



# **Water Joint Programming Initiative**

Water Challenges for a Changing World

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## **Advisory Boards Scientific and Technological Board**

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October 2016

## Scientific and Technological Board

**Dermot DIAMOND** - Dublin City University (Ireland)

**Agathe EUZEN** - CNRS - Laboratoire Techniques Territoires et Sociétés (France)

**Despo FATTA-KASSINOS** - Nireas - IWRC, University of Cyprus (Cyprus)

**Ing-Marie GREN** - Swedish University of Agricultural Sciences (Sweden)

**Jaap KWADIJK** - Deltares / University Twente (the Netherlands)

**Inmaculada ORTIZ** - Universidad de Cantabria (Spain)

**Jens Christian REFSGAARD** - Geological Survey of Denmark and Greenland (Denmark)

**Seppo REKOLAINEN** - Finnish Environmental Institute (Finland)

**Karl-Ulrich RUDOLPH** - Institute of Environmental Engineering and Management University of Witten (Germany)

**Adrian STANICA** - National Institute for Research and Development of Marine Geology and Geoecology (Romania)


- [Chair: Despo FATTA-KASSINOS](#)
- [Vice-Chair: Seppo REKOLAINEN](#)


<b>Dermot DIAMOND</b>		
Function	Director National Centre for Sensor Research	
Institution	Dublin City University	
Email	dermot.diamond@dcu.ie	
Phone	+35 317005404	
Direction	Autonomous sensors, sensor networks, water quality monitoring, nutrient monitoring and recovery	
<b>Areas of expertise</b>		
<p>My research interests are broad, ranging from molecular recognition, host-guest chemistry, ligand design and synthesis, electrochemical and optical chemical sensors and biosensors, microfluidics/lab-on-a-chip, sensor applications in environmental, clinical, food quality and process monitoring, development of fully autonomous sensing devices, wireless sensors and sensor networks. I am particularly interested in the using analytical devices and sensors as information providers for wireless networked systems i.e. building a continuum between the digital and molecular worlds.</p>		
<b>Professional Background</b>		
<ul style="list-style-type: none"> <li>• Vice President for Research, Dublin City University 2002-2004.</li> <li>• Director, National Centre for Sensor Research (NCSR), Dublin City University (<a href="http://www.ncsr.ie">www.ncsr.ie</a>) 2007-present.</li> <li>• Admitted Fellow of the Royal Society of Chemistry, 2002.</li> <li>• Admitted Member Royal Irish Academy, 2014.</li> <li>• Awarded inaugural silver medal for Sensor Research by the Royal Society of Chemistry, June 2002</li> <li>• Recipient of DCU President's Research Award, 2008.</li> <li>• Awarded D.Sc. (July 2002, Sensor Networks), PhD (July 1987, Chemical Sensors), MSc (1893, Instrumental Methods of Analysis) and BSc (1976) by Queen's University Belfast.</li> <li>• Awarded Personal Chair at DCU, 2004.</li> <li>• Editorial Board Member Analytical Chemistry (ACS) 2000-2003, The Analyst (RSC), Talanta (Elsevier).</li> <li>• Appointed visiting Professor, University of Wollongong, Australia, 2008-present.</li> <li>• Member European COST Action MP1205 (2012-2016) in Materials Physics and Nanosciences (MPNS) domain "Advances in Optofluidics: integration of optical control and photonics with microfluidics".</li> <li>• Appointed Member of the EU Advisory Board of the Water Joint Programming Initiative (JPI), March 2015.</li> <li>• Appointed leader of the Environmental Sensors Working Group of the European Sensor System Cluster (ESSC) initiative, November 2014.</li> <li>• Awarded Boyle-Higgins Medal by the Institute of Chemistry of Ireland for "outstanding and internationally recognised Irish research contribution to the advancement of chemistry", April 2015.</li> <li>• Research Gate: RG Score 42.59/45.00 ranked in the top 2.5% of all RG members.</li> </ul>		

