

CONFERENCE PROGRAM

4th Conference on Sustainability in Process Industry (SPI-2018)

24th-25th October, 2018

University of Engineering & Technology (UET), Peshawar

**Venue: US-Pakistan Center for Advanced Studies in Energy (USPCAS-E),
UET Peshawar**

Sector B/3, Plot D, Near Sui Gas Office, Hayatabad, Phase 5, Peshawar

Time	1 st Day, Wednesday, 24 th October, 2018 George E. Davis Hall		
08:00-09:00	Registration		
Inauguration Ceremony			
09:00-09:05	Recitation from the Holy Quran		
09:05-09:15	Welcome Address by Prof. Dr. Mohammad Younas (Conference Chairman)		
09:15-09:30	Address by Dr. M. Akram Shaikh (DG, PASTIC)		
09:30-09:40	Opening Remarks by Prof. Dr. Muhammad Abdul Aziz Irfan (Dean, Faculty of Mechanical, Chemical and Industrial Engineering)		
09:40-09:50	Address by Prof. Dr. Iftikhar Hussain (VC, University of Engineering and Technology, Peshawar)		
09:50-10:00	Address by Chief Guest		
10:00-10:40 Plenary Lecture-01 (George E. Davis Hall) by Prof. S. M. Javaid Zaidi (QAFAC Chair Professor Center for Advanced Materials Qatar University, Qatar)			
Comparative Study of Electrochemical Methods for Determination of Methanol Permeation Through Proton-Exchange Membranes			
10:40-11:30 Tea Break and Poster Session 1(Carl Bosch Hall)			
Technical Session 1A (George E. Davis Hall) ENERGY ENGINEERING-1			
Session Chair: Prof. Dr. Abdul Waheed Bhutto			
Session Co-Chair: Dr S. Naveed ul Hassan			
11.40-12.00	Keynote-01	Prof. Dr. Abdul Waheed Bhutto (DUET Karachi)	Food-Energy-Water nexus: opportunities for advancement on nature based solutions
12.00-12.15	EE-01	Dr. Muazzam Arshad (UET Peshawar)	Energy Recovery in Steel Industry
12.15-12.30	EE-02	Dr. Nasir Khan (China University of Petroleum, East China)	Viscosity reduction of crude oil by using ultrasonic waves: A Review

12.30-12.45	EE-03	Muhammad Shehreyar Khan (OGDC L Karak)	Optimization & Economic analysis of crude stabilization unit
12.45-13.00	EE-04	Wahad ur Rehman (UET Peshawar)	Modeling and Simulation of Kaplan Turbine
13.00-13.15	EE-05	Muhammad Alam Zaib Khan (University of Engineering and Technology Peshawar)	Preparation, characterization and effect of binding materials on bio mass Pellets properties
Technical Session 1B (John Coulson Hall) SEPARATION SCIENCE AND TECHNOLOGY-1			
Session Chair: Dr. Asim Laeeq Khan Session Co-Chair: Dr. Asmat Ullah			
11.40-12.00	Keynote-02	Dr. Asim Laeeq Khan (COMSATS Lahore)	Matrix Membranes comprising of fluorinated and sulfonated PEEK and functionalized mesoporous COK-12 for CO ₂ separation
12.00-12.15	SP-01	Dr. Zaib Jahan (NUST, Islamabad)	Cellulose Nanocrystals/PVA nanocomposite membranes for CO ₂ /CH ₄ separation at higher pressure
12.15-12.30	SP-02	Muhammad Zia ur Rehman (University of Engineering and Technology, Lahore Pakistan.)	Competitive adsorption of organic dyes from multicomponent solution using amine functionalized carbon
12.30-12.45	SP-03	Zufishan Shamair (COMSATS University Islamabad, Lahore Campus)	Ionic Liquid Fused Mixed Matrix Membrane for CO ₂ Separation
12.45-13.00	SP-04	Tanzila Anjum (Lahore School of Economics-LSE)	A comprehensive study on the performance and antifouling enhancement of PSf Mixed Matrix Membranes by embedding different nanofillers: Zeolite 4A, UiO-66 and Zeolite 4A@UiO-66
13.00-13.15	SP-05	Zabia Sajjad (COMSATS University Islamabad, Lahore Campus)	Ionic Liquid based membranes for butanol-water separation using pervaporation
Technical Session 1C (Robert H. Perry Hall) HEALTH, SAFETY & ENVIRONMENT			
Session Chair: Dr. Amanullah Session Co-Chair: Dr. Hayat Khan			
11.40-12.00	Keynote-03	Dr. Amanullah (Department of Agronomy, The University of Agriculture Peshawar)	Climate smart agricultural practices on degraded soils: symbiosis for sustainable crop production and food security
12.00-12.15	HSE-01	Dr. Waqas Ahmad (Institute of Chemical Sciences, University of Peshawar)	Desulphurization of heavy distillate fuels using air assisted performic acid oxidation system.
12.15-12.30	HSE-02	Nida Zafar (NUST Islamabad)	Encapsulation of Slow-Release Urea Fertilizer in Fluidized Bed Coater Using Different Plasticizers
12.30-12.45	HSE-03	Nouman Ahmad	To study the effect of PVA/Starch blends on

