



Athens Institute for Education and Research
3rd Annual International Conference on Chemistry & Physics
20-23 July 2015, Athens, Greece

Organized by ATINER's [Natural & Formal Sciences Research Division](#)

Conference Venue: [Tiania Hotel](#), 52 Panepistimiou Street, 106 78 Athens, Greece

Monday 20 July 2015

(all sessions include 10 minutes break)

08:30-09:00 Registration and Refreshments

09:00-09:15 (ROOM B) Welcome & Opening Remarks

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

09:15-10:30 Session I (ROOM B): Material Science / Instrumental Techniques and Other Essays I

Chair: Olga Gkounta, Researcher, ATINER.

1. *[Gabor Patonay](#), Professor, Georgia State University, USA, Maged Henary, Georgia State University, USA, Gala Chapman, Georgia State University, USA, Erica Lewis, Georgia State University, USA & Kyle Emer, Georgia State University, USA. Near-Infrared Fluorescent Carbocyanines – Chemistry and Applications.
2. *[Shafiq Rahman](#), Professor, Allegheny College, USA. Using Spin Distributions to Determine the Critical Temperature in an Anti-Ferromagnetic Potts Model.
3. [Sung-Jin Kim](#), Professor, Ewha Womans University, Korea. Graphene -SnO₂ Compositated Anodic Materials for Li-Ion Batteries.
4. [Mohsen Zareh](#), Professor, Zagazig University, Egypt and Head of Chemistry Department, University of Tabuk, Saudi Arabia. Nickel Ion-selective Electrode based on B-cyclodextrin as Ionophore.
5. *[Ahmed Sedky](#), Professor of Physics, Assiut University, Egypt. Melting time Effect Excess Conductivity in Bi (Pb):2212 Superconducting System.

10:30-12:00 Session II (ROOM B): Basic Physics I

Chair: *[Shafiq Rahman](#), Professor, Allegheny College, USA.

1. [Leonardo dos Santos Lima](#), Professor, Centro Federal de Educacao Tecnologica de Minas Gerais, Brazil. Spin Dynamics of the Frustrated Quasi-Two-Dimensional XY-Like Antiferromagnet.
2. *[Haiduke Sarafian](#), Professor, The Pennsylvania State University, USA. Coulomb Interaction in H₂ Molecule for States beyond the Ground State.
3. [Hiroyuki Furukawa](#), Associate Professor, Meijo University, Japan. Mode Bifurcation in Taylor Vortex Flow with non-Newtonian Fluids.
4. [Ioan Has](#), Associate Professor, Land Forces Academy, Romania, [Simona Miclaus](#), Professor, Land Forces Academy, Romania & [Aurelian Has](#), Assistant, University "C. Brancoveanu", Romania. A Reanalysis of the Theory of Interferometer Experiment Demonstrating that Michelson's Analysis Contains an Error, including the Boat Model Analysis, so readmitting the Ether Presence.
5. [Gocho Sharlanov](#), Efficiency Engineer and Independent Researcher, Bulgaria. The Speed of Light Postulate and Uncertainty Principle of the Macro-World in the General Relativity.

10:30-12:00 Session III (ROOM C): Organic/Biochemistry/Drugs I

Chair: *[Gabor Patonay](#), Professor, Georgia State University, USA.

1. [Han Mo Jeong](#), Professor, University of Ulsan, South Korea. Water-Dispersible Graphene Designed as a Pickering Stabilizer for the Suspension Polymerization of Poly(Methyl Methacrylate)/Graphene Core-Shell Microsphere Exhibiting Ultra-Low Percolation Threshold of Electrical Conductivity.
2. *[Mahendra Nath Roy](#), Professor, University of North Bengal, India, [Subhadeep Saha](#), [Siti Barman](#) & [Deepak Ekka](#), University of North Bengal, India. Cyclodextrins as Effective Hosts for the Formation of Inclusion Complex with RNA Nucleosides as Guests.
3. [Yong Rok Kim](#), Professor, Yonsei University, Korea, [Kang-Kyun Wang](#), Professor & [Eon Pil Shin](#), Ph.D. Student, Yonsei University, Korea. Functional Manipulation of Dendritic Cells by Photo-witchable Generation of Intracellular Reactive Oxygen Species.
4. *[Vinod Kumar Ojha](#), Associate Professor, P.G. Department of Chemistry, D.S. College, Katihar, B.N.Mandal University, India. Drug Designing for Enhancing the Efficacy of Some Compounds of Neem.

