

Conference Schedule

Day 1  
15<sup>th</sup> March  
2016

|                     |   |
|---------------------|---|
| 8:00 AM – 9:00 AM   | Registration  |
| 9:00 AM – 9:30 AM   | Inaugural session:<br>Mr. Hilal bin Hamad Al Hasani,<br>CEO, Public Establishment For<br>Industrial Estates, Oman |
| 9:30 AM – 10:15 AM  | Keynote Address 1:<br>Prof. Latif Ladid   |
| 10:15 AM – 11:00 AM | Keynote Address 2:<br>Prof. Martin Curley   |
| 11:00 AM – 11:30 AM | Refreshments  |
| 11:30 AM – 12:30 PM | Keynote Address 3:<br>Mr. Gilles Betis  |
| 12:30 PM – 1:30 PM  | Lunch   |
| 1:30 PM – 2:30 PM   | Research Paper Presentations<br>(Parallel Sessions) - Set A   |
| 2:30 PM – 2:45 PM   | Refreshments  |
| 2:45 PM – 3:30 PM   | Keynote Address 4:<br>Prof. Thomas Andersson  |
| 3:30 PM – 5:30 PM   | Research Paper Presentations<br>(Parallel Sessions) - Set B   |
| 5:30 PM – 6:00 PM   | Refreshments  |
| 6:30 PM             | Gala Dinner   |

Day 2  
16<sup>th</sup> March  
2016

|                     |  |
|---------------------|--|
| 9:00 AM – 9:45 AM   | Keynote Address 5:<br>Dr. Manuel Sanromà                                       |
| 9:45 AM – 10:30 AM  | Keynote Address 6:<br>Dr. Ali Amur Ali Al Shidhani                             |
| 10:30 AM – 11:00 AM | Refreshments   |
| 11:00 AM – 12:30 PM | Research Paper Presentations<br>(Parallel Sessions) - Set C                    |
| 12:30 PM – 1:30 PM  | Lunch  |
| 1:30 PM – 2:15 PM   | Keynote Address 7:<br>Prof. Mahmoud Daneshmand                                 |
| 2:15 PM – 2:30 PM   | Refreshments   |
| 2:30 PM – 3:30 PM   | Research Paper Presentations<br>(Parallel Sessions) - Set D                    |
| 3:45 PM             | Panel Discussion:<br>Towards a research agenda on<br>'Big Data and Smart City' |

Day 3  
17<sup>th</sup> March  
2016

Muscat City Tour

## Welcome to MEC

Founded in 2002, Middle East College (MEC) has established itself as one of the premier higher education institutions in the Sultanate of Oman. Located in the Knowledge Oasis Muscat, the country's flagship technology park, it provides a vibrant and inspiring campus environment with state of the art infrastructure. Nurtured in this environment, students are empowered to make a positive difference to the community, the state and the world. MEC offers undergraduate and postgraduate programmes in Engineering, Business, and Technology.

MEC's research agenda stems from the aim to contribute to a sustainable world through the pursuit of knowledge. In line with its vision and strategic goals, MEC is continuously focused on initiatives that contribute to quality enhancement of scholarly research, student innovation and the development of a research culture. Together with partner institutions, the college has achieved significant milestones in organizing research conferences and projects of national importance.

**For registration, please contact us at:**  
Middle East College  
Knowledge Oasis Muscat  
P.O. Box 79, PC 124, Al Rusayl,  
Sultanate of Oman  
Telephone: + 968 24531400,  
+ 968 24531575,  
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Email : conf2016@mec.edu.om  
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Website: www.mec.edu.om/conf2016



## The 3<sup>rd</sup> MEC International Conference Big Data and Smart City 2016 March 15-16, 2016



## The 3rd MEC International Conference

# Big Data and Smart City (ICBDSC) 2016

March 15-16, 2016

In this data-centric digital world, data is a key source for promoting the growth and wellbeing of society. Exploration of the interconnection of data helps to link information and formulate strategies efficiently. Big data is an emerging paradigm applied to large data sets where size, complexity and velocity are beyond the ability of normal computer software and hardware tools. These data sets may be from various sources such as social media, sensors, scientific applications, surveillance, video, audio, internet texts and medical records which are used for decision making.