		(NUST, Islamabad)	dissolution rate of slow release urea fertilizer
12.45-13.00	HSE-04	Sudeeha Ishaq (Lahore School of Economics, Lahore Pakistan)	Mixed Matrix Membranes comprising of BioMOF-1 in Polysulfone matrix for CO ₂ Separation
13.00-13.15	HSE-05	Bilal Beig(NUST, Islamabad)	Slow Release Urea
13.15-14.15			
Lunch/Prayer Break – Poster Session 2 (Carl Bosch Hall)			
Technical Session 2A (George E. Davis Hall)			
RENEWABLE ENERGY			
Session Chair: Prof. Dr. Naveed Ramzan			
Session Co-Chair: Dr. Nehar Ullah			
14:15-14:35	Keynote-04	Prof. Dr. Naveed Ramzan (UET Lahore)	Effect of demineralization on the physiochemical structure and thermal degradation of biomass
14:35-14:50	RE-01	Dr. Khalid Mahmood Khan (UET Lahore, FSD Campus)	Highly Efficient Perovskite Solar Cells based on Low-temperature Solution-Processed Electron Transporting Layers
14:50-15:05	RE-02	Dr. Muhammad Alam Zaib Khan (UET Peshawar)	Performance analysis of diesel engine using biodiesel from waste vegetable oil
15:05-15:20	RE-03	Haris Mahmood Khan (UET Lahore)	Characterization of hydroxyapatite extracted from quail bones
15:20-15:35	RE-04	Rumaisa Tariq (NUST Islamabad)	Study of Sewage Sludge Pyrolysis Mechanism and Kinetics with model-free & model-fitting Approach
15:35-15:50	RE-05	Uzma Nawaz (UET Peshawar)	Home Pump-Storage Hydroelectric System as Alternative to Battery Bank in UPS System
15:50-16:05	RE-06	Muhammad Sheheryar Iqbal (NUST, Islamabad)	A comparative study for an off grid model village on its electrification options
16:05-16:20	RE-07	Asif Ali (USPCAS-E UET Peshawar)	Bio methane from biogas, renewable energy resource for Pakistan
16:20-16:35	RE-08	Muhammad Khawar (UET Lahore)	To Study the Effect of Particle Size of Indigenous Coconut Shell on Torrefaction
16:35-16:50	RE-09	Muneeb Hussain (USPCASE NUST, Islamabad)	A Technical Discussion on Mini/Micro Hydro Plants (MHPs). A Case Study of Gilgit Baltistan (GB)
Technical Session 2B (John Coulson Hall)			
MODELING AND SIMULATION			
Session Chair: Dr. Atta Ullah			
Session Co-Chair: Dr. Muazzam Arshad			
14:15-14:35	Keynote-05	Dr. Atta Ullah (Department of Chemical Engineering, PIEAS)	Case Studies on Eulerian CFD Simulation of Chemical Process Systems
14:35-14:50	MS-01	Dr. Umer Afzal (University of Engineering and	Experimental validation of a CFD simulation model to determine the distribution of gaseous emissions in the

