

**2<sup>nd</sup> INTERNATIONAL CONFERENCE**  
**Department of Physics**  
*H<sub>2</sub> Production & Storage*  
*Nano-optics & Plasmonics*  
*2D & heterojunction Materials*  
*Energy Storage & Production*  
*Biomaterial & Biosensors*  
*Thin films & Applications*  
 (29 Feb - 01 March, 2024)

**1<sup>st</sup> Day Conference Schedule**  
 (Thursday 29 Feb 2024)

**FORMAN CHRISTIAN COLLEGE**  
 (A CHARTERED UNIVERSITY)

**SCAN ME**  
 to register now

Registration Forms are available at [www.fccollege.edu.pk/ictmsn](http://www.fccollege.edu.pk/ictmsn)  
 Registered Participants will get E-Certificate

### Inaugural Session (10:00am - 10:30am)

Opening Remarks by **Dr. Hassan A. Shah** (Dean of Sciences), **Dr. Trimble** (Vice Rector FCC) and Welcome address by **Dr. J. Addleton** (Rector FCC).

### Tea Break (10:30am - 11:00am)

#### Session 1

**Chair – Prof. Dr. Sadia Zaheer** (Chairperson/Professor, Department of Physics, FCC)

11:00am - 11:30am	<b>Prof. Dr. M. Shahid Rafique</b> (Dean of Science/Professor of Physic, UET Lahore, <b>Pakistan</b> ) "Techniques and tools for conducting cutting edge research"
11:30am - 12:00pm	<b>Prof. Dr. Shazia Bashir</b> (Chairperson Department of Physics, GCU, Lahore, <b>Pakistan</b> ) Femtosecond laser induced nanostructuring of materials
12:00pm - 12:30pm Online	<b>Dr. Kemal Celebi</b> (Assistant Prof. Department of Physics, Zhejiang University, <b>China</b> ) "Ultrathin membranes for chemical separations"
12:30pm - 1:00pm Online	<b>Prof. Dr. Lukas Schmidt-Mende</b> (Prof, Dept. of Physics, University of Konstanz, <b>Germany</b> ) "Perovskite solar cells - Reducing the defect density"

### Lunch Break and Poster session(1:00pm - 2:00pm)

#### Session 2

**Chair - Dr. Hamid Latif** (Professor, Department of Physics, FCC)

2:00pm - 2:30pm	<b>Dr. Javed Iqbal</b> (Chairperson, Department of Physics, AJK University, Muzafabad, <b>Pakistan</b> ) Laser Induced Plasma Spectroscopy (LIPS) as an Emerging techniques for Mineral Exploration and Materials characterization.
2:30 pm - 3:00 pm Online	<b>Dr. Marianna Kemell</b> ( Senior University Lecturer Dept of Chemistry, Univ. of Helsinki, <b>Finland</b> ) "Towards perovskite solar cells by atomic layer deposition"
3:00pm - 3:30pm Online	<b>Prof. Dr. Thomas Markus Ihn</b> (Professor, Department of Physics, ETH Zurich, <b>Switzerland</b> ) "Bilayer graphene quantum dots"
3:30pm - 4:00pm Online	<b>Prof. Dr. Sanjay Mathur</b> (Prof./Chair, Inorganic & Materials Chem. Uni. of Cologne, <b>Germany</b> )
4:00pm - 4:20pm	<b>Dr. Faryal Idress</b> (Asso. Prof. Polymer Eng. Dept. University of Punjab, Lahore, <b>Pakistan</b> ) "Laser flash photolysis study of Nb <sub>2</sub> O <sub>5</sub> /g-C <sub>3</sub> N <sub>4</sub> Hetero-structures as an Efficient Photo-catalyst"

### Dinner and Musical Night (7:00pm – 10:00 pm)

**FORMAN CHRISTIAN COLLEGE**  
(A CHARTERED UNIVERSITY)

**Department of Physics**

**H<sub>2</sub> Production & Storage**  
**Nano-optics & Plasmonics**  
**2D & heterojunction Materials**  
**Energy Storage & Production**  
**Biomaterial & Biosensors**  
**Thin films & Applications**

(29 Feb - 01 March, 2024)

