First Day Tuesday, April 07, 2015 New Hall

09:00-10:00 Registration

10:00-10:40 Opening Ceremony

L-01 Dr. Ahmed Refaat, Coordinator

L-02 Prof. Medhat Ibrahim, Conference Co-Chairman Prof. Ahmed Fakhry, Conference Chairman

Prof. Ashraf Shaalan, President of the National Research Centre

10:40-11:30 Coffee Break (Restaurant)

Oral Sessions and Lectures at the New Hall

11:30-14:25 **Oral Session 1:**

Chairs: Prof. Ahmed Fakhry & Prof. Wafa Abdel-Fattah

11:30-11:40 O-01: Dr. Wael H. Eisa

In recognition of Professor Ali Shabaka Nanomaterials; Synthesis and Spectroscopic Characterization

11:40-12:20 KL-01: Prof. Mohamed Abdel Harith

International Year of Light IYL2015: Laser the Magical Light

12:20-13:00 KL-02: Prof. Malgorzata Baranska

Recent Application of Raman Mapping

13:00-13:40 KL-03: Prof. Tawfik Abdel-Hamid El-Dessouky

LIDAR Techniques and its Applications

13:40-13:55 **O-02: Dr. Badawi Anis**

Optical Microspectroscopy Study of the Mechanical Stability of Empty and Filled Single-Chirality C₆₀-Peapods under Hydrostatic Pressure

13:55-14:10 O-03: Dr. Reda M. El-Agmy

Programmable Adaptive Optics for Femtosecond Laser Micromachining

14:10-14:20 O-04: Salem M. Salem-Gaballah

Terahertz Shielding and Spectroscopic Properties of Novel NBR/Ferrite Nanocomposite

14:20-15:15 Lunch (Restaurant)

15:15-17:00 **Oral Session 2:**

Chairs: Prof. Malgorzata Baranska & Prof. Medhat Ibrahim

15:15-15:30 L-03: Prof. Sultana N. Nahar

Atomic features of Til to interpret the lines and flux in Astronomical objects

15:30-15:40 O-05: Dr. Alaa El-Din A. Abdel-Gawad

Molecular Dynamics Study of the Anomalous Behavior of PGK in Low

Concentration of GdnHCl

L-03: Atomic Features of Ti I to Interpret the Lines and Flux in Astronomical Objects

Sultana N. Nahar

Astronomy Department, Ohio State University, USA

Sultana Nurun Nahar is a Bangladeshi American physicist. She is a research scientist in the Department of Astronomy at Ohio State University, USA.

Her research is on atomic processes of photoionization, electron-ion recombination, photoexcitation, collision. Her contributions include development of the unified method for total electron-ion recombination, theoretical spectroscopy for Breit-Pauli R-matrix method, resonant nano-plasma theranostics (RNPT) method for cancer treatment. She has published extensively on radiative and collisional atomic processes in astrophysical and laboratory plasmas, including photoionization, electron-ion recombination, photoexcitations and de-excitations, and electron-ion scattering. She has also worked on dielectronic satellite lines, theoretical spectroscopy, and computational nanospectroscopy for biomedical applications.

Keywords: Atomic features, Electron-ion recombination, Photoionization and Astronmical objects.

Email: nahar.1@osu.edu