

19th IBCAST 2022: Advanced Materials

Technical Program

ADVANCED MATERIALS

Day 1: August 16, 2022

12:30–14:00		LUNCH	
14:00–15:30 Session Chair: DR. MAZHAR MEHMOOD , NATIONAL CENTRE FOR NANO TECHNOLOGY, PIEAS ISLAMABAD	Time 1400:1450	Electrocatalysts for halogen mediated	
	1450-1510	22AM175: Synergistic improvement in piezoelectric, electrical and mechanical properties of PVDF/PZT/Montmorillonite Hybrid Nanocomposites	Prof. Jiantao ZAI , SJTU, China
	1510:1530	22AM606 : Effect of lateral Pressure on the Strength of Friction Stir Welding (FSW)	Ammar Hassan , PIEAS Islamabad
15:30–16:00		Tea Break	
16:00–17:00 Session Chair: DR. MAZHAR MEHMOOD , NATIONAL CENTRE FOR NANO TECHNOLOGY, PIEAS ISLAMABAD	1600-1620	22AM429: Optimum tubular Bezier Horn Design for Ultrasonic Vibration Assisted Machining of Nomex Composite	Khurram Hameed Mughal , The University of Lahore, Lahore, Pakistan
	1620-1640	22AM234: Template-free synthesis of Polyaniline and Polyaniline-Clay nanohybrids with defined morphology and improved properties for optoelectronic applications.	Ramsha Idrees , PIEAS Islamabad
	1640-1700	22AM437: Fabrication of Working Electrode for Electrochromic Glass	Saeed Umar , PIEAS Islamabad

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Day 2: August 17, 2022

09:00 – 10:30 Invited Talks Session Chair: PROF. DR. MUHAMMAD SHAHID, NUST ISLAMABAD	Time 0900-0950	Green high-performance processing technology for composite materials.	Prof. Dr. Songmei Yuan, Beihang University China
	0950-1010	22AM349: Graphite decorated TiO ₂ nanotubes for enhanced photocatalytic hydrogen evolution	Amara Nasir, PIEAS Islamabad
	1010-1030	22AM489: The Effect of Residual Stress in Welding Stainless Steel Bended Sections	Dr Hasan Aftab , NUST Islamabad
10:30 – 11:00	Tea Break		
11:00 – 12:30 Advanced Materials-II Session Chair: PROF. DR. MUHAMMAD SHAHID, NUST ISLAMABAD	1100-1150	Invited Talk	Prof. Dr. Yasir Nawab, NTU Faisalabad
	1150-1210	22AM563 Cost effective catalytic degradation of Methylene blue (MB) using Zero valent iron nanoparticles (ZVFeNPs)	Shar Bano, University of Karachi
	1210:1230	22AM661: A Numerical Study on Effect of Ceramic Core Placement on Composites Under Impact	Mateenullah Meo, IST Islamabad
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<p style="text-align: center;">14:00–15:30</p> <p style="text-align: center;">Session Chair: PROF. DR. YASIR NAWAB, NTU FAISALABAD</p>	<p style="text-align: center;">Time 1400:1450</p>	<p style="text-align: center;">NANOTECHNOLOGICAL APPLICATIONS WITH LIQUID CRYSTAL MOLECULES</p>	<p style="text-align: center;">Prof. Dr. Sait Eren San Department of Physics/Kocaeli University Izmit/Kocaeli/Turkiye</p>
	<p style="text-align: center;">1450-1510</p>	<p>22AM726: Design and Fabrication of Low Cost Microfluidic Device for Synthesis of Silver Nanoparticles</p>	<p>Shazia Bashir , PIEAS, Islamabad</p>
	<p style="text-align: center;">1510-1530</p>	<p>22AM555: Shelf Life Enhancement of Polybutadiene</p>	<p>Dr Shazia Aminr, CESAT Islamabad</p>
<p style="text-align: center;">15:30–16:00</p>	<p>Tea Break</p>		
<p style="text-align: center;">16:00–17:20</p> <p style="text-align: center;">Session Chair: PROF. DR. YASIR NAWAB, NTU FAISALABAD</p>	<p style="text-align: center;">1600-1620</p>	<p>22AM490: Optimization of Al-Cu Friction Stir Welding Parameters Through RSM and BOA</p>	<p>Dr Hasan Aftab , NUST Islamabad</p>
	<p style="text-align: center;">1620-1640</p>	<p>22AM13: Damage characterisation in woven carbon-epoxy composites</p>	<p>Mehmat Karahan. Bursa Uludag University</p>
	<p style="text-align: center;">1640-1700</p>	<p>22AM599: Effect of Dielectric Constant on Metal-Dielectric Nanoshell for Sensing Application</p>	<p>Fiza Arshad, Mirpur University</p>
	<p style="text-align: center;">1700-1720</p>	<p>22AM586: Development of Low- Density High Thermal Insulation Phenolic Impregnated Ceramic Composite</p>	<p>Hadiya Amin, CESAT Islamabad</p>

