



Australia - Spain Water Forum

Interdisciplinary Approach

29, 30 and 31 October 2015

SIMS (Sydney Institute of Marine Science)

An event by

- *Cátedra* Instituto Cervantes (Instituto Cervantes Australia Academic Forum)
- Macquarie University
- Spanish Researchers in Australia Pacific

Sponsors

- New South Wales Trade & Investment
- The Spain-Australia Council Foundation
- FECYT (Spanish Foundation for Science and Technology)
- BBVA
- Emirates

Endorsement

- The United Nations Office to Support the International Decade for Action 'Water for Life' 2005-2015
- Embassy of Spain, Canberra and the Embassy of Spain, NZ

With the collaboration of

- The University of Sydney



THE UNIVERSITY OF SYDNEY



Purpose of this seminar

The United Nations General Assembly, in December 2003, proclaimed the years 2005-2015 as the International Decade for Action 'Water for Life'. Its primary goal was to promote efforts to fulfil international commitments made on water and water-related issues in the United Nations Millennium Development Goals (MDGs) by 2015.

This year is the last of the International Decade for Action 'Water for Life' 2005-2015¹. The purpose of this seminar is to address the crucial importance of water at present, from the point of view of health as well as energy, social and cultural development. Spain and Australia share a high concern for water resources, water treatment and water management, the marine environment and the economic and social implications involved.

Program

Thursday 29 October 2015

- 13:00** **Registration**
- 14:00 – 14:50** **Conference opening**
- 14:00-14:30 Professor Mary O'Kane NSW Chief Scientist & Engineer. Opening Statement
Program presentation by Víctor Ugarte, Director Instituto Cervantes of Sydney
Welcome words by Manuel Cacho, Ambassador of Spain to Australia
Ana Vila-Concejo. Chair of Australia-Spain Water Forum
- 14:30–14:50 Opening lecture: Professor Sakkie Pretorius, Macquarie University Deputy Vice-Chancellor, Research. Australia's expertise and collaboration with Spain regarding water resources and research
- 14:50 – 15:30** **Keynote Lecture. Josefina Maestu, Director United Nations Office to Support the International Decade for Action 'Water for Life' 2005-2015. Water Scarcity, lessons from the water decade for the implementation of the new goals in the post 2015 agenda.**
- 15:30-15:40** Prof Jennifer McKay. Professor of Business Law University of South Australia Business School – Discussant
- 15:40 – 16:00** Round table and Q&A with Josefina Maestu, Prof McKay, Dr Amgad Elmahdi Manager Water Resources Assessment Section and Australian experts
- 16:00 – 17:30** **The culture of water [Chair: Cesar Espada, Deputy Head of Mission, Embassy of Spain]**
- 16:00-16:20 Jennifer Turpin. Artist. "The use and meaning of fresh water in Australia and Spain: An artist's perspective"
- 16:20-16:40 Chris Maxworthy. Member Australian Association for Maritime History. "What if Spain had conquered Australia in the 18th century?"
- 16:40-17:00 Spanish documentary: "Aral. El mar perdido"
- 17:00-17:20 Isabel Coixet (video conference) Film Director. Introducing the documentary "El mar de Aral"
- 17:20** **Welcome cocktail**

