groups include others from the government, Non-Governmental Organizations, academic sector, industries and chambers. She has collaborated with civil society NGO and other academic groups in the development of strategies and implementation of projects to accomplish common goals and build national capacities.

With the aim of applying to GEF funds, she was responsible for the preparation and presentation of National Implementation Plan (NIP) – Enabling activities project to UNEP, Uruguay's implementing agency. She designed the working areas and prepared the team work providing basis for the inventories, targets, outputs, responsibilities and coordination mechanisms. She is taking stock of progress and now she is undertaking the elaboration of Uruguay's NIP. At the moment three NIP follow up projects are developed and ready to be presented to implementing agencies/GEF as PDF-A.

She is also in charge of the national implementation of Basel Convention on the control transboundary movements of hazardous wastes and their disposal and of Stockholm Convention on Persistent Organic Pollutants. Even though she is not dealing with Rotterdam Convention directly she has full knowledge of its provisions.

Regional level

She has collaborated with the Basel Convention Coordinating Centre for Training and Technology Transfer for Latin America and Caribbean since its establishment in November 1996 and continues doing so. She was hired several times as a consultant for the centre or worked there as part of her daily duties for the Ministry. She shared responsibilities in the development of strategies and projects and collaborated with specific Terms of Reference to prepare Memorandum of Understanding. She interacted with the Regional Centres for South America (hosted by Argentina), Central America (hosted by El Salvador) and Caribbean (hosted by Trinidad and Tobago) and with countries giving assistance or collaborating where appropriate and required according to specific programmes i.e.

Information System and web site, phase 1 and 2 and supervising pilot projects done in Peru, Dominican Republic and El Salvador. She has collaborated in the preparation of guidance materials and forms. She has also worked in the coordination, preparation and appointment of regional workshops related to the chemicals cluster conventions. She helped in the elaboration of the Coordinating Centre first Business Plan presented to the parties to the Basel Convention, where it was endorsed. Her work with the Coordinating Center helped her understanding the countries of GRULAC region and other UN regions in the world, its characteristics and peculiarities, similarities and difficulties.

Since July 2005 she has convened Mercosur (South Common Market, integrated by Argentina, Brasil, Paraguay and Uruguay, with Chile, and Bolivia as observers) Ad-Hoc Working Group on Chemical Substances and will continue up to December 2005 after hosting a special meeting aim at developing regional plans for chemical within the region. She has prepared the agenda, coordinated the logistic and technical parts and chaired the group.

International level

She has represented Uruguay in several oportunities both during the instrument negotiation and after in the Conference of the Parties, i.e. COP VII to Basel Convention as attach person to the Minister of House, Land Planning and Environment. Also she has represented her country in INC, and Open-Ended Working Groups. She was asked to make a presentation on behalf of GRULAC during the Forum III in Bahia – Brasil and afterwards she was appointed to make speeches and presentations in regional activities such as congresses. She has participated, and sometimes asked to give speeches during case studies, study tours and International meetings related to PCBs, dioxins and furans, pesticides and stockpiles and implementation.

She integrated the team preparing the First Conference of the Parties to the Stockholm Convention, held in Punta del Este – Uruguay May 2005, in both logistics and technical part. She prepared the drafts for national discussions and positions. She also coordinated activities with UNEP Chemicals.

In September 2005, she was nominated by the region to represent GRULAC as member of the bureau, Vicepresident for the region, for the SAICM process until the International Conference on Chemicals Management in Dubai, February 2006. She has followed SAICM process since PREPCOM1 in Thailand, November 2003 and prepared the documents and regional GRULAC meetings together with the former Vicepresident for the region.

References

Ing. Silvia Aguinaga
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Professor Dr. Ali El-Shekeil, FRSC

Personal Data

- Nationality Yemeni.
- Marital Status Married.
- Date of Birth 1948.
- Country of Birth Yemen.

Scientific Certificates

- B.Sc., Industrial Chemistry, Faculty of Science, Baghdad University, 1974, Baghdad, Iraq.
- Ph.D., Chemistry, University of Arizona.1980, Tucson, USA.

Academic History

- Assistant Professor 1980 to 1985.
- Associate Professor 1985 to 1989.
- Full Professor 1989 to present.

