

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	High Performance composites made using blends of thermoplastic and thermoset polymers	Prof. Dr. Yasir Nawab, NTU Faisalabad
	1450-1510	22AM175: Synergistic improvement in piezoelectric, electrical and mechanical properties of PVDF/PZT/Montmorillonite Hybrid Nanocomposites	Ammar Hassan, PIEAS Islamabad
	1510:1530	22AM606 : Effect of lateral Pressure on the Strength of Friction Stir Welding (FSW)	Amna Parveen , UET Taxila
15:30–16:00		Tea Break	
16:00–17:20 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	22AM554: Study the Quality Improvement of TDI Before and After Distillation	Navida Ahmad, CESAT Islamabad

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Day 2: August 17, 2022

09:30 – 10:30 Invited Talks Session Chair: PROF. DR. YASIR NAWAB, NTU FAISALABAD	0930-0950	22AM349: Graphite decorated TiO ₂ nanotubes for enhanced photocatalytic hydrogen evolution	Amara Nasir, PIEAS Islamabad
	0950-1010	22AM489: The Effect of Residual Stress in Welding Stainless Steel Bended Sections	Dr Hasan Aftab , NUST Islamabad
	1010-1030	22AM548: Development of methodology for the synthesis of Polyacrylonitrile PAN fiber	Dr Rafia Iftikhar , CESAT, Islamabad
10:30 – 11:00	Tea Break		
11:00 – 12:30 Advanced Materials-II Session Chair: PROF. DR. YASIR NAWAB, NTU FAISALABAD	1100-1150	Electrocatalysts for halogen mediated	
	1150-1210	22AM555: Shelf Life Enhancement of Polybutadiene	Dr Shazia Amir, CESAT Islamabad
	1210:1230	22AM553: Simultaneous Determination of Molecular Weight Distribution (MWD) and Antiager by GPC and its Comparison with DSC	Sadaf Ali, CESAT Islamabad
12:30 – 14:00	LUNCH		

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14:00–15:30 Session Chair: PROF. DR. YASIR NAWAB, NTU FAISALABAD	Time 1400:1500	In Situ, Structural Health Monitoring of Composite Material By Piezo-Resistive Nano Sensor	Prof. Dr. Zaffar M Khan Vice Chancellor University of technology Noshehra
	1500-1550	Green high-performance processing technology for composite materials.	Prof. Dr. Songmei Yuan, Beihang University China
15:30–16:00		Tea Break	
16:00–17:10 Session Chair: PROF. DR. YASIR NAWAB, NTU FAISALABAD	1550-1610	22AM490: Optimization of Al-Cu Friction Stir Welding Parameters Through RSM and BOA	Dr Hasan Aftab , NUST Islamabad
	1610-1630	22AM13: Damage characterisation in woven carbon-epoxy composites	Mehmat Karahan. Bursa Uludag University
	1630-1650	22AM599: Effect of Dielectric Constant on Metal-Dielectric Nanoshell for Sensing Application	Dr Mehboob Alam, Mirpur University
	1650-1710	22AM726: Design and Fabrication of Low Cost Microfluidic Device for Synthesis of Silver Nanoparticles	Shazia Bashir , PIEAS, Islamabad

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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	“Weaving Technologies Advances for Innovative Applications”	Prof. Dr. Abdel-Fattah Seyam NC State University USA
	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	22AM586: Development of Low- Density High Thermal Insulation Phenolic Impregnated Ceramic Composite	Hadiya Amin , 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	Nanotechnological Applications With Liquid Crystal Molecules	Prof. Dr. Sait Eren San Department of Physics/Kocaeli University Izmit/Kocaeli/Turkiye
	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	Energy Absorption Characteristics of 3-D Integrated Core Sandwich Composites	Dr Mehmat Karahan. Bursa Uludag University
	1450-1510	22AM826: Effect of heteroatom doping on supercapacitive performance of graphene oxide-based electrodes	Zaeem ur rehman, PU Lahore
	1510-1530	22AM588: Diffusion Bonding of 304 Stainless Steel with AA2024 Aluminum Alloy in a Sandwich-Structure	Syed Hamid Raza, 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

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Day 4: August 19, 2022

09:00 – 10:30 Invited Talks Session Chair:	0900-0950	Pulsed laser deposition of epitaxial films: phase-field description	Michael Sorokin, National Research Centre ‘Kurchatov Institute’
PROF. DR FAZL E KHALID VC GIKI SAWABI	0950-1010	22AM563 Cost effective catalytic degradation of Methylene blue (MB) using Zero valent iron nanoparticles (ZVFeNPs)	Shaher Bano, University of Karachi
	1010-1030	22AM550: Effect of OH values of HTPB on thermo-mechanical properties of HTPB-TDI system using inert filler	Shoaib ur Rehman , CESAT, Islamabad
	1030-1050	22AM591: Preparation and Characterization of Nickel-based alloy Coatings for Structural Applications	Khurram Shehzad, NUST Islamabad
10:50 – 12:30	Closing Ceremony		