¹ More information in attachment

Friday 30 October 2015

- 9:30 - 11:10 The Science of Coasts [Chair: Ana Rubio, Hornsby Shire Council-SRAP]**
- 9:30-9:50 Associate Professor Ian Goodwin (MQ) ASPRO Climate Risk (CoRE) Tropical expansion and coastal evolution
- 9:50-10:10 Dr Ana Vila-Concejo (USYD-SRAP). Tropical and temperate coastal research.
- 10:10-10:30 Professor Bruce Thom (USYD) Coastal Management in Australia
- 10:30-10:50 Dr Adriana Vergés (UNSW-SRAP). Climate change and the tropicalisation of temperate reefs
- 10:50-11:10 Professor Peter Steinberg (SIMS) World Harbour Project presentation
- 11:10-11:50 Coffee break**
- 11:50 - 13:10 Sustainable water [Chair: Alberto Cerdan, Senior Trade Commissioner, Embassy of Spain]**
- 11:50-12:10 Dr James Hazelton (MQ) National Water Accounting Standards
- 12:10-12:30 Cliff Stone and Carlos Cerezo, Acciona Australia, Water Desalination.
- 12:30-12:50 Peter Brew (Consultant Adasa Sistemas) Irrigation modernisation in Australia and Spain
- 12:50-13:10 Brad Moggridge (NSW DPI Water) - Aboriginal cultural value of water
- 13:10 - 14:10 Lunch**
- 14:10 - 14:45 Bridging the science and industry of water [Chair: Adriana Vergés, Senior Lecturer at the School of Biological, Earth and Environmental Sciences UNSW]**
- 14:10-14:30 Associate Professor Melanie Bishop (MQ). Genetic solution or dilution: can selective breeding future-proof oysters?
- 14:30-14:50 Dr Ana Rubio-Zuazo ('Hornsby Shire Council'-SRAP) 'Healthy Oysters, Healthy Waterways'
- 14:50-15:10 Dr Álvaro Roura- Labiaga, Department of Ecology, Environment and Evolution La Trobe University "Octopus on the move: a genetic look to their diet and microbiome"
- 15:10-15:30 Stephen Summerhayes & Simón Leiva (Cook River Alliance) Water Sensitive Urban Design (WSUD)
- 15:30- 16:00 Closure and summary by SRAP organisers / Instituto Cervantes**

Saturday 31 October 2015

Special Session: Spanish and European researchers in Australia

- 09:30 – 09:50** **Conference opening by Prof Luis Salvador-Carulla (SRAP).**
History of SRAP, intro on other associations and intro International Federation.
- 09:50 – 10:50** **Roundtable: Relationship between European Scientific Associations, Embassies and Consulates and Cultural Organisations.**
Chair: Dr Ren Yi, Director, Research Training and International Research Training Partnerships, Macquarie University. Cotutelle and Joint PhD programs
Participants:
Thomas Biedermann, Office of the Attaché for Science and Technology. French Embassy.
Sergio Leon-Saval, University of Sydney & Vice-president of SRAP.
Dimitri Perrin, University of Queensland, Former President of the French Research Association in Japan.
Helen O'Neil, Director Australia British Council: President of the EUNIC Cluster in Australia.
Marian Schoen. EU Centre on Shared Complex Challenges. University of Melbourne.
- 10:50 – 11:20** **Break**
- 11:20 – 12:15** **Who is doing what? Other Sydney, Australia and New Zealand research centers**
- 12:15 - 13:15** **SRAP first Assembly**
- 13:15 – 13:30** **Closure**
- 13:30** **Lunch**

OPENING AND KEYNOTE SPEAKERS



Professor Mary O'KANE

Professor Mary O'Kane was appointed NSW Chief Scientist & Engineer on 23 October 2008. She is also a company director and Executive Chairman of Mary O'Kane & Associates Pty Ltd, a Sydney-based consulting practice specialising in innovation and major reviews, and a company director.

Born in central Queensland, Professor O'Kane is an expert in automatic speech recognition.

She has been a member of a number of high-level committees, including the Australian Research Council and the panel for the Federal Government's Review of the National Innovation System. She has chaired major reviews of the Australian Bureau of Meteorology and the Co-operative Research Centres Program.

Professor O'Kane was Vice-Chancellor and President of the University of Adelaide from 1996 to 2001. She was Chair of the Australian Centre for Renewable Energy from 2010 to 2012. She is a former member of the Australian Research Council, the Co-operative Research Centres Committee, the board of FH Faulding & Co Ltd and the board of the CSIRO. She is a Fellow of the Academy of Technological Sciences and Engineering and an Honorary Fellow of Engineers, Australia.



