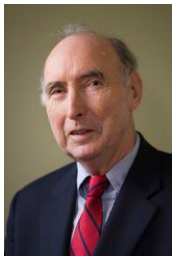
Speakers' curricula vitae

Presentations abstracts



Peter Rogers, Gordon McKay Professor of Environmental Engineering, School of Engineering and Applied Sciences, Harvard University, USA

Professor Rogers has a wide range of research interests, including the consequences of population on natural resources development; improved methods for managing natural resources and the environment; the development of robust indices of environmental quality and sustainable development; conflict resolution in international river basins; and the impacts of global change on water resources. He has carried out extensive field and model studies on population, water and energy resources, and environmental problems in Costa Rica, Pakistan, India, China, the Philippines, Bangladesh, and to a lesser extent, in 25 other countries.

His recent books include An Introduction to Sustainable Development (with K. F. Jalal and J. A. Boyd), 2008, and Water Crisis: Myth or Reality (with M. R. Llamas and L. Martinez-Contina), 2006.

Professor Rogers is Senior Advisor to the Global Water Partnership; recipient of Guggenheim and Twentieth Century Fellowships and the Warren A. Hall Medal of the Universities Council on Water Resources (UCOWR); member of the American Academy of Environmental Engineers (AAEE) and the American Society of Civil Engineers (ASCE); life member of the Indian Society of Agricultural Engineers; and Fellow of the American Association for the Advancement of Science (AAAS).

PRESENTATION ABSTRACT (22/10/2009)

"Facing the freshwater crisis"

The lecture starts with a discussion on the origins and source of the global water crisis. In particular it focuses on the relative roles of climate, water for food, water for sanitation and health, and urban water infrastructure. The presentation then focuses on technical, economic, and regulatory approaches to fix the problems, and concludes with a six-point plan to avoid the crisis.

Lute Broens, President, European Desalination Society · Board Member, Dutch National Water Partnership · Business Development Director, Norit BV, The Netherlands

Relevant Education/ Scientific Experience

University of Twente: Master Degree in Chemical Engineering, Speciality Membranes

Working Experience

1970 – 1979	Technical University of Twente, Science worker – Membrane Research
1979 – 1985	The Polymer Corporation, Manager R&D
1985 – 1993	X-Flow (leading membrane manufacturer), Co-founder, Technical Director Membrane manufacturing and research
1993 – 2001	Norit Membrane Technology, Co-founder, Managing Director
2001 – present	Norit Process Technology, Business Development Director

Lute Broens is co-founder of the company X-Flow BV, the subsidiary of Norit NV that develops and produces membranes. Norit X-Flow's membranes are being used worldwide in large installations for the filtration of water, beer and other beverages. Lute Broens has initiated and been actively involved in the development of the beer membrane filtration technology. In his current position as Business Development Director of Norit he has two focal points: the development of the market on one hand and that of innovative technologies on the other. It is his goal to be the connection between these two.

Relevant international positions / networks / experience

- Major experience in Research and Development
- Board member Netherlands Water Partnership (NWP)
- Chairman of the taskforce 'Water and the Water Cycle' of NWP
- Respected member of European Membrane Community
- Founding father of Wetsus (Centre for Sustainable Water Technology), Leeuwarden, The Netherlands
- Director of Strategy and Member of the Board of Wetsus, Leeuwarden, The Netherlands
- Active international network in the field of Membrane technology
- International expert in the field of ultra filtration and many other membrane applications
- Advisor in various Dutch-governmental working committees on water purification technology
- Chair – co-chair various international conferences – among which several EDS conference sessions
- President of European Desalination Society since September '08 (member of the board since '04, vice-president since '06)

PRESENTATION ABSTRACT (22/10/2009)

"Making the best use of waste water and sea water"

First, the nexus of water and energy will be illustrated in order to highlight their intricate links and common negative feedback loops under current infrastructure. Then, the advantages and challenges of renewable water and energy will be presented as sustainable alternatives. In this context the role of membrane technology will be shown through some examples of successful applications. Finally, political and technical strategies of decentralization vs. centralization will be juxtaposed to offer high-level conclusions about suggested local actions.

Grammatiki Papadopetrou-Tsingou, Director General, European Investment Bank, Luxembourg

Grammatiki Papadopetrou-Tsingou started her professional life in the Greek Ministry of Public Works and served at the Permanent Representation of Greece to the European Communities, before joining the Bank in 1985. Her career in the Bank includes operational work in several geographical areas (incl. Southern Africa, the Baltic Countries, Poland, Russia, Greece, Turkey) as well policy work (ACP Conventions, Mediterranean Policy, Enlargement). She has also served as Alternate Director at EBRD Board. She holds a diploma in Civil Engineering from the University of Thessaloniki (GR) and an MSc in Quantitative Economics from the University of Bristol (UK).

