# WITFOR 2016 World Information Technology Forum

September 12th - 14th, 2016



HOME COMMITTEES KEYNOTES CALL FOR PAPERS/DEMOS SUBMISSION REGISTRATION PROGRAM VENUE - CONTACT

## Program

ICT for Promoting Human Development and
Protecting the Environment
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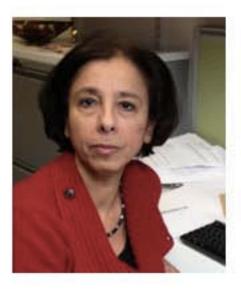
## Keynote Speakers



### Robert Atkinson

Dr. Robert D. Atkinson is one of the country's foremost thinkers on innovation economics. With an extensive background in technology policy, he has conducted ground-breaking research projects on technology and innovation, is a valued adviser to state and national policy makers, and a popular speaker on innovation policy nationally and internationally.

Before founding ITIF, Atkinson was Vice President of the Progressive Policy Institute and Director of PPI's Technology & New Economy Project. He received his Masters in Urban and Regional Planning from the University of Oregon and was named a distinguished alumnus in 2014. He received his Ph.D. in City and Regional Planning from the University of North Carolina at Chapel Hill in 1989.



## Chrisanthi Avgerou

Chrisanthi Avgerou is Professor of Information Systems at the London School of Economics and Political Science. Her main research interests concern the relationship of ICT to organizational change and the role of ICT in socio-economic development. She is Fellow of the Association for Information Systems (AIS), and she chaired the IFIP Technical Committee 9 on Social Implications of Information Technology from 2005 till 2010 and the IFIP WG 9.4 group on computers in developing countries from 1996 till 2003. Among her recent publications are Information Systems and Global Diversity, The Social Study of Information and Communication Technology: Innovation, Actors, and Contexts, and The Oxford Handbook of Information and Communication Technologies all published by Oxford University Press.

### About her keynote

### Prospects of socio-economic development in the digital era

The discourse on the transformational socio-economic effects of ICT has lately acquired renewed audacity. Academics, economic analysts, journalists and business strategists draw attention to the nearly worldwide mobile phone diffusion and significant advances in internet connectivity, a huge and increasing stock of software applications available as service over internet platforms, big data analytics and machine intelligence. They predict transformations across all aspects of society and most prevalent in economic growth, employment, medicine and security.

The extent and the speed of the realization of these transformative effects are debatable. We learned from earlier technology deterministic predictions that the socio-economic impact of technological innovation heavily depends on social and political dynamics. What is certain is that a range of powerful technologies are currently under construction and lead to unprecedented business and social innovation across the globe. But



### Alicia Bárcena

Ms. Barcena assumed office as the Executive Secretary of the Economic Commission for Latin America and the Caribbean (ECLAC) on 1 July 2008.

She had previously served as the Under-Secretary-General for Management at United Nations Headquarters in New York, Chef de Cabinet and Deputy Chef de Cabinet to the former Secretary-General, Mr. Kofi Annan.

Alicia Bárcena held the post of Deputy Executive Secretary and Director of ECLAC's Environment and Human Settlements Division.

Prior to her time at ECLAC, Ms. Bárcena served as Co-ordinator of the Latin American and Caribbean Sustainable Development Programme of the United Nations Development Programme (UNDP), responsible for the Environmental Citizenship Project at the United Nations Environment Programme (UNEP).

Alicia Bárcena was the Founding Director of the Earth Council in Costa Rica, a non-governmental organization in charge of follow-up to the agreements reached at the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil, in 1992.

Ms. Bárcena has taught and conducted research in the Autonomous Metropolitan University of Mexico. She has published numerous articles on sustainable development, public policy, environmental issues, and public participation.

Alicia Bárcena holds a Bachelor of Science degree in Biology, and holds a Master degree in Public Administration from Harvard University. She has completed the courses for a degree of Master in Ecology, and has initiated studies for a PhD degree in Economics at the National Autonomous University of Mexico.

On 2 September 2014 she was awarded an honoris causa doctorate by the University of Oslo, Norway.



### Malcolm Johnson

Malcolm Johnson was elected Deputy Secretary-General of the ITU on 24 October 2014 and started his mandate on 1 January 2015.