Professor Sakkie PRETORIUS

Professor Sakkie Pretorius is Deputy Vice Chancellor: Research at Macquarie University in Sydney. He is internationally recognised as a pioneer in molecular microbiology and biotechnology, and the translation of research outcomes to industry. Sakkie began his career in South Africa. At Stellenbosch University, he established a reputation for innovation and was appointed Professor of

Microbiology in 1993.

In the US and Europe, Sakkie also established a reputation for excellence: he conducted research into molecular yeast genetics at the Albert Einstein College of Medicine in New York and at the Max Planck Institute for Biophysical Chemistry in Göttingen, Germany, and became a part-time professor at the Katholieke Universiteit Leuven in Belgium. In 2003, Sakkie relocated to Adelaide with his family to become Director of Research at the Australian Wine Research Institute (AWRI). He was also appointed Affiliate Professor in the School of Agriculture, Food and Wine at the University of Adelaide. In 2004, he became Managing Director of the AWRI. In 2011, he was appointed Deputy Vic-Chancellor and Vice-President: Research and Innovation at the University of South Australia - a position which he held until the middle of 2013 before he took up his current role as Deputy Vice Chancellor: Research at Macquarie University in Sydney. Professor Pretorius has published more than 200 peer-reviewed research papers and book chapters (current Scopus H-index of 42) and presented at 550 conferences (many as an invited keynote speaker) and research seminars.



Josefina MAESTU

Coordinator, UN-Water Decade Programme on Advocacy and Communication (UNW-DPAC), Director, United Nations Office to Support the International Decade for Action 'Water for Life' 2005-2015

Josefina Maestu was appointed as Director of the programme in September 2009. Prior to her appointment, Ms. Maestu served as senior advisor to the Minister of Environment of Spain and she represented Spain in the Environmental Committee of the UN Economic Commission for Europe (UNECE), the Mediterranean Commission on Sustainable Development, and backstopped the Spanish EU Presidency. For 5 years she was a Director of a UK based economics and environment research consultancy. With an academic background in economics and planning, she has an extended professional career in the field of water while working in international relations, national civil servant positions and international advisor consultancies. She has coordinated the preparation of the economic analysis of River Basin Management Plans for implementation of the Water Framework Directive in Spain and has formed part of the EU coordination groups on water economics. Prior to this, she was Secretary-General of the Mediterranean Water Network for several years, and has been technical adviser to the European Commission and UN system organizations, including the World Bank.

INVITED SPEAKERS



Thomas BIEDERMANN

Thomas graduated with a Masters Degree in General Engineering from Ecole Centrale Marseille in 2009, with a specialization in Organic Chemistry / Biochemistry. He then joined the Office for Science and Technology of the Embassy of France in the USA as Deputy Attaché for Science and Technology. Based in Los Angeles, California, he monitored US research output and policy, and participated in the creation and strengthening of bilateral higher education

and research partnerships between American and French universities and research institutions.

Following a period of travelling, he has joined the French Ministry of Foreign Affairs again in April 2015, as Deputy Scientific Attaché at the Embassy of France in Australia. In this role, he participates in the strengthening of bilateral links in Research and Innovation by animating initiatives such as the French Researchers in Australia Network (FRAN).



Dr Melanie BISHOP

A/Prof Melanie Bishop leads the Benthic Ecology Laboratory at Macquarie University. Her research focuses on estuarine and coastal ecosystems, which are not only some of the most important ecosystems in terms of carbon sequestration and marine productivity, but are also areas that have borne the brunt of human impacts. She uses field experiments to uncover the mechanisms that maintain coastal biodiversity and its important ecosystem functions. The contribution her research is making to environmental management in Australia, and globally

has been recognised with the 2010 NSW Scientist of the Year Award in the Category Environment, Water and Climate Change Sciences and the 2012 Brian Robinson Fellowship from the Banksia Environmental Foundation.



Peter BREW

Peter is a technology strategist and businessman and is currently consulting to the Australian office of Adasa Sistemas, a Spanish water and environmental engineering company. Prior to this he was General Manager for Europe for Australian water technology company Rubicon Water. Peter has travelled widely inspecting and advising on irrigation modernisation in Australia, Spain, Morocco, Egypt, India, China, USA, France, Italy, Chile and Mexico. In 2013 he presented at the XVII National Congress of

Irrigation in Mexico.

