

## Open Workshop

Fostering inclusive and sustainable economic growth, employment and decent work (SDG#8) through ICT job creation tools for ensuring water security (SDG#6)

September 30<sup>th</sup> 2016

9.00 to 17.30

UNESCO, 7 Place de Fontenoy

Paris (France)

# Speaker Presentation

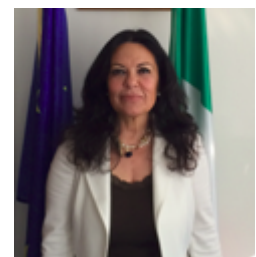
**Youssef Filali-Meknassi** studied Chemical Engineering at the Mohammed V University and got his Master degree in Environment engineering from Sherbrook University. Dr. Filali also holds a Ph.D. degree in water treatment processes from the INRS a highly selective post-graduate school which trains its top Engineers in Water management. At the end of his studies, he completed his first Pos-doc at the Universitat Politècnica de Catalunya and a second Post-doc at the Missouri University of S&T. Dr. Filali then was promoted to Research Assistant Professor in 2005 due to his great contributions to the Environmental Research Center. He joined UNESCO in September 2006. In 2007, he got the Wesley W. Horner Award from the ASCE. While Dr. Filali's focus was on emerging contaminants, he also provided critical support other topics as well. For example, he collaborated with USGS on a project focused on the chemical contamination caused by Hurricane Katrina in New Orleans and the Louisiana Peninsula.



**Flavia Schlegel** took up her duties as Assistant Director-General (ADG) for the Natural Sciences on 1 October 2014.

She is the holder of a Medical Doctorate obtained in May 1992 from the University of Zurich in Switzerland and a Master's Degree in Organizational Development obtained in July 2001 from the Institute for Interdisciplinary Research and Continuing Education of the Universities of Klagenfurt and Vienna (Austria).

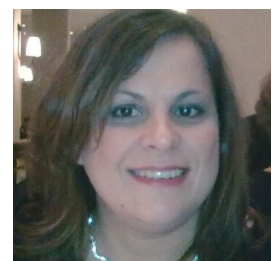
**Vincenza Lomonaco**, graduated in Political Science with a first class Degree from "La Sapienza" University in Rome, has been appointed Ambassador, permanent Delegate of Italy to UNESCO on September 18th, 2013. She entered the diplomatic career in 1982 as Italian Delegate at the United Nations' General Assembly, Economic and Social Council, Human Rights Commission, filling afterwards several positions, such as Europe's representative in the framework of the World UN Conference on Women in Nairobi, Consul in Montreal and Director for the promotion of Italian culture and language at the Italian Ministry of Foreign Affairs. She is author of several scientific publications.



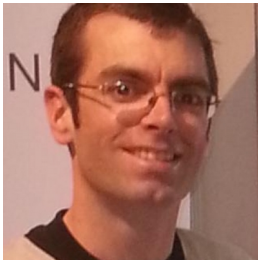


**Blanca Jiménez** is an environmental engineer with Master and PhD degrees in wastewater treatment and reuse obtained in France. She has authored more than 450 papers, published and presented in international scientific journals, books and conferences. She received the Mexican National Prize for Science and Technology (2009); was president of the Environmental Engineers' Association (1999-2000), and of the Mexican Federation of Sanitary Engineers and Environmental Science Association (2001-2002). She was a member of the board of directors of the International Water Association (2004-2008) and chair of the IWA Water Reuse Specialist Group (2006-2009), she was member of the Nominating Committee for the Stockholm Water Prize (2007-2012), and was the UN-Water Vice-Chair (2014-2015). She was co-coordinator of leading authors for the freshwater resources chapter under the adaptation group of the IPCC. Currently, she is the Director of the Division of Water Sciences, Secretary of the International Hydrological Programme at UNESCO. She sits on the editorial committees of several international journals such as Water Science and Technology; Water Reuse and Desalination; and Residuals Science and Technology. Currently she is the Chair for the IWA Disinfection Specialist group. In 2010 she received the Global Water Award from the International Water Association.

**Evdokia Achilleos** is a Project Advisor in "H2020 Eco-Innovation" sector in the European Commission (EC), Executive Agency for SMEs (EASME) since 2014 and she is responsible for the implementation of calls under the EU H2020 program.



