

**Program and Lecture Schedule of “International Workshop on Nanomaterials for Energy Conversion, Emerging Photovoltaic and Optoelectronic Technologies (NEEPO-19)” (Tentative\*\*)**

	8:15 - 9:15 am	9:20 - 10:30 am	10:30 - 11:00 am	11:00 am - 11:45 pm	11:45 - 1:00 pm	1:00 - 2:00 pm	2:00 - 2:55 pm	2:55 - 3:45 pm	3:45 - 4:00 pm
<b>Monday 07/10/18</b>	Registration	Inauguration + Keynote lecture (K1)	Group Photo + Tea break	K-2 (M Ibrahim)	I-1, I-2, C1 Hassan, Khurram,	Lunch	K-3* (Nazeer)	I-3, C2 Qamar Abid	Tea
<b>Tuesday 08/10/18</b>	<b>8:30 - 10:30 am</b> I-6, I-4, I-5, C-3 Zaheer, Zafar, Saifullah, Aftab (C3)		<b>10:30 - 11:00 am</b> Tea break	<b>11:00 am -1:00 pm</b> I-13, I-7, I-8, C-1 Usman, Gul, K-5* (Azhar), Saifullah		<b>1:00 - 2:00 pm</b> Lunch	<b>2:00 – 3:00 pm</b> K-6* (Lukas)	<b>3:00 – 4:00 pm</b> Poster presentation + Tea	<b>4:00 - 7:00 pm***</b> Excursion
<b>Wednesday 09/10/18</b>	<b>8:30 - 10:30 am</b> I-9, I-10, I-16, C-4 Naveed, Safeer, Naeem, Akbar		<b>10:30 - 11:00 am</b> Tea Break	<b>11:00 am - 1:00 pm</b> I-11, I-12, I-13, I-14 Adib-2, Azhar, Adbullah		<b>1:00 - 2:00 pm</b> Lunch	<b>2:00 - 3:00 pm</b> I-15, C-5 Arbab	<b>3:00 - 3:40 pm</b> Closing + Certificates	<b>3:40 – 4:00 pm</b> Tea

K: Keynote lecture, I: Invited talks, K\*: Online video talks by foreign faculty, C: Contributed talk.

\*\* Tentative plan. For latest technical program please consult the webpage of the workshop (<http://www.ncp.edu.pk/neepeo-2019.php>) and notice boards at venue.

\*\*\* Symposium dinner will be on 9<sup>th</sup> Oct. 2018, 7:30 pm advanced registration for workshop dinner is compulsory by 4:00 PM on 7<sup>th</sup> September 2019.

### **Invited Talks:**

**K-1 Prof. Dr. Ahmed Shuja (IIUI):** Revisiting the Materials, Devices and Systems Matrix for Applications in PV Solar and Optoelectronics

**K-2 Dr. M. Adib Ibrahim (Uni.i Kebangsaan, Malaysia):** Novel Nanostructures for Photovoltaic Devices

**K-3 Prof. M. Khaja Nazeeruddin\* (EPFL, Switzerland):** Developments and prospects of Perovskite solar cells (to be finalized)

**K-4 Prof. Shengzhong Liu (Shaanxi Normal University China):** High efficiency Perovskite solar cells and optoelectronic devices

**K-5 Dr. Azhar Fakharuddin\* (IMEC, Belgium):** Light from perovskite crystals

**K-6 Prof. Lukas Schmidt-Mende\* (Uni. Konstanz, Germany):** Perovskites - Defects and Interfaces

**I-1 Prof. Muhammad Hassan Sayyad (GIKI):** Commercialization of next generation solar cells

**I-2 Dr. Khurram Joya (KFUPM):** Functional nanomaterials for energy applications

**I-3 Dr. Shahzada Qamar Hussain (CUI Lhr):** Advanced light scattering techniques for thin-film solar

**I-4 Dr. Zafar Hussain Ibupoto (Uni. Sindh, Jamshoro):** Metal Oxide Nanostructures for energy applications

**I-5 Dr. Saifullah Awan (NUST):** Physics of metal-oxide semiconductors

**I-6 Dr. M. Zahir Iqbal (GIKI):** Two dimensional materials and their application

**I-7 Dr. Gul Rehman (QAU):** Theoretical calculations for energy materials and devices

**I-9 Dr. Safeer Ahmad (QAU):** Synthesis and Electrochemical Characterization of Hematite Based Electrodes for Water Splitting

**I-10 Dr. Naveed Zafar Ali (NCP):** Conceptual design of novel framework materials for Fuel Cell technology

**I-12 Dr. Azhar Iqbal (QAU):** Ultrafast charge dynamics at interface of hybrid materials

**I-13 Dr. Muhammad Usman (GIKI):** GaN-based light-emitting diodes

**I-14 Dr. Abdullah (QAU):** Water splitting: design strategies challenges and way forward

**I-15 Dr. Arbab M. Toufiq (Hazara University Mansehra):** Rare-earth doped Alumino-silicate Nanoparticles for applications in high power Fiber Lasers

### **\*Video lectures**

### **Contributed Talks:**

**C-1 Dr. Abid Ali (CIIT, Lhr):** Cobalt-Selenide Decorated Carbon Nanotube Fibers: A Versatile Approach towards Overall Electrochemical Water Splitting

**C-2 Dr. Muhammad Saif Ullah (PINSTECH):** Performance and Uniformity Improvement in Ultrathin Cu(In,Ga)Se<sub>2</sub> Solar Cells with a WO<sub>x</sub> Interlayer at the Absorber/Transparent Back-Contact Interface

**C-3 Dr. Muhammad Aftab, Akram (NUST):** Hierarchical Mesoporous Nanostructures of Ternary Metal Oxides for Energy Storage Applications

**C-4 Eng. Akbar Qureshi (BZU):** Enhanced Performance of Plasmonic Dye Sensitized Solar Cell due to Synergistic Combination of Copper doped TiO<sub>2</sub> Photoanode and rGO/Iron Hybrid Nanomaterial as a Low Cost Counter Electrode

**C-5 Dr. SAMSON, Aisida (University of Ibadan):** High energy induced semiconductor ZnO nanodevices for space technology

### **Waiting:**

**Dr. Naeem Ahmad (IIUI):** High electrocatalytic activity and low charge transfer resistance (RCT) in Single and alloy Cobalt-Nickel Nanowires /Polypyrrole (Co<sub>0.1</sub>Ni<sub>0.1</sub>/Ppy) nanocomposites based counter electrodes

**Abdur-Rehman Anwar (GIKI):** Role of polarization field on degradation of the internal quantum efficiency by analytical formulation of GaN-based light-emitting diodes