Peter holds an honours degree in Computer Science from the University of Sydney and has held a number of senior executive positions with global technology companies, including Associate Vice President at US stock market NASDAQ, Stockholm based OMX group of stock markets, Computershare, GEC Marconi and Alcatel.



Isabel COIXET

Spanish film director. She is one of the most prolific film directors of contemporary Spain, having directed seven feature-length films since the beginning of her film career in 1988, in addition to documentary films, shorts and commercials. Her films follow a departure from traditional national cinema of Spain, and help to “untangle films from their national context, clearing the path for thinking about national film from different perspectives.”[1] The recurring themes of “emotions, feelings and existential conflict” coupled with her distinct visual style secure the “multifaceted (she directs, writes, produces and acts)” filmmaker's status as a “catalan auteur”.



Amgad ELMAHDI

Dr Elmahdi has more than 20 years' experience in hydrology and water management, including a decade working internationally (Egypt, Italy, Netherlands and Greece) on water resources assessment and management projects. Amgad has also been a CSIRO research scientist, working on groundwater and integrated water resources management and has authored and co-authored over 90 scientific publications. Amgad currently manages the Bureau's Water Resources Assessment Section, which delivers products across surface water, groundwater, urban and irrigation system, design rainfalls and the Australian Water Resources Assessment and continental hydrological modelling system.



Prof Ian GOODWIN

Ian is Associate Professor in Climate and Coastal Risk and leads the Marine Climate Risk Group at Climate Futures Research Centre at Macquarie University, and is a researcher at the Sydney Institute of Marine Science (SIMS) in the SIMS/NSW OEH Coastal Processes Research Node. Ian has 30 years research experience in the fields of climatology, paleoclimatology and climate change science, coastal and marine geoscience, coastal oceanography, polar glaciology, environmental hazard definition and impact management throughout Eastern Australia and the South-West Pacific.

His papers have documented decadal climate variability, mechanisms for sea-level change, wave climate change, regional coastal evolution, coral reef evolution, extratropical storm climatology, reanalysis and reconstructions of Southern Hemisphere climate, Antarctic ice sheet dynamics. Ian is a foundation member of the scientific advisory committees for the Eastern Seaboard Climate Change Initiative (ESCCI) serves on the Scientific Advisory Panel for NSW-IMOS (Integrated Marine Observing System) and is researching coastal processes and climate change at numerous sites in NSW, SE Queensland, and the South-west Pacific.



Dr James HAZELTON

Dr James Hazelton joined Macquarie University in 2001. Prior to his academic career, James was with PricewaterhouseCoopers, where he worked in audit and risk management consulting in Sydney, London and New York. James specialises in business ethics and sustainability and has consulted, researched and taught extensively in these areas. He recently led a team engaged by the Australian Bureau of Meteorology to analyse the benefits of adopting national water accounting standards and was part of a team engaged by the NSW Office of Environment and Heritage to develop energy efficiency training for the accounting profession. Other research interests include the ethics of corporate political donations and incorporating contemporary ethical models into the accounting curriculum.



Simon LEIVA

Simon Leiva specialises in Water and Wastewater Industry, having worked on a wide range of projects both in Chile and Australia. Simon has worked for small and large enterprises, in the private and public sector. In these companies he has undertaken both management as well as technical roles with multidisciplinary teams. Before starting work with the CRA, Simon worked as the Technical Department Manager of Atlantis Corporation Pty Ltd. The types of projects that he has been a part of include: water efficiency; water sensitive urban design (WSUD); and on-site supervision during construction and operation of novel stormwater treatment systems.