		<i>Technology, Lahore Pakistan)</i>	industrial indoor environment
14:50-15:05	MS-02	Muhammad Ali Jamal (<i>Govt. College University Faisalabad</i>)	Experimental and Multiphase CFD studies of flow patterns and intensified micromixing performance of a multichannel micro-impinging stream reactor
15:05-15:20	MS-03	Ahsan Ayub (<i>SCME, NUST Islamabad</i>)	Sensitivity Analysis of Urea synthesis Process using Artificial Neural Networks
15:20-15:35	MS-04	Zanib Nawaz (<i>University of Engineering and Technology, Lahore</i>)	Impact of coal blends and co-firing with biomass on emission and efficiency of pulverized coal-fired power plant
15:35-15:50	MS-05	Aeman Qayyum (<i>UET Lahore</i>)	Furnace Oil Syngas Cleaning via Physical and Chemical Absorption
15:50-16:05	MS-06	Muhammad Shoaib Khan (<i>UET Peshawar</i>)	BIM Based Energy Simulation for Assessment of Buildings Energy Wastage for Pakistan
16:05-16:20	MS-07	Muhammad Aaqib (<i>UET Peshawar</i>)	Eye Gazed Controlled Wheelchair
16:20-16:35	MS-08	Muhammad Umer (<i>SCME, NUST Islamabad</i>)	Data-based Prediction and Sensitivity Analysis of Syngas Composition of a Moving Bed Coal Gasifier
16:35-16:50	MS-09	Zia ur Rahman (<i>SCME, NUST Islamabad</i>)	Exergy Analysis of Cumene Production Process through Interfacing of MATLAB and Aspen PLUS Environments
Technical Session 2C (Robert H. Perry Hall) MATERIALS ENGINEERING AND MINERAL PROCESSING			
Session Chair: Dr. Muhammad Najam Khan Session Co-Chair: Dr. Irshad Ali			
14:15-14:35	Keynote-06	Muhammad Najam Khan (<i>Baluchistan University of Information Technology, Engineering and Management Sciences (BUIEMS), Quetta</i>)	Annealing studies of Zinc Tin Oxide nanoparticles hydrothermally synthesized at lower temperature
14:35-14:50	MPE-01	Ms. Rabia Sharif (<i>University of Engineering & Technology, Lahore, FSD Campus</i>)	Comparative Analysis of Various Repelling Finishes on the Hydrophobic/ Oleo phobic Properties of Conventional Cotton Fabric
14:50-15:05	MPE-02	Ms. Ishrat Rahim (<i>Department of Physics/ University of Peshawar</i>)	Morphological, optical and sensing properties of graphene decorated by silver nanoparticles and PMMA thin film based sensors
15:05-15:20	MPE-03	Muhammad Sulaiman (<i>University of Engineering and Technology Lahore, Pakistan</i>)	Study of thermal and nano mechanical characteristics of chemically pretreated rice straw fiber.
15:20-15:35	MPE-04	Ishtiaq Ahmed (<i>UET Peshawar</i>)	Geopolymeric composite material for the application of thermal energy storage

15:35-15:50	MPE-05	Anem Saeed (<i>UET Lahore</i>)	Synthesis and Electrochemical Characterization of Novel Heterogeneous Ion Exchange Membranes based on Thermoplastic Polyurethane for Desalination of Brackish Water using Electrodialysis
15:50-16:05	MPE-06	Syed Sohail Ahmad Shah (<i>Center of Excellence in Solid State Physics, University of the Punjab, Lahore</i>)	Carbon nanotubes-based nanocomposites for the electromagnetic interference shielding
16:05-16:20	MPE-07	Pakeeza Mustafa (<i>NUST, Islamabad</i>)	Preparation and characterization of active and intelligent PVA/STARCH films for food packaging applications.
16:20-16:35	MP-E08	Afnan Ahmad (<i>UET Peshawar</i>)	Efficient Use of Waste Cardboard in Construction material
16:35-16:50	MPE-09	Sarfraz Khan (<i>UET Peshawar</i>)	Development of Cobalt/Chromium Mixed Metal Oxide Coatings as a Good Corrosion Resistant Material
16:50-17:10 Tea (Carl Bosch Hall)			
19.00-22.00 Networking Dinner			
2nd Day, Thursday, 25th October, 2018			
09:00-09:40 Plenary lecture-2 (George E. Davis Hall) By Prof. Dr. Asad Ullah Khan (Department of Chemical Engineering, COMSATS University Islamabad, Lahore Campus, Lahore, Pakistan 54000) Stabilizing Aqueous Suspensions of Alumina and Zirconia by Controlling Interparticle Interactions through the Use of Commercial Polyvalent Organic Electrolytes			
Technical Session 3A (George E. Davis Hall) Water Resource Management and Waste Water Treatment			
Session Chair: Prof. Dr Khadija Qureshi Session Co-Chair: Dr. Muhammad Daud			
09.40-10:00	Keynote-07	Prof. Khadija Qureshi (<i>Mehran University of Engineering and Technology Jamshoro</i>)	Arsenic in Sindh & Health Risk Assessment
10:00-10:15	WWT-01	Muhammad Bilal (<i>Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Topi</i>)	Sustainable Removal of Arsenic from Contaminated Drinking Water by Electrochemical Process using Iron Electrodes
10:15-10:30	WWT-02	Sehrish Shafqat (<i>Riphah International University</i>)	Water Scarcity and Quality in Urban Sector: Domestic Recycling Solutions for Water Woes of Pakistan

