

## Scientific Program

### International Conference and Exhibition on **Satellite**

Houston, USA August 17-19, 2015



#### Organize your Events at OMICS International Conferences

Proposals are invited for organizing Symposia/Workshops at OMICS International Conferences or OMICS Group will sponsor small events at your universities in related areas under the title of your own. These proposals can be sent to respective conference mail ids or to [symposia@omicsonline.org](mailto:symposia@omicsonline.org)

#### UK: Conference Series llc LTD

47 Churchfield Road, London, W3 6AY  
Phone:+44 8000148923, Fax: +44 2030041517

## Windsor-II



09:00-09:30

## Opening Ceremony

## Keynote Forum

- 09:30-09:35 **Introduction**
- 09:35-10:10 **Guoquan Wang**  
University of Houston, USA
- 10:10-10:45 **Yi Lung Mo**  
University of Houston, USA

Coffee Break 10:45-11:05 @ Gallery

- 11:05-11:40 **David Olowokere**  
Texas Southern University, USA

## 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 **Title: Periodic material-based vibration isolation for satellites**  
Yi Lung Mo, University of Houston, USA
- 12:05-12:30 **Title: Applications of satellite remote sensing for hydrologic studies**  
Hyongki Lee, University of Houston, USA
- 12:30-12:55 **Title: 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 **Title: 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 **Title: 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 **Title: 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 **Title: Satellite launch and in-orbit insurance**  
Robert P Whearty, Marsh Space Projects, USA

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

- 15:45-16:10 **Title: India's first Moon and Mars missions orbit determination**  
Narayanasetti Venkata Vighnesam, Visvesvaraya Technological University, India
- 16:10-16:35 **Title: A time domain along-track SAR interferometry method**  
Ning Cao, University of Houston, USA
- 16:35-17:00 **Title: 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 **Title: Comparison analysis of global horizontal irradiance between Korea Institute of Energy Research and NASA**  
Shin Young Kim, Korea University, Korea

## Panel Discussion

## Windsor-II

## Keynote Forum

09:30-09:35	<b>Introduction</b>
09:35-10:10	<b>Dimitar Ouzounov</b> Chapman University, USA
10:10-10:45	<b>Dorian Gorgan</b> Technical University of Cluj-Napoca, Romania

Coffee Break 10:45-11:05 @ Gallery

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

Session Introduction

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

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

13:35-14:00	<b>Title: The conceptual project of the geophysical microsatellite</b> Matviyenko Sergiy Anatoliyovich, State enterprise "Design office" Yuzhnoye "of M.K.Jangel", Ukraine
14:00-14:25	<b>Title: ARD (Alpha-Ray Detector) on board SELENE : Design, in-orbit performance and scientific outcome</b> Masayuki Itoh, Kobe University, Japan
14:25-14:50	<b>Title: A GUI for optimization of low-thrust trajectories for nuclear and solar electric propulsion</b> Porzia Federica Maffione, Polytechnic of Turin, Italy
14:50-15:15	<b>Title: Optimized image collection planning for KOMPSAT</b> Heejin Bae, KARI (Korea Aerospace Research Institute), Korea

Coffee Break 15:15-15:35 @ Gallery

15:35-16:00	<b>Title: The use of satellites in the border security</b> Ali Emre Destegul, Turkish Air War College, Turkey
16:00-16:25	<b>Title: Will high-altitude long-endurance (HALE) UAVS replace satellites?</b> 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 Chair: Ruisong Xu, Chinese Academy of Sciences, China

Session Co-Chair: Antonio G Accettura, OHB System AG, Germany

Session Introduction

10:00-10:25 **Title: Algorithms for optimal scheduling of multiple spacecraft maneuvers**  
Atri Dutta, Wichita State University, USA

10:25-10:50 **Title: 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

11:10-11:35 **Title: Protected Antipode Circle (PAC) on the far side of the Moon**  
Claudio Maccone, International Academy of Astronautics(IAA), Italy

11:35-12:00 **Title: 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 **Title: GNSS positioning availability control under space weather hazards**  
Vladislav V Demyanov, Irkutsk State Transport University, Russia

12:25-12:50 **Title: 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

13:40-14:05 **Title: 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 **Title: 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 **Title: Estimating total suspended sediment (TSS) budget of a freshwater lake using remote sensing**  
Essayas Kaba Ayana, Columbia University, Columbia

14:55-15:20 **Title: 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 **Title: 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