<b>Agathe EUZEN</b>		
Function	Research Fellow senior, anthropologist Deputy director at CNRS Institute of Ecology and Environment, in charge of sustainable development	
Institution	CNRS, Scientific unit: Laboratoire Techniques Territoires et Sociétés LATTs (CNRS, Université Paris Est)	
Email	agathe.euzen@cnrs-dir.fr	
Phone	+33 6 35 38 75 69	
Direction	Anthropology, environmental sciences, social scientist	
<b>Areas of expertise</b>		
<p>Water perceptions and uses – Water values – Closing the Water Cycle Gap – Developing Safe Water Systems for the Citizens.</p> <p>Her research interest mainly focus on perceptions and representations of the environment, water in the environment and their relationship to daily life practices.</p>		
<b>Professional Background</b>		
<p>Habilitation à diriger des recherches, in Planning and Urbanism (2014)          PhD in Management, economics and social sciences (2002)          Advanced Master in Engineering and Environmental Management (1998) - Mines Paristech          Nominate in many scientific committees focusing in water: Comité national de l'eau; Office national de l'eau et des milieux aquatiques; Comité de Bassin agence de l'eau Seine-Normandie</p> <p><u>Publications</u>          Euzen A., 2010, "L'eau à la maison", Editions Universitaires européennes          Euzen A. et Levi Y., 2013, "Tout savoir sur l'eau du robinet" Cnrs Editions          Euzen A., Eymard L. et Gaill F., 2013, "Le développement durable à découvert", Cnrs éditions.          Euzen A., Jeandel C., Mosseri R., 2015, "L'eau à découvert" Cnrs Editions          Laville B., Thiébault S., Euzen A. 2015, "Quelles solutions face au changement climatique ?" Cnrs Editions          Laville B., Thiébault S., Euzen A., 2015, "Designing solutions to climat change" Victoires Editions          Goeldner-Gianella L., Barreteau O., Euzen A., Pinon-Leconte M., Gautier Q. et Arnould P. (Dir.), 2016, "Concilier la gestion de l'eau et des territoires". Paris: Editions Johanet</p>		


<b>Despo FATTA-KASSINOS (Chair)</b>		
Function	Director, Nireas International Water Research Center	
Institution	University of Cyprus	
Email	dfatta@ucy.ac.cy	
Phone	+357 22 89 3515	
Direction	Water / wastewater treatment and reuse; contaminants of emerging concern; antibiotic resistance; advanced chemical oxidation processes; physicochemical and biological treatment; chromatographic analysis; effect-based analysis; contaminants' uptake by crops.	
<b>Areas of expertise</b>		
<p>The overlying goal of her research is the development and application of advanced chromatographic methods for the identification of microcontaminants and of their transformation products (TPs) in environmental samples, the assessment of their potential biological potency through the application of bioassays (e.g. toxicity, mutagenicity, estrogenicity, etc.), the design and evaluation of advanced treatment technologies for the removal of microcontaminants including antibiotic-resistant bacteria and resistance genes (ARB&amp;ARG) from urban wastewater, and the assessment of their potential to be taken up by crops through agricultural reuse.</p>		
<b>Professional Background</b>		
<p>Dr. Despo Fatta-Kassinou (h-index: 36, citations: 6433 (Google scholar)) is an Associate Professor of the Department of Civil and Environmental Engineering and the Director of Nireas-International Water Research Center (Nireas-IWRC) at the University of Cyprus (UCY). Since 2011, she directs and coordinates all the scientific and administrative activities of Nireas-IWRC, which is the first Water Research Centre in Cyprus, and is very active in the research area of water and wastewater treatment, management and reuse. Since 2003, she has attracted more than 11 million EUR in research funds (from national and European funding agencies). She has published 116 journal papers (while more are in preparation), 110 conference papers, various chapters in book series, edited one book on the "Xenobiotics in the Urban Water Cycle" by Springer (which is one of the very first and most popular books in the field), while two others books entitled "Wastewater Reuse and Current Challenges" and "Advanced Treatment Technologies for Urban Wastewater Reuse" in "The Handbook of Environmental Chemistry Series" have been published by Springer. In 2012, she received Nikos Symeonides 2011 National Research Award by the Cyprus Research Promotion Foundation. She is Editor of Journal of Environmental Chemical Engineering, Elsevier and also a member of the NORMAN Association and the leader of its Working Group 5 "Wastewater reuse". She is the Chair of the European COST Action NEREUS ES1403, "New and emerging challenges and opportunities in wastewater reuse". She is also the Coordinator of the ANSWER project "Antibiotics and mobile resistance elements in wastewater reuse applications: risks and innovative solutions" (H2020-MSCA-ITN-2015/675530) (with budget: 3.7 M€). She serves on numerous research evaluation panels (e.g. National Research Funding Agencies from Europe, Middle East, North Africa, Canada, USA, the European Science Foundation and the European Commission).</p>		


