Scientific Program

International Conference and Exhibition on Satellite
Houston, USA  August 17-19, 2015

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OMICS International Conferences
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Email: satellite@omicsgroup.com, satellite@conferenceseries.com
### Keynote Forum

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<tr>
<th>Time</th>
<th>Speaker</th>
<th>Institution</th>
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<tbody>
<tr>
<td>09:30-09:35</td>
<td>Introduction</td>
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<tr>
<td>09:35-10:10</td>
<td>Guoquan Wang</td>
<td>University of Houston, USA</td>
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<tr>
<td>10:10-10:45</td>
<td>Yi Lung Mo</td>
<td>University of Houston, USA</td>
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<tr>
<td>11:05-11:40</td>
<td>David Olowokere</td>
<td>Texas Southern University, USA</td>
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#### Group Photo

**Track 1: Satellite Engineering & Technology**

- **Track 12: Integral Manoeuvres for the Future**
- **Track 13: Vibration Design and Satellite Remote Sensing**

**Session Chair:** Yi Lung Mo, University of Houston, USA  
**Session Co-Chair:** Hyongki Lee, University of Houston, USA

#### Session Introduction

- **11:40-12:05**  
  Periodic material-based vibration isolation for satellites  
  Yi Lung Mo, University of Houston, USA

- **12:05-12:30**  
  Applications of satellite remote sensing for hydrologic studies  
  Hyongki Lee, University of Houston, USA

- **12:30-12:55**  
  Introduction to GPS geodesy infrastructure in the Houston metropolitan area for urban geological hazards study  
  Guoquan Wang, University of Houston, USA

**Lunch Break 12:55-13:45 @ Windsor-III**

- **13:45-14:10**  
  Case study of satellite-based AIS system for continuous tracking at sea of global movement of Nigerian liquefied natural gas  
  David Olowokere, Texas Southern University, USA

- **14:10-14:35**  
  Improving BIM as an architectural design tool towards sustainability through applying LEED categories on its database  
  Wael Ahmed Abonema, Helwan University, Egypt

- **14:35-15:00**  
  Thermo-electrochemical testing and simulation of lithium-ion batteries operating in radiation driven space environments  
  William Walker, National Aeronautics and Space Administration, USA

- **15:00-15:25**  
  Satellite launch and in-orbit insurance  
  Robert P Whearty, Marsh Space Projects, USA

**Coffee Break 15:25-15:45 @ Gallery**

- **15:45-16:10**  
  India's first Moon and Mars missions orbit determination  
  Narayanasetti Venkata Vighnesam, Visvesvaraya Technological University, India

- **16:10-16:35**  
  A time domain along-track SAR interferometry method  
  Ning Cao, University of Houston, USA

- **16:35-17:00**  
  Diffusion modeling of water flow in the Congo floodplains using geodetic and remote sensing measurements  
  Ting Yuan, University of Houston, USA

- **17:00-17:25**  
  Comparison analysis of global horizontal irradiance between Korea Institute of Energy Research and NASA  
  Shin Young Kim, Korea University, Korea

**Panel Discussion**
### Day 2
#### August 18, 2015

**Windsor-II**

#### Keynote Forum

<table>
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<td>09:30-09:35</td>
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</table>
| 09:35-10:10 | **Dimitar Ouzounov**  
Chapman University, USA                                                        |
| 10:10-10:45 | **Dorian Gorgan**  
Technical University of Cluj-Napoca, Romania                                      |

*Track 2: Satellite Navigational Systems  
Track 3: Types of Satellites & Applications  
Track 4: Satellite Subsystems  
Track 5: Space Missions  
Track 6: Military and Non-Military Satellite Technology*

**Session Chair:** Dorian Gorgan, Technical University of Cluj-Napoca, Romania  
**Session Co-Chair:** Luiz Sampaio Athayde Junior, Federal University of Bahia, Brazil