PRESENTATION ABSTRACT (22/10/2009)

"A financing strategy for water and energy projects in the era of climate change"

Climate Change challenges underline the urgent need for an approach that goes beyond sector boundaries. Looking at the nexus of Water and Energy is essential. Water needs Energy, Energy needs Water while global demand for both Water and Energy is escalating. Sustainable solutions require a coherent approach and Climate Change mainstreamed into policy and financing decisions. Mitigation and adaptation require substantial funding and finance remains a challenge. Other than scarcity of funds, constraints include institutional frameworks, delivery mechanisms and the capacity to implement. Multilateral institutions have an important role to play, as can be illustrated by the work of the EIB in this field.

Philippe Marin, Senior Water & Sanitation Specialist, The World Bank, Tunisia

Philippe Marin is a senior water and sanitation specialist in the Water Division of the Middle East and North Africa region of the World Bank. An expert on water utilities reforms and public-private partnerships, he has worked in more than 40 developing and developed countries on institutional reforms, infrastructure finance and utilities management. He joined the World Bank Group in 2001, and has more than 15 years of experience in the water sector, gained with both the private sector and several international financial institutions. He graduated as an engineer from INA-PG in Paris and holds an MBA degree from INSEAD in Fontainebleau, France.

PRESENTATION ABSTRACT (22/10/2009)

"Towards water sustainability: the financial challenge"

The water and sanitation sector is seriously under-funded, both in developing and developed countries. With increasing challenges from urbanization, environmental contamination and climate change, the gap between actual investments and needs has become critical. While there is an increasing awareness of the importance of water in the public, the usual demagogical answer – calling for "more money" from governments – is not the solution. Public budgets are constrained all around the world, especially with the global financial crisis, and the water sector has a poor record of advocating its cause because it is notoriously inefficient. Fundamental reforms are needed to tackle the underlying problems of the sector. That "water has a cost" must be understood by all, and governments must be ready to make difficult decisions and trade-offs about who should bear these costs. Service providers, especially urban utilities, need to become more efficient if they want to attract funding in a sustainable manner: there is little point in providing more funding to a utility which loses most of its water through leakages and does not properly maintains its infrastructure assets. This is an area where the involvement of the private sector can be of great help – whether it is through management delegation, technical assistance or subcontracting. As demonstrated from recent research by the World Bank, private sector participation can be very effective in improving the operational efficiency of water utilities, helping to increase revenues and reducing costs, thereby generating a virtuous circle which allows them to become "creditworthy" that is, access more easily both public and private funding sources.

Mike Young, Director, Environment Institute and Research Chair in Water Economics and Management, The University of Adelaide, Australia

Mike Young is a fellow of the Academy of Social Sciences in Australia. A Member of the Wentworth Group of Concerned Scientists, in 2006, Mike Young was awarded the Land and Water Australia Eureka Award for Water Research. He holds Adjunct Professorships with the University of New England and Charles Sturt University.

Prior to joining the University of Adelaide, Mike spent 30 years with CSIRO, where, amongst other things he established their Policy and Economic Research Unit with offices in Adelaide, Canberra and Perth.

Awarded a Centenary Medal for his contribution to environmental economics, in 2005, the Canberra Times recognised Mike as "Green Australian of the Year." In 2006, the Canberra Times listed him as one of the 10 most influential people in water policy reform. In 2008, the South Australian media identified Mike as one of the state's 50 most influential people and identified him as the person most likely to change the place we live in. Later in the same year, he was named South Australian of the Year in the environment category.

Mike is currently responsible for leading preparation on a report on water management and investment for the United Nations Environment Program.

PRESENTATION ABSTRACT (23/10/2009)

"Allocating and managing water scarcity in an ever-changing world: Lessons from Australia"

In recent times, much of Australia has experienced a step change to a drier regime which has necessitated many changes to the way water resources are allocated and managed. In particular, there have been dramatic changes to the way water rights are defined and water markets used to facilitate change.

The good news is that these changes have enabled rapid adjustment and change. Without these changes, Australia's water resources and its water dependent communities would be in much worse state than they are. There is an opportunity for other countries to learn from Australia and put in place allocation systems that are robust enough to cope with adverse climate change and or the emergence of long drought periods.