<b>Ing-Marie GREN</b>		Photo
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<b>Professional Background</b>		


<b>Jaap C.J. KWADJIK</b>		
Function	Scientific Director Dept. Inland water systems	
Institution	Deltares	
Email	jaap.kwadijk@deltares.nl	
Phone	+31 88335 8369	
Direction		
<b>Areas of expertise</b>		
<p>Prof. Dr. Jaap Kwadijk is director of science at Deltares, the Netherlands research institute for applied research in the field of water, subsurface and infrastructure. He is also part time Professor modeling water management and climate at the Twente University.</p>		
<b>Professional Background</b>		
<p>Jaap Kwadijk received his PhD at the University Utrecht in 1993 on the impact of climate change on the River Rhine. Since 1997 he has been employed at WL   Delft Hydraulics (Deltares) where he has been involved in hydrological, water resources and climate change impact assessment studies. He joined in many international projects on flood forecasting, and water resources management. He lived for two years in Egypt where he was team leader of an international group of scientists and consultants that aimed at developing long term strategies for the water management of lake Nasser.</p>		

<b>Inmaculada ORTIZ</b>		
Function	Professor	
Institution	University of Cantabria, Spain	
Email	inmaculada.ortiz@unican.es	
Phone	+34 6 50 456274	
Direction	Advanced separation processes	
<b>Areas of expertise</b>		
<p>Her research interests are (i) engineered processes for sustainable production of water and treatment of industrial effluents, (ii) membrane-based advanced separations for environmental and industrial applications (iii) water and wastewater treatment in developing countries.</p>		
<b>Professional Background</b>		
<p>Inmaculada Ortiz is Professor of Chemical Engineering at the University of Cantabria, Spain, since 1996. She received her B.Sc. degree and Ph.D in Sciences (Chemistry) from the University of the Basque Country (Spain) in 1980 and 1985, respectively. In autumn of 1980 she was a postgraduate researcher at the Inorganic Chemistry Department, Giessen University, Germany and later, 1985-86 and autumn 1987 academic visitor at the chemical engineering department, Imperial College, University of London. From 1983 to 1992, she was Research Assistant and Lecturer in Chemical Engineering at the University of the Basque Country, and from 1992 to 1996 she was Lecturer at UC and professor of Chemical Engineering at the University of Huelva, Spain and visiting Professor at Wuhan University, China in 2010.</p> <p>She has been Head of the Chemical Engineering Department at UC in 1996-2000, 2003-2004 and 2014-present; Chair of the Spanish National R&amp;D Programs of "Environment" and "Chemical Products and Processes", Ministry of Economy and Innovation, Spain in 1998-2002 and Chair of the National Scientific Panel "Chemical and Environmental Technology", Spanish Agency of Evaluation and Prospective, ANEP in 2005-2008.</p> <p>Dr. Ortiz has developed significant public outreach activities, aimed at the transfer of knowledge to the industrial sector and dissemination of science to both the specialist and the general public. For setting up the former, Dr. Ortiz has undertaken the responsibility and coordination of over 80 R&amp;D grants and contracts with public and private companies and organisations and in 2006 she promoted the creation of a knowledge based technological spin-off company, APRIA SYSTEMS S.L.</p>		