From 2007 to 2014, he served as Director of ITU's Telecommunication Standardization Bureau (TSB). In this post, he spearheaded activities in cybersecurity, climate change and accessibility. He increased the involvement of developing countries and academia in ITU's standards activities, introduced free downloading of ITU-T Recommendations, and initiated a programme to address developing-country concerns over lack of interoperability and conformity to ITU standards. He achieved a threefold increase in the activities of ITU's Telecommunication Standardization Sector without increasing its budget.

Between 2003 and 2006, Mr Johnson was International Coordinator at the United Kingdom's Office of Communications (Ofcom), where he had lead responsibility for the United Kingdom in ITU and in CEPT.

From 1992 to 2003, he was Director of the United Kingdom's Radiocommunications Agency and European Coordinator for WRC 93, WRC 95 and WRC 97.

Between 1988 and 1992, he worked in the European Commission's Telecommunication Regulations Division, where he represented the Commission in the Council of the European Union, EU Parliament, CEPT and ITU.



## Erick Mata

Erick Mata is currently Associate Professor at the School of Computer Science of the Costa Rica Institute of Technology (ITCR). He obtained his M.Sc. and Ph.D. degrees in Computer and Information Science from the University of Oregon in 1986 and 1990, respectively.

From January 2011 through July 2013, he worked at the Smithsonian Institution in Washington DC as the Executive Director of Encyclopedia of Life (EOL). As EOL's Executive Director, he led a team of scientists and computer scientists from Harvard University, the Marine Biological Lab at Woods Hole Mass., the Field Museum, Missouri Botanical Garden, and the National Museum of Natural History of the Smithsonian institution. EOL is a global initiative aimed at fulfilling Edward O. Wilson's dream of increasing awareness and understanding of living nature through an Encyclopedia of Life that gathers, generates, and shares knowledge in an open, freely accessible and trusted digital resource.

From 1995 through 2010 he was the founding Director of the Biodiversity Informatics (BI) Program at INBio, the National Biodiversity Institute of Costa Rica, a non-profit non-governmental scientific organization devoted to gather and generate knowledge on the country's biological diversity and promote its sustainable use. INBio's BI Program has been recognized world-wide as a pioneer effort in the use ICT's to gather, manage, synthesize and disseminate digital information about biodiversity at the species and ecosystem level.

From 1980 through 1994, he was a full time professor at at the School of Computer Science of the Costa Rica Institute of Technology.

Erick Mata has actively participated in many international BI initiatives. He was Chair of the Outreach and Capacity Building Subcommittee of the Global Biodiversity Information Facility (GBIF) for four years and Chair of its Science Committee for two years. He was also the General Coordinator of the Species and Specimen Thematic Network of the Inter American Biodiversity Information Network for four years.

In 2004 he was awarded the 2004 Mérito Informático prize, in the Pioneer category, by Costa Rica's Computer Scientists Professional Association.

His current research areas include: biodiversity informatics, scientific data visualization, computer vision for organismal identification, and algorithmic graph theory.

### About his keynote

Global Biodiversity Informatics: Developing Information and Communication Technologies to Meet the Global Challenges of Biodiversity Conservation

The main goal of biodiversity research is to understand and explain the rich diversity of living nature at the genetic, species, and ecosystem level as well as their relation to geographical, meteorological, and anthropogenic variables, among others. Scientific modeling and analysis lead not just to descriptions and explanations of what organisms inhabit the planet today, where they live, why, and how those organisms interact, particularly with human beings, but also to the identification of causality relations, trends and predictions. All of these scientific activities depend on access to the best available data on recorded observations for each species and the appropriate software tools.

Thanks to recent developments in computer science and other areas, ICT's play today a critical role in helping meet the global challenges of biodiversity conservation, as defined by the Aichi targets as well as national biodiversity strategies and action plans.

In this talk I will address how traditional obstacles to the design and implementation of ICT's to help biodiversity conservation have become myths rather than realities. Obstacles and threats at the technical, scientific, legal, financial, and cultural level have turned into opportunities if we properly identify and take advantage of them. Additionally, I will present the Global Biodiversity Informatics Outlook developed under the leadership of the Global Biodiversity Information Facility (GBIF) and other Biodiversity Informatics initiatives, as a framework for making better use of all these opportunities, to benefit us all.