# NMC-COMSATS-ISESCO International Conference on Mathematical Modeling

# The Second Meeting of COMSATS' International Thematic Research Group on Mathematical Modeling (28-30 December 2015)

National Mathematical Centre Abuja, Nigeria



# Announcement

# **Preamble**

One of the most pressing 21<sup>st</sup> century issues is the control of pollution of the air and water. Its impact on human health, agriculture, biodiversity, water and sanitation and ecosystem imbalance is of great concern to the global community. Continuous emissions of pollutants in the air as a result of combustion of hydrocarbons, coal and sold fuel have led to rapid cases of carcinogenic and respiratory diseases such as lung cancer and asthma. Continuous deposition of contaminants from factories and spillages from oil companies and sewage into drinking water are endangering the life of people and marine life. Among the world topmost challenging problems are: eruption of earthquake, floods, extreme temperature, and emergence of diseases like bird flu, Ebola and swine flu, financial meltdown which rendered several millions people jobless and many nations insolvent financially the list continues ad finitum. Scientists, engineers, educationists and policy makers have been adopting mathematical modeling and simulation techniques to solve these problems challenging mankind.

In view of the above, the National Mathematical Centre (NMC), Abuja in collaboration with the Commission on Science and Technology for Sustainable Development in the South (COMSATS), Islamic Educational, Scientific and Cultural Organization (ISESCO), the entire Mathematical Modeling Community comprising: NMC-COMSATS-ISESCO International Thematic Research Groups (ITRGs) and the National Thematic Research Groups (NTRGs) in Mathematical Modeling in Nigeria as well as the Government of Federal Republic of Nigeria is pleased to announce, to the Researchers, Scientists, Students and Policy Makers, the

International Conference on Mathematical Modeling and the Second Meeting of COMSATS' International Thematic Research Group on Mathematical Modeling. It is expected to attract Mathematical scientists, Engineers and environmentalists and other relevant scientists and professionals all over the world.

#### THEME OF THE CONFERENCE:

### Solving humanity problems and through Mathematical Modeling

The Conference will cover, among others, Modeling and Simulation in the following areas:

- Pollutions of air and water
- Population dynamics of bacteria, fungi, zooplankton, phytoplankton;
- Terrestrial and marine biodiversities.
- Multiscale hierarchical modeling
- Complex systems modeling and simulation
- Medical and biomedical systems and surgical modeling
- Bimolecular simulation and metamodeling techniques
- Climatic, reservoirs design and vehicle routine problems
- Engineering systems and telecommunication network
- Nanofluid and nanotechnology
- Quantitative models, financial models
- Applications in the industry and other human endeavors.
- Complex Atmosphere-Ocean General Circulation problem
- Ecological risk assessments
- Renewable and non-renewable energies
- Nuclear safety problem
- Energy efficient batteries
- Remote sensing and Satellite imagery
- Impact Assessments
- Geographic Information Systems (GIS)
- Quality control of water and air. Determinations of benchmarks for clean air and water quality.
- Transportation of contaminants in air and water.
- Oil spillages and corrosion problem in the marine and terrestrial environments.

#### **Organizers**

 Professor A.R.T. Solarin, FMAN, President, AMU, Director/CE, NMC, COMSATS Distinguished Professor; UNESCO-NMC Chair of Mathematics (Chief Convener)

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# 6. Professor J A Ogidi (Invited Speaker)

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#### 7. Prof. Dr. Xiaodong Zeng (Invited Speaker)

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#### 8. Prof. Femi Taiwo (Invited Speaker)

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# 9. Professor M. O. Ibraheem (Invited Speaker)

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# 10. Dr. Lugano Wilson; Lic. (Invited Speaker)

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#### 11. Dr. ABIODUN Babatunde Joseph (Invited Speaker)

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#### 12. Dr. Mofoluso A. Fagbeja (Invited Speaker)

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### 13. Dr. Asma T. Ibrahim (Invited Speaker)

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**Registration Fee:** Ten Thousand Naira (=N=10,000.00); **Students** =N=5,000.00

Papers from the Conference will be published as special issue after review process and will be indexed in some standard international databases such as Mathrev, Zentralblatt MATH, and Crossref.

All Abstracts of Presentations should be sent to:

boyelami2000@yahoo.com;joshuaoladejo@rocketmail.com. This must be received by 20<sup>th</sup> December 2015.

Arrival: 27<sup>th</sup> December, 2015

Conference period: 28<sup>th</sup> - 29<sup>th</sup> December, 2015

ITRG Meeting: 30<sup>th</sup> December, 2015

**Departure:** 31<sup>st</sup> December, 2015

For more information visit: www.nmcabuja.org

A. M. Biu

Registrar, National Mathematical Centre Abuja, Nigeria

Announcer