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Day 3: August 18, 2022

09:00 – 10:30 Invited Talks Session Chair: DR ZAFFR UZ ZAMAN CESAT ISLAMABAD	Time 09:00-0950	Energy Absorption Characteristics of 3-D Integrated Core Sandwich Composites	Dr Mehmat Karahan, Bursa Uludag University
	0950-1010	22AM715: Precise Control of a Yolk-Double Shell Metal-Organic Framework-Based Nanostructure Provides Enhanced Fire Safety for Epoxy Nanocomposites	Ye-Tang Pan, BIT China
	1010-1030	22AM588: Diffusion Bonding of 304 Stainless Steel with AA2024 Aluminum Alloy in a Sandwich-Structure	Syed Hamid Raza, CESAT Islamabad
10:30 – 11:00	Tea Break		
11:00 – 12:30 Advanced Materials-II Session Chair: DR ZAFFR UZ ZAMAN CESAT ISLAMABAD	1100-1150	Investigation of the mechanism of damage formation in Al₂O₃ and CaF₂ crystals	Mahmoud Izerrouken, Nuclear research center of Draria
	1150-1210	22AM662: Evaluation And Control Of Defects Induced In Sodium Silicate Sand Mold Steel Casting Process	Dr. Aneela Wakeel, UET Taxila
	1210-1230	22AM825: Effect of Carbon Black Additive on Performance of MnO electrode for Supercapacitor Applications	Mohsin Ali Raza , PU Lahore
12:20 – 14:00	LUNCH		

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Day 3: August 18, 2022

14:00–15:30 Session Chair: PROF. DR FAZL E KHALID VC GIKI SAWABI	Time 1400:1450	Pulsed laser deposition of epitaxial films: phase-field description	Khodan Anatole N. A.N. Frumkin Institute of Physical Chemistry and Electrochemistry Russian Academy of Sciences
	1450-1510	22AM826: Effect of heteroatom doping on supercapacitive performance of graphene oxide-based electrodes	Zaem ur rehman , PU Lahore
	1510-1530	22AM: Experimental & constitutive of Ti6Al4V titanium alloy additively manufactured through selective laser melting	Dr Uzair Ahmad Dar , CESAT, Islamabad
15:30–16:00	Tea Break		
16:00–17:30 Session Chair: PROF. DR FAZL E KHALID VC GIKI SAWABI	1600-1650	Rotary Ultrasonic Machining Technologies for Advanced Aerospace Materials	Dr. Shehzad Ahmad , MNS UET Multan
	1650-1710	22AM316: Ultrasonic NDT based method for in-situ estimation of load bearing capacity & post-cure quality assessment of carbon-epoxy composites	Muhammd Areeb , NED Karachi
	1710-1730	22AM553: Simultaneous Determination of Molecular Weight Distribution (MWD) and Antiager by GPC and its Comparison with DSC	Navida Ahmad , CESAT Islamabad

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Day 4: August 19, 2022

09:00 – 10:30 Invited Talks Session Chair:	0900-0950	Invited Talk	Michael Sorokin, National Research Centre 'Kurchatov Institute'
PROF. DR FAZL E KHALID VC GIKI SAWABI	0950-1010	22AM550: Effect of OH values of HTPB on thermo-mechanical properties of HTPB-TDI system using inert filler	Shoaib ur Rehman , CESAT, Islamabad
	1010-1030	22AM591: Preparation and Characterization of Nickel-based alloy Coatings for Structural Applications	Khurram Shehzad, NUST Islamabad
10:30 – 12:30	Closing Ceremony		