Occupational History

- Vice-Dean, Faculty of Science, Sana'a University, 1981-1983.
- Dean, 1983-1985.
- Dean, Second Time, 1987-1991.

Educational Services

- Head of Committee for Writing Chemistry Books for Secondary Schools, Ministry of Education, 1982-1985.
- Visiting Professor:
 1. Qatar University, 18-25 March 1988.
 2. University of Arizona, Tucson, USA, 1-31 Aug. 1989.
 3. University of London, Royal Holloway and Bedford New College, Egham, Surrey, UK, Aug. 31-Sept.21, 1997.
 4. University Putra Malaysia (UPM) 9/7-9/10 2003.
- Member, Scientific Committee for the Establishment of Hadhramout University for Science and Technology, 12/1992 to 10/1996.

- Member of editorial board, Asian Journal of Chemistry, India, 1992 to Present.
- Member of Academic Council, Sana'a University, 1995 to 1997.
- Member of Committee for Writing Chemistry Books for Secondary Schools, The new curriculum, Ministry of Education, 2002-now.
- Member of Committee for Science and Technology Policy for Yemen, Ministry of Higher Education and Scientific Research, 2002-now.

Consultation Services

- Many

Petroleum Studies

1. Twenty four

Environmental Studies

- 1- Environmental Pollution, a Book in the Series of Simplified Science and Technology, 1995.
- 2- Recycling of Plastics in Yemen, 1996.
- 3- Recycling of Lubricant Oils in Yemen, 1996
- 4- Environmental Protection of Socotra: The LPG filling-station project, 2000.
- 5- Ozone Depletion Substances (ods) In Yemen, 2001.
- 6- Plastic Bags, The Real Solution, A Workshop, Social Development Fund, Sanaa, April 28-29, 2002.
- 7- Halon Bank, Ozone Unit, Environmental Protection Authority, May 12th, 2002.
- 8- Plastic Bags Alternatives, A Lecture on World Day of Cleaning, June 5th, 2002.

Renewable Energy Studies

Six

Scientific Societies

- Fellow Royal Society of Chemistry (London, 2003)
- Member of the American Chemical Society, 1980-1988.
- Member and Secretary of the Yemen Affiliation of the International Union of Pure and Applied Chemistry, IUPAC, 1987 to Present.

University Committees

- President or member of more than 15 University Committees.

- Theses Supervision and Evaluation**
- 10 Ph.D. Dissertations (9 Offered).
 - 7 M. Sc. Theses (7 Offered).
 - 8 M. Sc. Theses and 5 Ph.D. Dissertations evaluated.
- International Scientific Conferences**
- Attended 30+ International Scientific Conferences
- Publications**
- More than 22
 - 61 Papers published in Famous International Scientific Refereed Journals in the following countries: USA (14), China (2), Russia (1), Egypt (3), Britain (18), Japan (1), The Netherlands (1), Hungary (2), Pakistan (3), Romania (2), Qatar (2), India (1), UAE (1), Iraq (2), Germany (4), Yemen (4).
 - 7 Papers under publication.
- a) Books**
- b) Papers**
- c) Papers in the INTERNET**
- To check for the author's papers in the INTERNET where a minimum of 50 papers will be found, published in the most famous International journals, please consult BIDS (Bath Information Database Services) at <http://www.bids.ac.uk>, E-mail: bidshelp@bath.ac.uk, using ELSHEKEIL_A*
- Courses Taught**
- | | |
|------------------------------|---------------------------------|
| ■ General Chemistry | ■ Organic Chemistry |
| ■ Polymer Chemistry | ■ Industrial Organic Chemistry |
| ■ Petroleum Chemistry | ■ Petrochemicals |
| ■ Advanced Organic Chemistry | ■ Advanced Organic Chemistry |
| ■ Organic Spectroscopy | ■ Advanced Organic Spectroscopy |
- Computer Capability**
- Using IBM and Macintosh computers at home and office since 1986. Programs like Windows Mellinium and MS Office 2000, MS Word, Excel, Power Point etc are well mastered.
- Languages**
- Arabic is the mother language.
 - Fluent English: writing, reading and conversation.