She had worked previously for 9 years as a Policy Officer in EC DG ENV and in National Administration of Greece, focusing on water, environment and climate action issues. She worked for 6 years in the private sector in innovative SMEs that developed commercial software tools for process design and optimization. She had also done postdoctoral research in rheology and nanotechnologies for water treatment. She is a Chemical Engineer with a Bsc from Penn State University and a PhD from Princeton University in the areas of material science, transport phenomena, and scientific computing.



**Vincent Picavet** is co-founder and CEO at Oslandia, a company specialized in OpenSource Geographical Information Systems. As an engineer in applied mathematics, he started his career working on satellite imagery before dedicating himself to GIS. He designed and implemented spatial data infrastructures for numerous and diverse use cases, from environment to transportation or hydrological simulation.

He is an expert in Spatial databases and OpenSource software development. He has given a lot of training sessions at the university or for private companies. He regularly talks at international conferences, GConf.eu, FOSS4G or other events related to GIS, spatial data and OpenSource.

**Gabriel Anzaldi Varas** Head of the Smart Management Systems Unit at Eurecat. He is Electronic Engineering by IESE, Advanced Studies in Electronic Technology by UPC, Telecommunication Engineering by UPM, achieved his MSc in Telecommunications at the Buenos Aires Technological Institute, and MSc in communications at the US Signal Centre. He holds an extensive and multidisciplinary experience along product life cycle including, system development, innovation planning, scouting and business models along different sectors (public, private), both nationally and internationally, holding different positions such as Design Engineer; Project Manager; Researcher; Presales Engineer; Technical Director; R&D Director; CTO and collaborating with SMEs and large companies. He is coordinating the EU H2020 WIDEST project.



**Tom Baur** is a senior specialist in clean tech finance and electrical and ICT engineering with more than 15 years of international project experience – in Europe and in emerging markets. He is active in financial, investment & risk advisory for clean tech companies, funds and projects, especially in power energy and water management; he enjoys dealing with complex innovation projects that bridge strategic and operational challenges, i.e. in modelling due diligence and benchmarking in 'smart' asset management in

Industry 4.0; he sits in the advisory boards of European innovation projects; and he works as a senior member of the Secretariat of the European Innovation Partnership on Water.

**Dr. Lluís Pesquier** develops his research activity into GRUMETS Research Group (Methods and Applications in Remote Sensing and Geographic Information Systems) and CREAM. He is PhD in Geography, MSc in Computational Science for the Universitat Autònoma de Barcelona (UAB), and BS in Physics in at the Universitat de Barcelona. His main research interests are: spatial analysis, geostatistical analysis applied to Remote Sensing imagery, GIS processing, developing parallel solutions in high performance computing environments and ICT interoperability in Water domain; several papers and congress contributions are related to all these topics. He has participated in different EU funded projects, including the coordination of WaterInnEU, H2020 project of the ict4water cluster. He is also professor of Geography Department of UAB.



**Rudy Rossetto** (Scuola Superiore Sant`Anna, Italy) deals with surface and subsurface hydrology. He holds a MSc in Earth Science from Uni. of Pisa (IT), a MSc in Geoenvironmental Engineering from Cardiff Uni. (UK) and a PhD in Engineering Geology from Uni. of Siena (IT). Main research fields are: development and application of GIS integrated surface- /ground-water and solute transport numerical models to water management issues in the Mediterranean environment with special focus on low flow conditions and analysis of water related agro-ecosystem services (phyto-treatment plants and Managed Aquifer Recharge schemes). He is coordinator of the EU HORIZON 2020 FREEWAT project, scientific coordinator of the EU LIFE REWAT ([www.rewatlife.eu](http://www.rewatlife.eu)), coordinator of the PHARM-SWAP MED project and WP8 leader in EU FPVII MARSOL Sant'Alessio induced riverbank filtration case study. Since 2012 he is Co-Editor in Chief of Acque Sotterranee-Italian Journal of Groundwater.

**Brando Benifei**, 30, European Federalist, is one of the youngest MEPs and is from La Spezia, Italy. He has been chair of European affairs for the Young Democrats and Vice-President of ECOSY (youth organization of PES) for 4 years. He joined the PES working group which originally drafted the European Youth Guarantee. His main fields of legislative work in the EP are Employment and social affairs and Foreign affairs. He is co-chair of the Youth Intergroup and vice-chair of the Disability Intergroup.

