

# 3<sup>RD</sup> NATIONAL CONFERENCE ON PHYSICS AND EMERGING SCIENCES

Department of Physics

Allama Iqbal Open University, Islamabad

SCHEDULE

6 April 2015

0800 – 0930 Registration

**Opening Session** **(Auditorium)**

0930 Tilawat

0945 Welcome address

1015 Address of chief guest

1045 Thanks

1130 – 1200

**Tea Break**

1200 – 1215 Talk of Guest speaker I

1215 – 1230 Talk of Guest speaker I

**Chair: Dr. A.A Ghazi**

**Co-Chair: Dr. Ahsan Ilahi**

**Session-I** **(Room - 106)**

1230 – 1240 Calculation of eddy currents in a spherical tokamak

**Adeel Akhtar**

1240 – 1250 Structural and electrical study of nano-structured electrolytes for solid oxide fuel cells

**Altaf Ahmed**

1250 – 1300 Compensation of Discontinuity in treatment fractions of radiation therapy

**Asmat Ullah**

1300 – 1400

**Lunch/Prayer Break**

**Chair: Prof. Dr. Iftikhar Ahmed**

**Co-Chair: Dr. Mahboob Sadiq**

**Session-I** **(Room - 107)**

1230 – 1240 Plasmonic based biosensing through 1D nanostructured devices

**Musrat Munir**

- 1240 – 1250 Photo detachment of  $H^-$  near soft spherical surfaces  
**Navid Hussain Shah**
- 1250 – 1300 Sensitivity Enhancement of CR-39 Ion Track Detector (ITD) by  
Chemical Processing in KOH & NaOH Mixed Solutions  
**Nosheen Mehboob**
- 1300 – 1400 **Lunch/Prayer Break**

**Chair: Prof. Dr. Azhar Hussain**

**Co-chair: Dr. Afzal Sheikh**

**Session-II** **(Room - 106)**

- 1400 – 1410 Synthesis and Characterizations of Cobalt ( Co) doped Zinc  
oxide(ZnO)  
**Basharat Ullah**
- 1410 – 1420 Computation of Electric Potential using Monte Carlo Simulation  
**Haleema Sadia Qureshi**
- 1420 – 1430 Photo detachment of  $H^-$  near hard spherical surfaces  
**Muhammad Asif**
- 1430 – 1440 Estimation of Global and Diffuse Solar Radiation  
**Azher Mahmood**
- 1440 – 1450 Simulation of 1D EM wave using FDTD Method Simulation  
**Maliha Tehseen Saleem**
- 1450 – 1500 Seasonal Variability of Aerosol Optical Depth by Using Satellite and  
Ground Based Measurements Over Lahore and Karachi  
**Mian Eid Ul Wahab**
- 1500 – 1510 Synthesis, Structural, Optical and Morphological properties of CdS  
nanoparticle  
**Muhammad Anas**
- 1510 – 1520 In Vivo Dosimetry Using Diodes in External Beam Radiation Therapy  
**M. Asghar Gadhi**
- 1520 – 1530 Magnetic Behavior of ZnSe by Adding 1st Row Atoms, A First  
Principle Study  
**Ashiq Rasool**
- 1530 – 1600 **Tea Break**

**Chair: Dr. Ishaq Ahmed**

**Co-Chair: Dr. Ahsan Ilahi**

**Session-II** **(Room - 107)**

- 1400 – 1410 Synthesis and characterization of  $TiO_2$  nanoparticles  
**Qaisar Nadeem Anjam**