12:00-13:00 Lunch

13:00-14:30 Session IV (ROOM B): Applied Physics/ Astrophysics I**Chair:** *Haiduke Sarafian, Professor, The Pennsylvania State University, USA.

1. Boris Sedunov, Professor, Russian New University, Russia. The Molecular Physics of Chain Clusters.
2. *Erendira Huerta Martinez, Postdoc, Metropolitan Autonomous University, Mexico, Yair Krongold, Researcher, National Autonomous University of Mexico, Mexico & Marco Maceda, Researcher, Metropolitan Autonomous University, Mexico. Active Galactic Nuclei as Evolved Material Source for the Host Galaxy.
3. Ali Bilek, Lecturer, UMMTO University, Algeria. Photoelastic Analysis and Modeling of a Stress Field Locked in a Birefringent Hollow Cylinder.

14:30-16:00 Session V (ROOM B): Nanotechnology I**Chair:** *Erendira Huerta Martinez, Postdoc, Metropolitan Autonomous University, Mexico.

1. *Mohamed Abdel Salam, Associate Professor, King Abdulaziz University, Saudi Arabia, Olfat Fageeh, MSc Student, King Abdulaziz University, Saudi Arabia & Shaeel Al-Thabaiti, Professor, King Abdulaziz University, Saudi Arabia. Catalytic Reduction of Nitrate Ions in Aqueous Solution using Copper Coated Zero Valent Iron Nanoparticles Supported on Multi-Walled Carbon Nanotubes.
2. Luat Vuong, Assistant Professor, City University of New York, USA, J.L. Dominguez Juarez, City University of New York, USA, S. Vallone, City University of New York, USA, M. Moccarme, City University of New York, USA, A. Lempel, City University of New York, USA & H.D. Gafney, City University of New York, USA. Plasmon-induced Optomechanics in Nanofluids.
3. *Burhan Davarcioglu, Associate Professor, Aksaray University, Turkey. Nanotechnology in Packaging Industry and Its Applications.

16:00-17:30 Session VI (ROOM B): Education/Pedagogy and Research Methodology**Chair:** *Mohamed Abdel Salam, Associate Professor, King Abdulaziz University, Saudi Arabia.

1. Claire Gober, Ph.D. Candidate, University of Pennsylvania, USA & Madeleine Joullie, Professor, University of Pennsylvania, USA. Incorporating Fermentation into Undergraduate Laboratory Courses.
2. Benjamin W. Stewart, Director of Faculty Development, Expository Writing Program, New York University, USA, Andy Rivas, City University of New York, USA & Luat Vuong, Assistant Professor, City University of New York, USA. Import Crisis: Of Attention and Additions to Scientific Citation Networks.
3. Mahmoud Huleihil, Senior Lecturer, Beit Berl College, Israel & Huriya Huleihil, Alhozayyel Elementary School, Israel. Current Status of Science and Technology Education at Arab High Schools in Israel.
4. *Ellene Tratras Contis, Professor, Eastern Michigan University, USA, Nirit Glazer, Lecturer, University of Michigan, USA & Yariv Glazer, Co-Founder, SVN, USA. A Technology-Rich Kinesthetic Approach for STEM Teaching and Learning.

17:30-19:00 Session VII (ROOM B): Material Science / Instrumental Techniques and Other Essays II**Chair:** *Ellene Tratras Contis, Professor, Eastern Michigan University, USA.