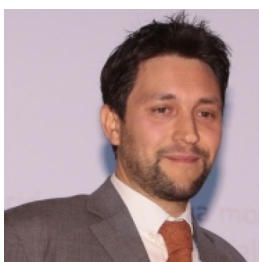
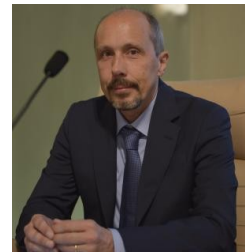






**Mario Enrico Pè** is Full Professor of Genetics and Dean of the Faculty of Experimental Sciences at Scuola Superiore Sant'Anna . He has a long standing teaching activity in the field of Genetics, Plant Genetics, Plant Breeding, Plant Genomics, including both introductory and advanced courses. As far as research activity he applies quantitative genetics and genomic approaches to study four major areas: i) genetic basis of agronomic traits in cereals, including yield components and plant response to stresses; ii) valorization of crop genetic resources; iii) genetic control of sexual reproduction in crop plants; iv) structural and functional characterization of non-coding RNAs.

**Luca Sebastiani** is a Professor and the Director of Institute of Life Sciences at the Sant'Anna University, Pisa, Italy. He holds a PhD in "Functional Relationships Between Plant Biology, Agriculture and Environment" at Sant'Anna University and published over 110 journal articles, reports, book chapters, and books. He was the convener of the 8th International Workshop on Sap Flow (2011 – Italy) and Member of the Scientific Committees of the International Symposium on CLIMWATER 2010: Horticultural Use of Water in a Changing Climate (IHC2010) and of the International Symposium on Olive Irrigation and Quality (2009 – Israel). Since 2014 he is an Associate Editor of Agricultural Water Management Journal edited by Elsevier. His research focus on the understating of the physiology of woody plants under environmental constrains and used these knowledges for developing ICT and DSS technologies in agriculture.



**Iacopo Borsi** is an applied mathematician with more than 14 years of experience on modeling industrial and environmental processes. Specific skill on flow in porous media (single and multi-phase), with particular interest in hydrogeological processes. Expertise in software tools, GIS modeling and programming languages. Teaching experience at national and international level. Author of one monograph and more than twenty-five papers in international journals. Member of IAH and IAMGS (International Association for Mathematical Geosciences). Iacopo is currently employed as Senior Environmental Modeler at TEA Sistemi SpA, an Italian private company delivering research and consultancy services in energy and environment sector.

**Ms Alice Aureli** has a PhD in Hydrogeology and works in the UNESCO Water Sciences Division since 1989. She is the Chief of the Groundwater Resources and Aquifer Systems Section of UNESCO's International Hydrological Programme. She is responsible for, amongst others, the International Shared Aquifers Resources Management (ISARM) programme. This role has led her to supervise the work of the interdisciplinary group that advised the UN International Law Commission to prepare the Draft Articles on the Law of Transboundary Aquifers. An important aspect of her work has been on scientific and policy-related issues surrounding groundwater governance. Ms Aureli is the author of a large number of publications and has also served as editor of various international journals.



**Randall T. Hanson** Lead USGS research hydrologist for over 35 years developing hydrologic methods and water-supply analysis of regional watersheds nationally and internationally. With a B.S. in mathematics and in geology from New Mexico Institute of Mining and Technology and M.S. in hydrology from the University of Arizona, research includes new modeling methods and integrated hydrologic models for regional-flow, conjunctive-use, climate-change adaptation, and sustainability analysis.

Leads development of the integrated hydrologic model, MODFLOW-One Water Hydrologic Model, and linkages to climate models and decision support tools. International research helps in Asia and Latin America, and is USGS representative for UNESCO/OAS ISARM of the Americas.

**César Carmona Moreno** was awarded a PhD in Computer Science and Image Processing (Institut National Polytechnique de Toulouse – France) in 1991. In 1993, he received the Nature's award to the best publication of the year for his publication on SAR Interferometry. Currently, he is the scientific team coordinator of the Water Resources Management activities in Developing Countries at the JRC of the European Commission. The team is directly involved on the development of the Water Knowledge Management Platform (AQUAKNOW.NET), the European Water Initiative – Communication and Information System (EUWI.NET), the European Energy Initiative – Communication and Information System (EUEI.NET) and the Europe-AID Knowledge Management System (CAPACITY4DEV.EU). He is also the Coordinator of the Centres of Excellence networks on Water in Latin America (RALCEA) and Africa (AU-NEPAD Centres of Excellence). He is the JRC EUROCLIMA Coordinator for the assessment of the impact of Climate Change on natural resources in Latin America.