Joaquim Poças Martins, Professor, University of Porto · President of the Structuring Board at Aguas do Portò, Portugal

- Born in Portugal, 1953
- Chartered Civil Engineer, MSc in Public Health Engineering and PhD from the University of Newcastle upon Tyne, UK, with a Diploma in Top Management from IESF, University of Navarra, Spain.
- Fellow of the Portuguese Association of Chartered Engineers, member of IWA Water Loss Task Force and of EAPN – European Anti-Poverty Network.
- Currently:
- Professor of Hydraulics and Environmental Engineering at the University of Porto, Portugal.
- President of the Restructuring Board of Aguas do Porto (152,000 clients).
- Managing Director of GIDEA – Innovation and Development for the Water Industry, Ltd.
- Former CEO of Aguas de Portugal (holding of 60 water, wastewater and solid waste companies), EPAL/Lisbon (300,000 clients), Aguas do Douro e Paiva (300,000 m3/d), Aguas de Gaia (130,000 clients) and GAIURB – Urban Development of Gaia.
- Former President of two public Foundations: Rehabilitation of the Historical Centre of Gaia and ELA – Aquarium and Environmental Education of Aguda.
- He has led the successful corporatization and change management processes of three water companies.
- Between 1993 and 1995 he was the Secretary of State for the Environment and the Consumer of Portugal.
- He is the author of two books and of more than one hundred scientific and technical publications.
- He is the author of fifty studies and master plans in the water and environment fields (water supply, wastewater, solid waste, river basin management and municipal organization/corporatization) and acted as a consultant to NATO, the European Community and Eastern European countries.
- Currently writing a book on Management of Change in Water Companies for IWA Publishing and leader of projects on water loss reduction, rehabilitation of urban streams and beaches.

PRESENTATION ABSTRACT (23/10/2009)

"Water and the city"

Cities, in many respects, are shaped by water: water supply, waste water, landscape, urban streams, floods, waterfronts, beaches and lakes.
The reduction of water loss in urban water supply systems - which is often greater than 50% - is an imperative on environmental, ethical and economical grounds. The corresponding savings may be sufficient to finance the expansion of the systems and other activities related to the urban water cycle, without tariff increases.
The rehabilitation of urban streams and beaches, namely with the installation of foot paths and cycling paths along the banks and water fronts, greatly enhance people's quality of life.
Climate change and poverty related issues add additional levels of complexity to the water problems, namely in terms of sustainability.

Marc Edwards, Professor of Civil & Environmental Engineering, Virginia Polytechnic & State, USA

Marc Edwards received his bachelor's degree in Bio-Physics from SUNY Buffalo in 1986. He received his M.S. and Ph.D. in Environmental Engineering from the University of Washington, in 1988 and 1991, respectively. In 2004, Time Magazine dubbed Dr. Edwards "The Plumbing Professor" and listed him amongst the 4 most important "Innovators" in water from around the world. The White House awarded him a Presidential Faculty Fellowship in 1996. In 1994, 1995 and 2005, Edwards received the Outstanding Paper Award in the Journal of American Waterworks Association and he received the H.P. Eddy Medal in 1990 for best research publication by the Water Pollution Control Federation (currently Water Environment Federation). His M.S. Thesis and PhD Dissertation won national awards from the American Water Works Association (AWWA), the Association of Environmental Engineering and Science Professors and the Water Environment Federation. He was later awarded the Walter Huber Research Prize from the American Society of Civil Engineers (2003), State of Virginia Outstanding Faculty Award (2006), and a MacArthur Fellowship (2008-2012). Edwards is currently the Charles Lunsford Professor of Civil Engineering at Virginia Tech, where he teaches courses in environmental engineering and applied aquatic chemistry. Since 1995, undergraduate and graduate students advised by Edwards have won 22 nationally recognized awards for their research work on corrosion and water treatment. Edwards has published more than 98 peer reviewed journal articles, made more than 100 national and international conference presentations on six continents, and delivered 6 keynote addresses. Edwards was president of the Association of Environmental and Engineering Science Professors and he testified to the United States Congress on the issue of lead in Washington DC drinking water. His research group is currently emphasizing research on internal corrosion processes in home plumbing-- a problem costing consumers in the U.S. billions of dollars each year and which also can endanger the safety of potable water. The National Science Foundation, individual water utilities and homeowners' groups, the AWWA Research Foundation, the United States Environmental Protection Agency (U.S. EPA), and the Copper Development Association support that research. His students' work has been featured in Time Magazine, Materials Performance, National Public Radio, Prism, Salon, Good Housekeeping, Environmental Science and Technology, Public Works, Earth and Sky, and in newspaper articles around the country.

PRESENTATION ABSTRACT (23/10/2009)

"Optimizing urban water distribution systems"

Centralized distribution systems that transport freshwater into and wastewater out of cities, have served as a bulwark of civilization for several millennia. Modern distribution systems have also taken on fire-fighting, flood control and irrigation duties. As these systems reach the end of their useful lives, there is a tremendous opportunity to utilize new technologies including distributed treatment, advanced water heating, nutrient cycling, grey water and storm water recovery, and cistern use. These innovative systems, especially when deployed in synergistic combinations at small, intermediate or large scale, can potentially revolutionize system performance, resilience and sustainability.