1. Salah Doma, Professor, Alexandria University, Egypt. Ground State Calculations of Confined Hydrogen Molecular Ion H_2^+ Using Variational Monte Carlo Method
2. Hadir Maher Shalaby, Associate Professor, Alexandria University, Faculty of Pharmacy, Egypt and King Saud University, Saudi Arabia, Nourah Z. Al-Zoman, Associate Professor, King Saud University, Saudi Arabia, Mona M. Al-Shehri, Associate Professor, King Saud University, Saudi Arabia, Areej M. Al-Taweel, Associate Professor, King Saud University, Saudi Arabia, Ghada A. Fawzy, Associate Professor, Cairo University, Faculty of Pharmacy, Egypt and King Saud University, Saudi Arabia & Shagufta Perveen, Associate Professor, King Saud University, Saudi Arabia. Simultaneous Determination of Luteolin and Apigenin in Commercial Herbs using Capillary Electrophoresis with Diode Array Detection (CE-DAD).
3. Alexey Pigarev, Student, Moscow Institute of Physics and Technology, Russia, Alexey Konyashkin, Researcher & Oleg Ryabushkin, Professor, Moscow Institute of Physics and Technology, Russia. Computer Simulated Kinetics of Equivalent Temperature of Nonlinear-Optical Crystals Interacting with Laser Radiation.
4. Alexander Volkov, Student, Moscow Institute of Physics and Technology (State University), Russia, Alexey Konyashkin, Senior Scientist, Moscow Institute of Physics and Technology (State University), Russia & Oleg Ryabushkin, Deputy Head, Moscow Institute of Physics and Technology (State University), Russia. Laser Induced Damage Threshold Determination from Functional Dependence of Potassium Dihydrogen Phosphate Heating upon Irradiation by Thulium Fiber Laser.

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

Tuesday 21 July 2015

(all sessions include 10 minutes break)

08:00-10:00 Session VIII (ROOM B): Nanotechnology II

Chair: *Bhaskar Chakraborty, Professor, Sikkim Government College, India.

1. Dong Ha Kim, Professor, Ewha Womans University, Korea. Advancing the Performance of Energy Conversion, Photocatalysis, Sensing and Light Emission via Hybrid Carbon and Plasmonic Nanostructures.
2. Mircea Diudea, Professor, Babes-Bolyai University, Romania & Atena Moldovan, Researcher, Babes-Bolyai University, Romania. C₆₀ Aggregation.

10:00-11:30 Session IX (ROOM B): Basic Physics II

Chair: *Vinod Kumar Ojha, Associate Professor, P.G. Department of Chemistry, D.S. College, Katihar, B.N.Mandal University, India.

1. M Howard Lee, Professor, University of Georgia, USA. Chaos in Ergodicity.
2. Diego Romero Maltrana, Associate Professor, Pontificia Universidad Catolica de Valparaiso, Chile. Symmetries as by-Products of Conserved Quantities.
3. Rodrigo Rivera, Faculty, Pontificia Universidad Catolica de Valparaiso, Chile & Francisco Vera, Pontificia Universidad Catolica de Valparaiso, Chile. Falling Faster than Free Fall.
4. Daniel Rohrlich, Researcher, Ben Gurion University of the Negev, Israel. Axioms for Quantum Mechanics: Relativistic Causality, Nonlocality, and the Existence of a Classical Limit.
5. *Ramzi Suleiman, Professor, Department of Psychology, University of Haifa, Israel & Department of Philosophy, Al Quds University, Palestine. If God Plays Dice, Must we do the same? Quantum Entanglement as a Deterministic Phenomenon.
6. *Hesham Mansour, Professor, Cairo University, Egypt. Nuclear Symmetry Energy and Three - Body Forces.

10:00-11:30 Session X (ROOM C): Organic/Biochemistry/Drugs II

Chair: George Poulos, Vice-President of Research, ATINER & Emeritus Professor, University of South Africa, South Africa.

1. *Bhaskar Chakraborty, Professor, Sikkim Government College, India. Synthesis of Some Novel Fluoro Isoxazolidine and Isoxazoline Derivatives using N-Benzyl Fluoro Nitron in Ionic Liquid via Cycloaddition Reaction and their Antibacterial Activities.
2. Talaat El-Emary, Professor, Assiut University, Egypt. Efficient Synthesis, Characterization and Biological Evaluation of Some Novel Atophan Carbohydrazide Derivatives.

11:30-13:00 Session XI (ROOM B): Applied Physics/ Astrophysics II

Chair: *Hesham Mansour, Professor, Cairo University, Egypt.