**Ezio Crestaz** is a geologist, with specializations in GIScience and Computer Science. Since 1986, he has been working at various ENI companies, in Italy and abroad, in geothermal, mining, water management, environmental protection and remediation fields, taking part, among others, in regional scale and transboundary projects funded by UNDP, OLADE and EC. Following a PostDoc position at JRC of the European Commission, focused on water-agriculture-energy nexus in developing and emerging countries, he currently works in Saipem SpA. Contract professor in groundwater hydrology at Camerino Un., in 2006-2007, and guest lecturer in GISc at Birkbeck College/UCL, London, in 2010-2013, he is author of various scientific contributions in groundwater hydrology, spatial analysis, spatial databases and GIS applications design and development.

**Marco Petitta** is Associate Professor of Hydrogeology at La Sapienza University of Rome, Italy. He is teaching Basic Hydrogeology, Groundwater Hydrodynamics and Applied Hydrogeology. PhD in groundwater modeling, his researches are focusing on groundwater management, groundwater quantity and quality, remediation of polluted sites, isotope techniques for groundwater studies. He is Chairman of the Italian Chapter of the IAH, Coordinator of the Panel of Experts in Hydrogeology of the EFG and Member of the Working Group of Groundwater of the European Union, for the Common Implementation Strategy of Water Directives. He is coordinator of the H2020 project KINDRA on groundwater knowledge gaps. He is active in international collaborations and with several European Universities.



**Christoph Schüth** got his PhD in Applied Geology from the University of Tübingen in 1995. After a PostDoc at Stanford University, he again joined the University of Tübingen. Since 2005 he is Full Professor for Hydrogeology at Darmstadt Technical University. Since 2011 he is also scientific director at IWW Water Centre, a private non-profit institute with a staff of 100 focusing on drinking water issues. In his research he focuses on (i) water resources management especially in arid areas, (ii) the fate of organic contaminants in the environment, and (iii), the development of novel methods to remediate soil and groundwater contaminations.



**Chris M. Mannaerts** is Associate Professor of Environmental Satellite Hydrology at the Faculty of Geo-information Sciences & Earth Observation (ITC) of the University of Twente (NL). He holds engineering MSc degrees in physical chemistry, environmental sanitation and a PhD in agricultural hydrology from the University of Gent (B). His education inputs and multidisciplinary research interests relate to hydrological remote sensing, combined with the use of biogeochemical data in water security studies, with emphasis on climate and human impacts on water resources and aquatic ecosystems. He is involved in int'l networks (GEO) related to societal use and open access to earth observation, and has a long track record in knowledge exchange, research and advisory project services in Africa, Latin America and South-east Asia.



**Manuel Sapiano** leads the Water Policy Unit within Malta's Sustainable Energy and Water Conservation Unit with responsibilities for the development of National Policies and Management Plans for the Water Sector and the undertaking of National Water Conservation and Stakeholder Engagement Initiatives. Furthermore, he also coordinates the implementation process of EU related water legislation in the Maltese islands, and in this role is currently coordinating the implementation of Malta's 2<sup>nd</sup> River Basin Management Plan. Within the Common Implementation Strategy of the Water Framework Directive, he fulfils the role of Water Director for Malta. He also represents Malta as one of the co-chairs of the Water Reuse CIS Task Group.

**Peter van der Keur** is senior scientist at the Geological Survey of Denmark and Greenland (GEUS), Department of Hydrology, in Copenhagen. He holds a PhD in physical geography on the topic of hydrological modelling and use of remote sensing, and MSc in unsaturated hydrological processes. He is and has been involved in many EU funded research projects on integrated water resources management at basin level with the use of hydrologic models, impact studies of climate change especially with regard to leaching of pollutants to groundwater, and uncertainty assessments in using hydrological models. Other research areas are assessment of water related disaster risk reduction measures, both quantitatively and qualitative. In addition he has been involved in an EU project on capacity development in disaster risk reduction and climate change adaptation and is currently working on the Horizon2020 KINDRA project on mapping gaps in groundwater research.