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| 11:05-11:30 | Testing geospace technologies for alerting large earthquakes: An integrated approach of space and ground observations  
Dimitar Ouzounov, Chapman University, USA |
| 11:30-11:55 | Geodetic imaging technologies for research and education  
Ramesh L Shrestha, University of Houston, USA |
| 11:55-12:20 | Paradoxical variation of the solar day related to Kepler/Newton system: The Solar Zenith Theory  
Luiz Sampaio Athayde Junior, Federal University of Bahia, Brazil |
| 12:20-12:45 | Flexible and adaptive processing of Earth observation data over high performance computation architectures  
Dorian Gorgan, Technical University of Cluj-Napoca, Romania |

**Lunch Break 12:45-13:35 @ Windsor-III**

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| 13:35-14:00 | The conceptual project of the geophysical microsatellite  
| 14:00-14:25 | ARD (Alpha-Ray Detector) on board SELENE: Design, in-orbit performance and scientific outcome  
Masayuki Itoh, Kobe University, Japan |
| 14:25-14:50 | A GUI for optimization of low-thrust trajectories for nuclear and solar electric propulsion  
Porzia Federica Maffione, Polytechnic of Turin, Italy |
| 14:50-15:15 | Optimized image collection planning for KOMPSAT  
Heejin Bae, KARI (Korea Aerospace Research Institute), Korea |

**Coffee Break 15:15-15:35 @ Gallery**

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| 15:35-16:00 | The use of satellites in the border security  
Ali Emre Destegul, Turkish Air War College, Turkey |
| 16:00-16:25 | Will high-altitude long-endurance (HALE) UAVS replace satellites?  
Lt. Abdullah Kaya, Turkish Air War College, Turkey |

**Panel Discussion**

### Day 3
#### August 19, 2015

**Churchill**

**Track 7: New Satellite Technologies for Cleaner Low Orbits  
Track 10: Applications of Satellite Technology  
Track 11: Satellite Challenges and Solutions**
### Session Introduction

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| 10:00-10:25   | Algorithms for optimal scheduling of multiple spacecraft maneuvers  
Atri Dutta, Wichita State University, USA |
| 10:25-10:50   | Future telecomsats as a new paradigm for satellite industries and operators  
Antonio G Accettura, OHB System AG, Germany |

### Coffee Break 10:50-11:10 @ Gallery

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| 11:10-11:35   | Protected Antipode Circle (PAC) on the far side of the Moon  
Claudio Maccone, International Academy of Astronautics (IAA), Italy |
| 11:35-12:00   | Remote sensing monitoring and driving force analysis of urban expansion in Guangzhou City, China  
Ruisong Xu, Chinese Academy of Sciences, China |
| 12:00-12:25   | GNSS positioning availability control under space weather hazards  
Vladislav V Demyanov, Irkutsk State Transport University, Russia |
| 12:25-12:50   | Enhancing LEED as a sustainable rating system by applying its regional priority for all environmental regions  
Wael Ahmed Abonema, Helwan University, Egypt |

### Lunch Break 12:50-13:40 @ Windsor-III

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| 13:40-14:05   | Reliability and cost effectiveness of spacecraft attitude and orbit monitoring  
Tamer Mekky Ahmed Habib, National Authority for Remote Sensing and Space Sciences, Egypt |
| 14:05-14:30   | Mitigating the effects of rain-induced fading in Ka-band satellite video broadcast system using time diversity in  
concert with maximal ratio combining  
Leshan Uggalla, University of South Wales, UK |
| 14:30-14:55   | Estimating total suspended sediment (TSS) budget of a freshwater lake using remote sensing  
Essayas Kaba Ayana, Columbia University, Columbia |
| 14:55-15:20   | Conceptual design of manned space transportation vehicle using laser thruster in combination with H-II rocket  
Yoshinari Minami, Advanced Science-Technology Research Organization, Japan |
| 15:20-15:45   | Electrodynamics of new submillimeter transmission lines based on flat waveguide splitters  
Alexander G. Yushchenko, National Technical University, Ukraine |

### Panel Discussion

### Award Ceremony

### Coffee Break 15:45-16:10 @ Gallery

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**Bookmark your dates**

**2nd International Conference and Exhibition on Satellite & Space Missions**

**Berlin, Germany  June 13-14, 2016**