- 1410 – 1420 Investigation of Toxic Metals in Tobacco of Pakistani Cigarettes and related health issues using PIXE  
**Sadaqat Ali Khan**
- 1420 – 1430 Determination of Charge Density along a Wire using Method of Moment  
**Sadia Khatoon**
- 1430 – 1440 Determination of Capacitance of a Parallel Plate Capacitor Using Method of Moment  
**Sehrish khan**
- 1440 – 1450 Computation of Magnetic Potential using Monte Carlo Simulation  
**Shakir Ullah**
- 1450 – 1500 Contrast Enhanced Magnetic Resonance Imaging and its Biological Applications in the Study of Sciatica  
**Rushmat Ali**
- 1500 – 1510 The study of laser irradiation effects on structural, mechanical and morphological properties of Al, Fe and Cu alloys  
**Nazia Ali**
- 1510 – 1520 Calibration of Cylindrical Geometry Radon Dosimeter Experimentally and by Monte Carlo RAHI Method  
**Zahoor Ahmed**
- 1520 – 1530 Investigation of the role of magnetic resonance imaging in the diagnosis of posterior fossa tumors  
**Wazir Ali**
- 1530 – 1600 **Tea Break**

**Chair: Dr. A.A Ghazi**

**Co-Chair: Dr. Ahsan Ilahi**

**Session-III**

**(Room 106)**

- 1600 – 1610 Theoretical studies of semiconductor nanostructures: The effect of functionalization on their structural and Electronic properties  
**Gul Subhan**
- 1610 – 1620 Structural and Magnetic Properties of Gallium Nitrite Nanosheet, DFT Study  
**Ishtiaq Ahmad Khan**
- 1620 – 1630 Structural & Magnetic Properties of Graphene Nanosheet (Density Function Theory)  
**Mashkooor Abbas**
- 1630 – 1640 Simulation of Plasmonic Band Gap of Silver Metallic Nanostructures  
**Muhammad Ishaq**
- 1640 – 1650 Design, Analysis and Simulation of Micromixer by Using Fuzzy Logic  
**Muhammad Jamil**

1650 – 1700	Simulation of Extraordinary Optical Transmissio through ID Plasmonic Nanostructure Devices <b>Muhammad Umar Farooq</b>
1700 – 1710	Power broadening effect on rydberg series in potassium atom <b>Samiullah Khan</b>
1710 – 1720	Quantum Fisher Information for Moving Three Levels Atom <b>Shoaib Ijaz</b>
1720 – 1730	Synthesis and dielectric characterization of MgO Nano particles <b>Tariq Saeed</b>
1730	<b><u>Tea Break</u></b>

**Chair: Dr. Waqar Ali Syed**

**Co-Chair: Dr. Afzal Sheikh**

<b>Session-III</b>	<b>(Room 107)</b>
1600 – 1610	Verification of radiation pattern of infinite current carrying conductor using simulations in MATLAB and HFSS <b>Poonam Iftikhar</b>
1610 – 1620	Simulation of Piezoelectric Micropump Using Fuzzy Logic <b>Noor Ul Qamar</b>
1620 – 1630	Study of $Z/\beta$ detection threshold of CR-39 ITD for measuring relativistic heavy ions <b>Shahid Manzoor</b>
1630 – 1640	Calibration of Cylindrical Geometry Radon Dosimeter Experimentally and by Monte Carlo RAHI Method <b>Zahoor Ahmed</b>
1640 – 1650	Characterization of Nitrogen 50Hz Pulsed DC Generated Plasma Calculating Excitation Temperature Using <b>Shahid Naseer</b>
1650 – 1700	Study of Radioactivity in the Nagar Parkar Granite Used as a Building Material <b>Sumaira Kausar</b>
1700 – 1710	Study of luminescence properties of $\text{Pr}^{3+}$ and $\text{Ce}^{3+}$ doped $\text{Cs}_2\text{NaGdBr}_6$ <b>Hayat Khan</b>
1710 – 1720	To Study the Electrical Characteristics of Nickel-Chromium Supper Alloy and Its Computer Modeling <b>Mansoor Ahmed</b>
1720 – 1730	Fabrication and Characterization of Highly Ordered porous Anodic Alumina Membrane by Two Step Anodization <b>Ismat ullah</b>
1730	<b><u>Tea Break</u></b>