Prof Jennifer McKAY

Professor McKay has researched, taught, consulted on water resource management and law issues throughout Australia and in India and the USA and is a part time Commissioner of the SA Environment, Resources and Development Court. In 2008, she worked on the United Nations Expo in Zaragoza 2008, and held a senior Fulbright at Berkeley. She has 160 publications looking at laws and the implementation of ESD in water management, mining and other Natural resources issues. She has a BA Hons (Melbourne), LLB Adelaide, PhD (Melbourne) and Diploma in Human Rights Law from a American University in Washington DC 2009



Chris MAXWORTHY

Australian Association for Maritime History and Maritime History, Department Member. Expert on the early colonial maritime history of Australia and the Pacific Ocean region, from the planning of European settlement at 'Botany Bay', the Nootka Sound confrontation and the consequent Anglo-Spanish convention, Napoleonic War, and Latin American independence.



Bradley MOGGRIDGE

Brad is a Murri from the Kamilaroi Nation (North-West NSW) from a large and proud extended family. He grew up in Western Sydney and now lives in Canberra. He has university Masters qualifications in Hydrogeology from UTS and Bachelor qualifications in Environmental Science from ACU. Brad is employed by NSW DPI Water as the Team Leader Aboriginal Water Initiative, and is honoured to lead the only dedicated Aboriginal water unit in Australia. The program aims to enhance the Aboriginal communities' awareness of water planning and management and improve the capacity for water planning instruments to provide opportunities for Aboriginal people to better access water. Brad has presented at the Australian Academy of Science, also the International Association of Hydrogeologists 40th World Congress 2013, International River Symposiums – 2012 and 2014, engaged with Maori Iwi and Water Scientists in Waikato NZ and was invited to attend the Wentworth Group of Concerned Scientists Master Class 2013.



Dr Álvaro ROURA-LABIAGA

Alvaro is a marine ecologist working with zooplankton trophic links, biological oceanography, biodiversity and parasite-host relationships. He did his PhD in the Instituto de Investigaciones Marinas de Vigo (IIM-CSIC) in 2013, about the ecology of planktonic stages of cephalopods in coastal upwelling ecosystems. He is currently doing a two-year postdoc at La Trobe University, with a "Barrié de la Maza" Postdoctoral Fellowship and RFA funds from La Trobe. His research is centred in the diet and microbiome of *Octopus vulgaris* larvae during their planktonic stage in order to apply this knowledge to captive studies



Dr Ana RUBIO-ZUAZO

Ana's research revolves around marine ecology and aquaculture, in particular oyster farming (edible and pearl oysters). Her work combines environment, disease, health of catchments – waterways and aquaculture industry practices. Ana has a long history of working with the Australian oyster industry, assisting them with the identification of catchment risks and improvement of their husbandry practices as part of the implementation of estuary-wide Environmental Management Studies. Ana has set up oyster monitoring programs, as well as developing catchment-wide data portals for better management of oyster areas and undertaken research on environmental controls of oyster farms and new technology to improve industry sustainability.



Prof Luis SALVADOR-CARULLA

Luis Salvador-Carulla is professor of Disability and Mental Health at the Faculty of Health Sciences (University of Sydney). His field of interest is support decision systems and policy in long-term care, disability and mental health, and Intellectual Developmental Disorders. He is honour member of the World Psychiatry Association and Secretary of the WPA section "Classification, Diagnostic assessment and Nomenclature".

Dr Salvador-Carulla has intensively participated in the development of international networks in the fields mentioned above, person centred medicine, healthy ageing, and bridging and knowledge transfer between disability and ageing. He has been advisor to the Government of Catalonia (Spain), the Spanish Ministry of Health, the European Commission (EC) and the World Health Organisation (WHO). He coordinated the European Commission project eDESDE-LTC for the development of a European coding system for long term care, and he participates in the 'REFINEMENT' project aimed at analysing financing, quality and effectiveness of mental health systems in Europe. He has successfully secured competitive grants over the last years. He chaired the WHO working group on the classification of intellectual disabilities at chapter V of the International Classification of Diseases (ICD-11). He received the Leon Eisenberg Award of the Harvard Medical School in 2012. He is the secretary general of the Instituto Cervantes Academic Forum (*Cátedra* Instituto Cervantes)



Prof Peter STEINBERG

In 2009 Professor Peter Steinberg was appointed the inaugural Director and CEO of SIMS. He is concurrently Professor in the School of Biological Earth and Environmental Sciences and Director of the Centre for Marine Bio-Innovation at UNSW Australia, and Co-Director for the Advanced Environmental Biotechnology Centre, Nanyang Technological University, Singapore.