1. *Igor Bulyzhenkov, Professor, Moscow Institute of Physics and Technology, Russia. Material Space-Plenum from Aristotle should Replace Empty Space in Textbooks.
2. Francisco Vera, Professor, Pontificia Universidad Catolica de Valparaiso, Chile. The Backward Reaction Force on a Firehose.
3. Yuri Heymann, Manager, Axioma Inc, Switzerland. The Dichotomous Cosmology with a Static Material World and Expanding Luminous World.

13:00-14:00 Session XII (ROOM B): Environmental Studies**Chair:** *Igor Bulyzhenkov, Professor, Moscow Institute of Physics and Technology, Russia.

1. *Mervette El Batouti, Professor, Alexandria University, Egypt, Mona M. Naim, Faculty of Engineering, Alexandria University, Egypt & Nouran A. Ibrahim, Faculty of Engineering, Alexandria University, Egypt. Fabrication of Porous Chitosan Affinity Membranes - A Kinetic Study.
2. Katarzyna Kiegiel, Adjunct Professor, Institute of Nuclear Chemistry and Technology, Poland, D. Gajda, Institute of Nuclear Chemistry and Technology, Poland, A. Abramowska, Institute of Nuclear Chemistry and Technology, Poland, A. Miskiewicz, Institute of Nuclear Chemistry and Technology, Poland & G. Zakrzewska-Kołtuniewicz, Institute of Nuclear Chemistry and Technology, Poland. The Recovery of Valuable Metals from Flowback Fluids after Hydraulic Fracturing of Polish Gas-Bearing Shales.

14:00-15:00 Lunch**15:00-16:30 Session XIII (ROOM B): Material Science / Instrumental Techniques and Other Essays III****Chair:** *Mervette El Batouti, Professor, Alexandria University, Egypt.

1. Mariano Aceves-Mijares, Researcher, National Institute of Astrophysics, Optics and Electronics (INAOE), Mexico, Carlos-Valdez Ruiz, Ph.D. Student, Universidad de Sonora, Mexico, Jesus Alarcon-Salazar, Ph.D. Student, National Institute of Astrophysics, Optics and Electronics (INAOE), Mexico, Rosa Lopez-Estopier, Professor, Catedra CONACyT, Mexico, Tom M. Piters, Professor, Universidad de Sonora, Mexico, Dainet Berman-Mendoza, Professor, Universidad de Sonora, Mexico, Marco A. Vasquez, Postdoctoral Fellow, National Institute of Astrophysics, Optics and Electronics (INAOE), Mexico & Jorge Pedraza, Professor National Institute of Astrophysics, Optics and Electronics (INAOE), Mexico. Characterization of non-Stoichiometric Silicon Oxide by Thermo, Cathode, and Photo – Luminescence.
2. Mouna Bouhelal, Professor, University of Larbi Tebessi, Algeria & Florent Haas, Emeritus Research Director, University of Strasbourg, France. 0- States in sd Shell Nuclei: Shell Model Description.
3. Mohamed Elhadi Mansour, Professor, University of Larbi Tebessi, Algeria & Mohamed Lotfi Benkhedir, University of Tebessa, Algeria. Valence Band States of a-Se doped with Cl an As.
4. Yuri Stirmanov, Student, Moscow Institute of Physics and Technology, Russia, Alexey Konyashkin, Senior Scientist, Moscow Institute of Physics and Technology, Russia & Oleg Ryabushkin, Professor, Moscow Institute of Physics and Technology, Russia. Piezoelectric Resonance Spectroscopy of Ionic Conductivity in Nonlinear-Optical Crystals.
5. Tatyana Borisenko, Graduate Student, Moscow Institute of Physics and Technology, Russia, Alexander Surin, Postgraduate Student, Moscow Institute of Physics and Technology, Russia & Oleg Ryabushkin, Professor, Moscow Institute of Physics and Technology, Russia. Problem of Fundamental Absorption Edge Determination in Periodically Poled Nonlinear-Optical Crystals.

17:30-20:00 Urban Walk (Details during registration)**20:30- 22:00 Dinner (Details during registration)****Wednesday 22 July 2015**
Cruise: (Details during registration)**Thursday 23 July 2015**
Delphi Visit: (Details during registration)