**2<sup>nd</sup> Day Conference Schedule**  
(Friday 01 March 2024)

SCAN ME to register now

Registration Forms are available at [www.fccollege.edu.pk/ictmsn](http://www.fccollege.edu.pk/ictmsn)  
Registered Participants will get E-Certificate

### Session 1

**Chair - Dr. Hamid Latif (Professor, Department of Physics, FCC)**

10:30am - 11:00am	<b>Prof. Dr. Sabeih Anwer</b> (Chairperson, Department of Physics, LUMS, Lahore, <b>Pakistan</b> ) "Single photon quantum experiments for enlightening how we teach physics"
11:00am - 11:30am	<b>Prof. Dr. Rizwan Raza</b> (Head Department of Physics, COMSATS University, Lahore, <b>Pakistan</b> ) "The Sustainability: The clean energy devices and recycling of waste"
11:30am - 12:00pm	<b>Dr. M. Bilal Tahir</b> (Director Institute of Physics, Khwaja Fareed UEIT, Rahim Yar Khan, <b>Pakistan</b> ) "Advancements in Material Sciences: A Nano-technological Perspective"
12:00pm - 12:30pm	<b>Dr. Rustam Ashurov</b> (Senior Scientist, Institute of Ion-Plasma & Laser technology, <b>Uzbekistan</b> ) Advancements in Electrochemical Stability and Storage Performance of Silicon Anode Materials for Lithium-ion Batteries
12:30pm - 1:00pm Online	<b>Prof. Dr. Surjit Mukharjee</b> (Professor, FECC, Brno Univ. of Tech, Brno, <b>Czech Republic</b> ) "Beyond the Atom: Advancements in Activation Analysis for Reactor"

**Lunch Break (1:00pm-2:00pm)**

### Session 2

**Chair - Dr. Ammara Shabbir (Associate Prof./ Graduate Coordinator, Department of Physics, FCC)**

2:00pm - 2:20pm	<b>Dr. Naveed Afzal</b> (Director Centre for Advanced Studies in Physics, GCU, <b>Pakistan</b> ) "High performance Metal-Semiconductor-Metal Photo-detectors based Metal Oxide"
2:20pm - 2:40pm	<b>Dr. M. Arshad</b> (Senior Scientist, National Centre for Physics, Islamabad, <b>Pakistan</b> ) "MXene-based Anode Materials: synthesis, characterization and investigation of properties"
2:40pm - 3:00pm	<b>Dr. Sofia Siddique</b> (Assistant. Professor, Depart. of Phys., UET, Lahore, Pakistan) "Developing an appropriate blend of PVDF-Co-HF using solution blending to increase the thermal stability of energy harvesting devices"
3:00pm - 3:20pm	<b>Prof. Dr. Safia Anjum</b> (Professor Dept of Phy/Principle Lahore College, University) "Investigation of Cerium Ni-Zn Ferrites on cationic distribution in superparamagnetic behavior and its electrochemical performance for Pseudocapacitors"
3:20pm - 3:40pm	<b>Dr. Syed Sajid Ali Gillani</b> (Assistant Prof. of Physics, GCU, Lahore <b>Pakistan</b> ) "Isotropic pressure induced structural, electronic, photocatalytic, elastic and mechanical properties of RbPbF <sub>3</sub> : GGA-PBE and HSE0 <sub>3</sub> based computational estimation"
3:40pm - 4:00pm	<b>Dr. M. Rafique</b> (Asst. Prof. Department of Physics, University of Sahiwal, Sahiwal, <b>Pakistan</b> ) "Nonlinear Transverse Electric Surface Waves in a Meta-material/Plasma Sandwich Structure"
4:00pm- 4:20 pm	<b>Dr. Saqib Jabbar</b> (Asst. Prof. Department of Physics, GCU, Lahore, Pakistan) Enhanced Antimicrobial and Optical Activities of MnO Nanoparticles Doped with Various Metal-Atoms
4:20pm- 4:40 pm	<b>Ms. Sana Tariq</b> (PhD Scholar, Forman Christian College, Lahore, <b>Pakistan</b> ) Tissue Engineered Periosteum: Fabrication of a Trilayer Composite Scaffold with Biomimetic Properties for Enhanced Bone Healing

**Concluding Session (4:40 pm-5:00 pm)**

**Tea (5:00pm-5:30pm)**