Professor Steinberg has brought to SIMS his extensive research and academic experience together with commercial knowledge. He has been a Fulbright Scholar, a Queen Elizabeth II Fellow and CEO of an ASX listed Biotechnology Company focusing on the development of novel antibacterials from marine organisms. Professor Steinberg is a distinguished researcher who has more than 130 international publications. His research interests include seaweed ecology, diseases of marine organisms, biofouling and antifouling, bacterial biofilm biology, marine chemical ecology and marine biotechnology.



Stephen SUMMERHAYES

Stephen is the Cooks River Alliance (CRA) Project Manager.

He is a solicitor of 20 years' standing, admitted to practise in both England and Australia. In 2003 he established his own legal firm to

support undergraduate studies in Environmental Science and International studies and, thereafter, a postgraduate Master of Environmental Science by research. Before starting work with the CRA he worked as the Manager of Projects and Programs at the Sydney Coastal Councils Group. Before that, he spent two years in Latin America studying and working for community organisations in Ecuador and Guatemala. To enhance his service delivery he has undertaken a Diploma of Project Management, Advanced Diploma of Management and a Cert IV in Training and Assessment. He tutors adult literacy and numeracy and teaches philosophical ethics to primary school children.



Emeritus Prof Bruce THOM

Vice-Chancellor University of New England, Professor Bruce Thom has held positions including Foundation Professor of Geography, Royal Military College, Duntroon, Professor of Geography University of Sydney and Pro-Vice-Chancellor Research, University of Sydney. He currently holds the title of Emeritus Professor from the University of Sydney. Bruce served as Chair of the Australian State of Environment Committee 1998-2002, and as Chair of the Coastal Council of New South

Wales (1999-2004). He served as the Visiting Professor for Coastal Management and Planning at the Department of Infrastructure, Planning and Natural Resources in Sydney. He also formerly held the position of Visiting Professor in the NSW Department of Planning. Bruce is a member of the Wentworth Group of Concerned Scientists, Deputy Chair of the Australian Coastal Society and Chair of the Federal Government's Coasts and Climate Change Council (2011). In 2010 he was awarded a member of the Order of Australia for his contribution to the ecological management of the coastal zone and as a contributor to public debate on natural resource policy. Bruce is an honorary life member of Surfriider Foundation Australia, and most importantly an honorary member of the Sydney Coastal Councils Group. Bruce provided a history of the geomorphology of Sydney's coastline. Sydney has inherited a coast from the time the Tasman Sea opened 60-80 million years ago. This geologic inheritance is critical in understanding its present biophysical character and how it offers an array of natural assets that help drive the lifestyles and livelihoods of the city.



Jennifer TURPIN

Jennifer is a public artist with 25 years' experience creating kinetic installations engaging water, wind and light as sculptural media at the interface of art, science, nature and the built environment. Many of the artworks, created with colleague Michaelie Crawford, are integrated into environmental restoration projects. Activated by nature's elemental energies, the artworks are rhythmic, responsive and transformative 'performances' in the everyday life of the city. Puzzling, playful, mesmerising or contemplative, they make visible the invisible and highlight the elemental energies of nature so often taken for granted.

Jennifer is a recipient of a Churchill Travelling Fellowship. For this she will research ancient and contemporary cultures that have developed a 'culture of care' in relation to water. She will explore how some societies deliver(ed) environmentally sustainable outcomes through attitudes to conserving, protecting, revering and reusing water. She hopes to discover how art and design today can best bring the poetics and beauty of such water initiatives to people's attention.