**07 April 2015**

**Chair: Prof. Dr. Iftikhar Ahmed**

**Co-Chair: Dr. Mahboob Sadiq**

**Session-IV**

**(Room 106)**

- 0910 – 1920 Syntheses and Characterization of SnO<sub>2</sub> Nanostructures for UV Sensors  
**Zaheer Abbas**
- 0920 – 1930 Drift Waves Instability in Pair-Ion-Electron (PIE) Plasma Scattering of EM waves by conducting cylinder  
**Zanera Ijaz**
- 0930 – 1940 Microcontroller Based Over Heat Detector Using Temperature Sensor With Buzzer Indication  
**Muhammad Tahir Ejaz**
- 0940 – 1950 Heart rate monitoring system using 8051  
**Imran Zafar**
- 0950 – 1000 Vehicle Tracking System using GPS and GSM  
**Ghufran Aqeel**
- 1000 – 1010 Ambulance tracking and monitoring of patient's health Using GSM Module  
**Shagufta Iqbal**
- 1010 – 1020 Review of Solar Models Based On Sunshine Hours, Temperature, Relative Humidity and Cloud Factor and Estimation Of Global and Diffused Radiations At Gujranwala, Pakistan.  
**Azhar Tufail**
- 1020 – 1030 Automatic Vehicle Accident Detection and Messaging System Using GSM and GPS Modem  
**Ammara Asif**
- 1030 – 1040 Evaluations of performance parameters of indigenously Developed Roots pumping system  
**M Fahad Bodla**
- 1040 – 1050 Study of scattering width of nihility cylinder coated with chiral/chiral nihility/topological insulator placed in topological insulator space  
**Malik Mazhar**
- 1050 – 1100 Study of radar cross section (RCS) in presence of dielectric circular cylinder coated with chiral/chiral nihility/topological insulator in infinite topological insulator medium  
**Khawaja Masood**
- 1100 **Closing ceremony**

**07 April 2015**

**Chair: Prof. Dr. Izhar Hussain**

**Co-Chair: Dr. A. A Ghazi**

**Session-IV**

**(Room 107)**

- 0900 – 1910 Effects of Different Temperature Treatments on the Structural and Mechanical Properties of Aluminum 7075 Alloy  
**Muhammad Rashid Khan**
- 0910 – 1920 Co-crystal of 2,4-Diamino-5-(4-chlorobenzyl)-6-ethylpyrimidinium nitrobenzoatemethanol solvate  
**Asghar Abbas**
- 0920 – 1930 Scattering of EM waves by conducting cylinder  
**Sufian Ullah**
- 0930 – 1940 Optoelectronics and Elastic Properties of BBi and AlBi: A DFT study  
**Abdul Jalil**
- 0940 – 1950 Crystal structure developments and study of optical properties of vanadium oxide thin films deposited by a magnetron sputtering Technique  
**S. Mukhtar**
- 0950 – 1000 Street Lights That Glow On Detecting Vehicle Movement  
**Shahzeb Khan**
- 1000 – 1010 Humidity, Temperature and Gas Sensor Using Microcontroller  
**Iram Hassan**
- 1010 – 1020 Toxic Gas Detector using Microcontroller  
**Saif ur Rehman**
- 1020 – 1030 Study of radar cross section (RCS) in presence of dielectric circular cylinder coated with chiral/chiral nihility/topological insulator in infinite topological insulator medium  
**Khawaja Masood Ahmed, Malik Mazhar Ali**
- 1030 – 1040 Study of scattering width of nihility cylinder coated with chiral/chiral nihility/topological insulator placed in topological insulator space  
**Malik Mazhar Ali**
- 1040 – 1050 Simulation of 1D EM wave using FDTD Method  
**Maliha Tehseen Saleem**
- 1050 – 1100 Electronic, Magnetic, Thermodynamic and Structural Properties of Heusler Alloys  
**Ather Hussain**
- 1100 **Closing ceremony**