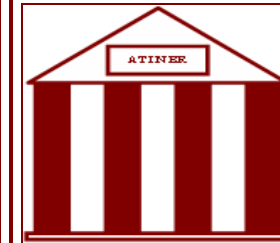


**Athens Institute for Education and Research**  
**4<sup>th</sup> Annual International Conference on Physics**  
**18-21 July 2016, Athens, Greece**  
Organized by the [Physics Research Unit](#) of ATINER  
sponsored by the [Athens Journal of Sciences](#)  
[Scientific & Organizing Committee](#)



Conference Venue: [Titania Hotel](#), 52 Panepistimiou Street, 10678 Athens, Greece

**Co-Organizer and Sponsor**



**NSF Engineering Research Center for  
Revolutionizing Metallic Biomaterials**

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## Monday 18 July 2016

(all sessions include 10 minutes break)

### 08:00-08:30 Registration and Refreshments

#### 08:30-09:00 Welcome & Opening Address (ROOM A-10<sup>th</sup> Floor)

- Gregory T. Papanikos, President, ATINER.
- George Poulos, Vice-President of Research, ATINER & Emeritus Professor, University of South Africa, South Africa.

#### 09:00-10:30 Session I (ROOM B-10<sup>th</sup> Floor): Environmental Issues

**Chair:** Ethel Petrou, Academic Member, ATINER & Professor and Chair, Department of Physics, Erie Community College-South, State University of New York, USA.

1. Jagannathan Sankar, Distinguished Professor, North Carolina A&T State University, USA. Revolutionizing Metallic Biomaterials for Biodegradable Implants – A Global Status.
2. Marwa Elkady, Associate Professor, Egypt-Japan University of Science and Technology, Egypt & Hassan Shokry Ahmed, Assistant Professor, City of Scientific Researches and Technological Applications, Egypt. Nano-Tube Zirconium Tungstate-Vanadate as Cation Exchanger for Lead Decontamination from Polluted Wastewater.
3. \*Burhan Davarcioglu, Associate Professor, Aksaray University, Turkey. Adaptation to Climate Change and Eco-Efficiency (Cleaner Production) for More Effective Environmental Management in Industry.

#### 10:30-12:00 Session II (ROOM B-10<sup>th</sup> Floor): Astrophysics and Geophysics

**Chair:** Jagannathan Sankar, Distinguished Professor, North Carolina A&T State University, USA.

1. M. Howard Lee, Regents Professor of Physics, University of Georgia, USA. Hamilton-Jacobi Trajectories of Comets Kohoutek and ISON.
2. \*Jaroslav Klokocnik, Professor, Astronomical Institute, Czech Academy of Sciences, Czech Republic, Jan Kostecky, Research Institute of Geodesy, Topography and Cartography, Czech Republic & Ales Bezdek, Astronomical Institute, Czech Academy of Sciences, Czech Republic. On Feasibility to Detect Volcanoes Hidden under Ice of Antarctica via their "Gravitational Signal".
3. \*Avinash Sharma, Professor and Director, GGS Indraprastha University, India. Relic Neutrinos: Challenges & Possible Ways for their Detections.

#### 12:00-13:30 Session III (ROOM B-10<sup>th</sup> Floor): Nuclear Physics and Elementary Particles

**Chair:** \*Jaroslav Klokocnik, Professor, Astronomical Institute, Czech Academy of Sciences, Czech Republic.

1. Spyridon Margetis, Professor, Kent State University, USA. High Energy Nuclear Collisions - One Trillion Degrees in the Shade.
2. Gerassimos Petratos, Professor, Kent State University, USA & Mina Katramatou, Associate Professor, Kent State University, USA. A Novel Experiment on the Quark-Gluon Structure of the Proton and Neutron.

### 13:30-14:30 Lunch

**14:30-16:00 Session IV (ROOM B-10<sup>th</sup> Floor): New Ideas and Methods in Education**

**Chair:** \*Avinash Sharma, Professor and Director, GGS Indraprastha University, India.

1. \*Bala Maheswaran, Professor, Northeastern University, USA. Assessment and Analysis of a New Teaching and Learning Approach via Mastering Technique.
2. Mina Katramatou, Associate Professor, Kent State University, USA. Winds of Change in Undergraduate Physics Programs in the USA.
3. Nassim Hamein, Director of Research, Hawaii Institute for Unified Physics, USA & Amira Val Baker, Research Scientist, Hawaii Institute for Unified Physics, USA and University of Malaya, Malaysia. The Electron and the Holographic Mass.

**16:00-18:00 Session V (ROOM B-10<sup>th</sup> Floor): A Round-Table Discussion on *Teaching and Researching Sciences (Physics and Chemistry) in a Global World***

**Chair:** Ethel Petrou, Academic Member, ATINER & Professor and Chair, Department of Physics, Erie Community College-South, State University of New York, USA.

1. Dr **Jagannathan Sankar**, Distinguished Professor, North Carolina A&T State University, USA.
2. Dr **Edward Lee-Ruff**, Professor, York University, Canada.
3. Dr **Nassim Hamein**, Director, Hawaii Institute for Unified Physics, USA
4. Dr **Avinash Sharma**, Professor & Director, GGS Indraprastha University, India.
5. Dr **Batric Pesic**, Professor, University of Idaho, USA.
6. Dr **Anouar Alami**, Professor & Head of Department of Chemistry, Sidi Mohamed Ben Abdellah University, Morocco.

**21:00-23:00 Greek Night and Dinner (Details during registration)**

## Tuesday 19 July 2016

08:00-11:00 Educational and Cultural Urban Walk Around Modern and Ancient Athens (Details during registration)

11:00-13:00 Session VI (ROOM B-10<sup>th</sup> Floor): Applied Chemistry & Applied Physics

Chair: \*Bala Maheswaran, Professor, Northeastern University, USA.

1. \*Haiduke Sarafian, Professor, The Pennsylvania State University, USA. Vibrating Inductor and an RL(t) Network.
2. \*Edward Lee-Ruff, Professor, York University/Chemistry, Canada. Photochemical Generation of 9-Fluorenyl Radicals.
3. Batric Pesic, Professor, University of Idaho, USA. Transport of Chloride Ions Evaluation through Modulated Concrete Microstructures.
4. Gregory Boutis, Associate Professor, The City University of New York, USA. <sup>13</sup>C, <sup>2</sup>H NMR Studies of Structural and Dynamical Modifications of Cholesterol Exposed Porcine Aortic Elastin.
5. Jorge Rosenblatt, Professor Emeritus, Institut National de Sciences Appliquées, France. Inequality and Indistinguishability in Statistical Econophysics.

13:00-14:00 Lunch

14:00-15:30 Session VII (ROOM B-10<sup>th</sup> Floor): Nanophysics, Nanotechnology and other Issues

Chair: \*Burhan Davarcioglu, Associate Professor, Aksaray University, Turkey.

1. Sergiu Cojocaru, Researcher, Horia Hulubei National Institute for Physics and Nuclear Engineering, Romania. Electron-Phonon Coupling and Heat Transfer in Layered Nanostructures at Low Temperatures.
2. Seda Hekim, PhD Student, Firat University, Turkey & Sinan Akpınar, Supervisor, Firat University, Turkey. Renner Teller Quantum Dynamics of  $ND(\alpha^1\Delta)+D(^2S)$  Reaction.

21:00-22:30 Dinner (Details during registration)

## Wednesday 20 July 2016

Cruise: (Details during registration)

## Thursday 21 July 2016

Delphi Visit: (Details during registration)



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