Lucien Chabason, President, Blue Plan · Director, Institut du Développement Durable et des Relations Internationales (IDDRI), France

Born in 1941 in Paris (France), Lucien Chabason, Former Coordinator of the Mediterranean Action Plan (UNEP) in Athens from 1994 to 2003 studied law, economics and sociology at the University of Paris before entering the Ecole Nationale d'Administration (1968). Since 2004, he is Senior Adviser, IDDRI(Paris) and President of the Blue Plan for the Mediterranean.

He followed environmental issues in the Prime Minister's Office, then was the Division Head for land and landscape planning in the Ministry of Environment (1978-1984) and the Director of the Research Division (1984-1988). Between 1988 and 1990, Lucien Chabason was Director of the office of the Minister of Environment and the person in charge of the preparation of the Green Plan for France, adopted by the Government in 1991. He was an expert to OECD for the evaluation of environmental performance of Portugal, Italy, Netherlands, Sweden, Denmark, Ireland, Poland, Czech Republic, Switzerland.

Finally, he is a Professor of Environmental Policy at the Political Studies Institute of Paris (Sciences-Po) since 2004.

PRESENTATION ABSTRACT (23/10/2009)

"Water demand management in the Mediterranean"

Adding to increased pressures on water resources resulting from population growth, irrigation, tourism and urbanization, climate change is to intensify water issues in the Mediterranean region. In the southern countries, annual water resources might be reduced by 15-25 % by the middle of the present century.

So far, countries faced the need for increased use of freshwater resources through a supply approach combining reservoir construction, desalinization, exploitation of fossil waters as well as non conventional resources such as the re-use of treated waste waters.

However, there are some obvious limits to this approach which is to a certain extent unsustainable.

In relation with energy policy, water policy should take into account the need for a demand oriented approach aiming at reducing the socio economic pressure on water resources through a better efficiency in water uses specially in agriculture, energy production and tourism, urban water utilities and an appropriate water pricing policy.

This, at the same time, is a technological, economical and social challenge; some experiences in the Med region illustrate this new orientation.

Jürg Staudenmann, Water Governance Advisor to the United Nations Development Programme, Bratislava Regional Center, Slovakia

Jürg Staudenmann's work comprises development and implementation of multi-country projects, the facilitation and support of the "Water Community of Practitioners", as well policy advice and support for programme development to country offices and other clients in Europe, CIS and other regions.

A major focus of his work concentrates on knowledge management; besides active knowledge codification, dissemination, and promotion, and the promotion of networking and experience exchange amongst water-practitioners, the development and piloting of innovative approaches to KM is in the forefront. Inter alia, Juerg Staudenmann stands behind the development of "WaterWiki" (http://WaterWiki.net), an innovative Wiki-based knowledge base and on-line collaboration platform around water and UN-related themes. Besides provision of technical advise and support, Juerg Staudenmann is leading the development of new strategic partnerships and resource mobilization.

Before assuming his current assignment in Bratislava, Juerg Staudenmann was working in UNDP headquarters New York as Evaluation Specialist, after his initial assignment for UNDP (2001) as Environmental Programme Officer within the Programme of Assistance to the Palestinian People (PAPP) in Jerusalem. Before coming to UNDP, Jürg Staudenmann was working in Applied Research on Water and Resources Recycling (aquaculture management). He holds a Master's degree in Environmental Sciences and Engineering (1994) from the Swiss Federal Institute of Technology Zürich (ETH). In 2003, he completed postgraduate studies on Development Countries (NADEL/ETH).

PRESENTATION ABSTRACT (23/10/2009)

"Water governance and the right to water (& sanitation)"

No life without water! But the fact remains that every 6th person on this planet lacks access to clean and reliable drinking water; and every third to most basic sanitation. The multiple consequences include over 3,000 children dying every day of diarrhea, billions of dollars of economic losses due to sick laborers, or the fact that girls are often not attending school because there are no separate, safe toilets. The international community has therefore recognized "sufficient, clean and reliable water" as a basic Human Right.

Does this mean free and unlimited water for all? No. But it obliges states to ensure that each and every person in the country has access to an existential minimum of potable water on an affordable and daily basis; which may require adequate subsidization schemes for the most poor and vulnerable population groups.

Is it realistic? Absolutely! With a few exceptions there is, in principle, enough water for life in every region on earth. And the estimated global costs to achieve the water and sanitation related MDG-targets, some 8 billion USD yearly, are not even comparable to the sums that we have been witnessing recently for economic bailouts. The keywords here are better "water governance" and the application of a "Human Rights-Based Approach". This includes the recognition of water as an economic common good – to be wisely governed – on one hand, and a prioritization of households over other water consumers, combined with innovative solutions in other sectors to reduce water consumption on the other.