The purpose of the conference on Big Data and Smart City is to bring together researchers, designers, developers and practitioners interested in the advances and applications in the field of smart cities, green information and communication technologies, sustainability, energy aware systems and technologies to realize smart communities of the future.

We take great pleasure in inviting you to the 'International Conference on Big Data and Smart City (ICBDSC) - 2016', on 15 and 16 March, 2016 organized by Middle East College, Muscat, Sultanate of Oman. The conference is technically co-sponsored by IEEE.

### Conference themes include but are not limited to:

- Creative use of technology for smart buildings and homes
- Smart cities and key issues in well-being
- Advanced communication systems and approaches for smart cities
- New developments in smart cities and regions
- Sensors, actuators and their networking in smart cities
- Management, configuration and deployment of smart city infrastructure
- Energy aware systems and technologies
- Sustainable computing and communications
- Computational intelligence and soft computing (genetic algorithm, neural networks, fuzzy logic)
- Modeling of complex energy, mobility, health, society and e-government systems
- Technologies for utility business transformation
- Next generation distribution systems and smart sensors
- Impact of distributed energy resources and smart grids (Electric cars, demand response, distributed generations, storage)
- Energy efficient hardware and software solutions
- Creative use of technologies to analyze and measure/assess well-being
- Big data architecture, computer networks, network security
- Storage architectures, grid computing, service oriented architecture
- Data privacy and security issues in intelligent systems
- Cloud computing framework for big data processing
- Data privacy and security issues in intelligent systems
- Big data acquisition, preprocessing, data storage and management, knowledge management
- Big data intelligent computing, machine learning, pattern recognition, signal processing, image processing, and bio-informatics
- Big data analysis and applications
- Modeling technology and systems for big data
- Big data mining, data warehousing and big data visualization
- Smart data for business intelligence, and business process integration and management
- Explore standardized smart data formats and privacy and protection, and data convergence
- Evaluate best practices in smart data handling
- Smart data for social entrepreneurship and community engagement

Please visit conference homepage for further details: [mec.edu.om/conf2016](http://mec.edu.om/conf2016)  
Conference emails: [conf2016@mec.edu.om](mailto:conf2016@mec.edu.om) , [sub2016@mec.edu.om](mailto:sub2016@mec.edu.om)

## Keynote Speakers



**Prof. Martin Curley,**  
Vice President and Director, Intel Labs Europe at Intel Corporation  
**Keynote Title:**  
**Open Innovation 2.0 and Digital Technology: the New Paradigm for Prosperity and Sustainable Intelligent Living**



**Prof. Latif Ladid,**  
Chair, IEEE ComSoc TCsub Internet of Things, Emeritus Trustee-Internet Society - ISOC, Senior Researcher @ SnT - University of Luxembourg on Multiple European Commission Next Generation Technologies - IST Projects.  
**Keynote Title: Impact of the New Internet Protocol Version 6 on Big Data, IoT, SDN-NFV, 5G & Smart Cities**



**Mr. Gilles Betis,**  
Urban Life and Mobility Action Line Leader, EIT Digital;  
Chair, IEEE Smart Cities Initiative  
**Keynote Title:**  
**The IEEE Smart Cities Initiative - Creating Value for Smart Citizens**



**Dr. Ali Amur Ali Al Shidhani,**  
Director of ICT Research, The Research Council, Sultanate of Oman  
**Keynote Title:**  
**Overview of Smart City Initiatives in Oman**



**Prof. Thomas Andersson,**  
Chairman of the Board, International Organisation of Knowledge Economy and Enterprise Development, Sweden  
**Keynote Title:**  
**Fulfilling the potential of ICT: Smart Cities, Innovation and Engaged Citizens in the GCC**



**Dr. Manuel Sanromà,**  
Managing Director, Open Administration of Catalonia, Barcelona, Spain  
**Keynote Title:**  
**Big Data on Smart City: towards the Improvement of the Quality of Life of the Citizens**



**Prof. Mahmoud Daneshmand,**  
Vice Chair, IEEE ComSoc TCsub Big Data; Professor of Business Intelligence & Analytics, Howe School of Technology Management; Professor, Department of Computer Science, Schaefer School of Engineering & Science, Stevens Institute of Technology, USA  
**Keynote Title: The Big Data Stream Analytics and Smart City**