Dr Adriana VERGÉS

Adriana is a Senior Lecturer at the School of Biological, Earth and Environmental Sciences UNSW. Her most recent research focuses on the ecological impacts of climate change and the tropicalisation of temperate communities such as algal forests and seagrass meadows. She has worked in tropical coral reefs and temperate ecosystems from around the world (Mediterranean Sea, Atlantic, and Indian and Pacific oceans) and much of her research is

experimental and takes place underwater.



Dr Ana VILA-CONCEJO

Senior Lecturer and ARC Future Fellow at the School of Geosciences, University of Sydney. Director *One Tree Island* research station. Her research focuses on how water moves sand on beaches, tidal inlets, estuaries and coral reefs. She studies coastal processes and environments (morphodynamics) in Spain, Portugal, Brazil and Australia. She is the chair of the upcoming International Coastal Symposium which will be held in Sydney in March 2016. She is in the board of the society of Spanish Researchers in Australia-Pacífico (SRAP).



Dr Ren Yi

Ren Yi is an experienced research manager and researcher with a keen interest in the effective management of higher degree research processes. He has been working in higher education for more than 10 years, including positions at the University of Melbourne, The University of Queensland, Victoria University and the University of Southern Queensland.

Ren is actively involved with the research management profession. He is one of Past Presidents of the Australasian Research Management Society and is an active member of the International Network of Research Management Societies. He has also been appointed to different research management committees by the Australia Research Council and by Universities Australia. In 2009, Ren was awarded an Australian Endeavour Executive Award by Deputy Prime Minister Hon Julia Gillard. In the same year he also won an Award for Excellence 2009 from the Australasian Research Management Society for embedding research administration in a regional university.

He has extensive experience as a researcher. He completed his Ph.D. at the University of Melbourne in economic geography and international business. He currently holds an Australia Research Council grant. Dr. Yi is currently a reviewer for the Academy of International Business and the Australian Research Council.

International Decade for Action 'Water for Life' 2005-2015

The world is waking up to the water and sanitation crisis. At the United Nations Millennium Summit in September 2000, the largest-ever gathering of world leaders adopted the Millennium Declaration; from the Declaration emerged the Millennium Development Goals, an integrated set of time-bound targets for extending the benefits of globalization to the world's poorest citizens. Target 10 in goal 7, aims at cutting in half the proportion of people without sustainable access to safe drinking water. At the Johannesburg World Summit for Sustainable Development, in 2002, this target was expanded to include basic sanitation, and water as a resource was recognized as a critical factor for meeting all the Goals. This sanitation objective is now an integral part of target 10.

Since Johannesburg, further international deliberations on water and sanitation have helped advance cooperation and action in this area. Significant progress has been made since then in providing people with access to clean drinking water and basic sanitation. But a major effort is still required to extend these essential services to those still unserved, the vast majority of whom are poor people.

Given the magnitude of the task, in December 2003, the United Nations General Assembly, in resolution A/RES/58/217, proclaimed the period 2005-2015 International Decade for Action 'Water for Life'. The decade officially started on World Water Day, March 22, 2005.

The United Nations Office to Support the International Decade for Action "Water for Life" 2005-2015

http://www.zaragoza.es/ciudad/centros/detalle_Centro?id=3264

The Water Decade Office was created with the aim of sponsoring from Zaragoza the comprehensive management of water resources, especially the drinking water supply and sanitation, and to be the focal point of the Organization in a matter that affects 19 of its agencies (FAO, UNICEF, UNESCO, UNHCR, etc.) and 5 regional commissions.

The implementation of the actions identified in the program of the Water Decade will be held in five phases, of two years each, and for which specific guidelines have been established with independent objectives. Thus, the priority objectives for this first biennium 2006-2007, in which the opening of the Headquarters Office in Zaragoza is included, are institutional development, worldwide communication and impact, the increase of technical and institutional capacity as well as boosting research work and socioeconomic policies.

The coordination of the overall project will take place at the Office of the Water Decade which will interact closely with other international meetings on water such as the Commission on Sustainable Development, UN-Water division or water initiative of the European Union. These interactions are aimed at raising awareness to all countries on whether to adopt sustainable policies on the exploitation of water resources, and to develop plans for integrated management and efficient use.