<b>Jens Christian REFSGAARD</b>		
Function	Professor	
Institution	Geological Survey of Denmark and Greenland (GEUS)	
Email	jcr@geus.dk	
Phone	+45 30709830	
Direction		
<b>Areas of expertise</b>		
<p>Comprehensive experience in research, teaching and consultancy on groundwater and surface water hydrology and water resources management.</p> <p>Recent research interests include integrated groundwater-surface water modelling at catchment scale, agriculturally related water quality issues, uncertainty assessments in the modelling and management process, assessments of climate change impact and adaptation measures and water resources management concepts.</p>		
<b>Professional Background</b>		
<p>Education/academic degrees</p> <ul style="list-style-type: none"> <li>• MSc in civil engineering with specialization in hydrology, Technical University of Denmark, 1976.</li> <li>• Dr. Scient. in natural science, University of Copenhagen, 2007.</li> </ul> <p>Employments</p> <ul style="list-style-type: none"> <li>• 1976-1984: Technical University of Denmark (DTU). Research assistant, assistant professor and associate professor.</li> <li>• 1980-2000: Danish Hydraulic Institute (DHI). Chief hydrologist, head of research and development.</li> <li>• 2000-date: Geological Survey of Denmark and Greenland (GEUS). Research professor in Department of Hydrology.</li> </ul> <p>Participated in and coordinated numerous Danish and EU funded research projects. Supervised more than 20 PhD students. Author of more than 100 ISI journal papers with more than 3500 citations (h-index = 28).</p>		

<b>Seppo REKOLAINEN (vice-Chair)</b>		
Function	Director	
Institution	Finnish Environment Institute	
Email	seppo.rekolainen@ymparisto.fi	
Phone	+35 8405806538	
Direction		
<b>Areas of expertise</b>		
Water resources management, water pollution control, monitoring of water resources and quality, water security		
<b>Professional Background</b>		
<p>Seppo Rekolainen has a doctoral degree in limnology from the University of Helsinki. The theme of his thesis was management of agricultural water pollution. He has been working as a scientist at the Finnish Environment Institute from the beginning of 1980's. Subjects of his research have been linked to integrated water management issues. From 2010 he has been the Director of the Freshwater Centre at the Finnish Environment Institute.</p>		

<b>Karl-Ulrich RUDOLPH</b>		
Function	General Director	
Institution	Institute of Environmental Engineering and Management at the Private University of Witten/Herdecke	
Email	mail@professor-rudolph.de	
Phone	+49 2302 914 01 0	
Direction		
<b>Areas of expertise</b>		
<p>KU Rudolph is the General Director of the IEEM gGmbH (Institute of Environmental Engineering and Management at the Private University of Witten/Herdecke, Germany), and CEO of the CEEM (Consultants for Environmental Engineering and Management, Prof. Rudolph GmbH). Before, he worked for the operations of GfA, a large PPP sewage treatment plant company, as member of the Deutsche Bank Advisory Board, and as Supervisory Board Member for the Berlin Water Works.</p>		
<b>Professional Background</b>		
<p>Professor Dr.-Ing. Dr.rer.pol. Dr.h.c. Karl-Ulrich Rudolph is double educated in water engineering and environmental economics, specialising in water and sanitation international. 2008, he was awarded as Guest Professor at the NEU - National Economic University in Hanoi. Since 12/2009, he is Co-ordinator of the UNW-DPC working group on "Capacity Building in Water Efficiency". In 2011, he was mandated as supervisory manager the "Office for Water and Sustainability" through BMBF (the German Ministry of Education and Research) and MOST (the Vietnamese Ministry of Science and Technology). In March 2012, he was conferred the Honorary Doctorship (Dr. h. c.) from the VNU, Vietnam National University for "outstanding success in scientific project execution and implementation of technology based solutions in the water sector of Vietnam". For a novel Water Franchise concept, he has won the Global Contest at the World Bank 2006. In May 2012, he was appointed as Member of the Scientific and Technological Advisory Board for the Joint Water Programming Initiative (JPI) of the European Commission. Since 01/2013 he is member of the Technical Advisory Committee (TAC) for the National Urban Sanitation Plan (NUSP), India. In 2013, he received the "Best of the Best" EU Life Environment Project Award for the IEEM Project "Integrated Water Purification Management". In 2014, he was assigned as member of the supervisory board for the "Wirtschaftsbetriebe Oberhausen", the PPP company operating the cities infrastructural services, including the sewerage system operations and a large waste incineration plant.</p>		

<b>Adrian STANICA</b>		Photo
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