10:30-10:45	WWT-03	Adnan Akhtar <i>(Department of Chemical Engineering, University of Engineering and Technology, Lahore)</i>	Treatment of dye polluted aqueous phase by electrocoagulation: Optimization Study
10:45-11:00	WWT-04	Salma Amir <i>(Institute of Chemical Sciences, University of Peshawar)</i>	Determination of dinitroaniline herbicides in water and onion samples by SUPRA microextraction: Green chemistry approach
11:00-11.15	WWT-05	Irfan <i>(Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Topi)</i>	Removal of Chromium from Tannery Waste
Technical Session 3B (John Coulson Hall) SEPARATION SCIENCE AND TECHNOLOGY-02			
Session Chair: Prof. Dr. Arshad Hussain Session Co-Chair: Dr. Jamil Ahmad			
09:40-10:00	Keynote-08	Prof. Dr. Arshad Hussain <i>(School of Chemical and Materials Engineering, National University of Sciences and Technology, Islamabad)</i>	Fabrication and Characterization of Cellulose Acetate based Mixed Matrix Membranes for Gas Separations
10:00-10:15	SP-06	Dr. Muhammad Aslam <i>(COMSATS Lahore)</i>	Energy-positive Treatment of Domestic Wastewater with a staged Anaerobic Fluidized Bed Ceramic Membrane Bioreactor
10:15-10:30	SP-07	Dr. Muhammad Ahmad <i>(Government College University, Faisalabad)</i>	Separation of complex feed streams of a product by layer melt crystallization
10:30-10:45	SP-08	Dr. Fahad Rehman <i>(COMSATS University Islamabad, Lahore Campus, Pakistan)</i>	Manipulating Equilibrium through Bubble Mediated mass transfer for Ethyl Acetate production
10:45-11:00	SP-09	Sidratel Muntaha <i>(University of Engineering and Technology, Peshawar)</i>	Feasibility study of Micro-filtration Membrane for Dewaxing of Edible oil.
11:00-11:15	SP-10	Waheed-Ur-Rehman <i>(UET Peshawar)</i>	Concentration of Pomegranate Juice through Non-Thermal Osmotic Distillation Technique using PVDF and PTFE Membranes
Technical Session 3C (Robert H. Perry Hall) Biochemical, Catalysis and Reaction Engineering			
Session Chair: Dr. Sajjad Hussain Session Co-Chair: Dr. Naseer Ahmad Khan			
09:40-10:00	Keynote-09	Dr. Sajjad Hussain <i>(Gulam Ishaq Khan Institute of Engineering Sciences and Technology, Topi)</i>	Electrochemical and Photo-assisted electrochemical technologies: an alternative to treat emerging contaminants

10:00-10:15	CRE-01	Abdul Sattar Jatoi (Dawood University of Engineering and Technology Karachi, Sindh)	Study to investigate parametric effect on biodesulfurization of coal
10:15-10:30	CRE-02	Muhammad Sagir (University of Gujarat)	Catalyst for FFA reduction for bio-diesel production
10:30-10:45	CRE-03	Abid Ullah (UET Peshawar)	MnO ₂ based carbon nanotubes (CNTs) catalysts with enhanced Oxygen Reduction Reaction (ORR) activity in Polymer Electrolyte Membrane Fuel cells (PEMFCs)
10:45-11:00	CRE-04	Saad Ullah Khan (GIK, Institute of Engineering Science and Technology)	Electrochemical degradation of Reactive yellow 145 synthetic dye through anodic oxidation of Ti/Ti _{0.7} Ru _{0.3} O ₂
11:00-11:15	CRE-05	Dr. Shaukat Ali (Institute of Chemical Sciences, University of Peshawar)	Manganese-Catalyzed Sustainable C-H Bond functionalization
11.15-11.40 Tea Break (Carl Bosch Hall)			
Technical Session 4A (George E. Davis Hall) GREEN SAFE AND SUSTAINABLE DEVELOPMENT			
Session Chair: Prof. Dr. M. Suleman Tahir			
Session Co-Chair: Prof. Dr. Muddasar Habib			
11:40-12:00	Keynote-10	Prof. Dr. M. Suleman Tahir (Chemical Engineering, University of Gujrat)	Effective utilization of Pakistani Reserves for Sustainable Energy Production
12:00-12:15	GSD-01	Mian Waqar Ul Mulk (OGDCL)	Control system to self-regulate adsorption & desorption processes for solid desiccant dehydration unit
12:15-12:30	GSD-02	Amjad Wahab (UET Peshawar)	Preparation, Characterization, and Properties of Polyethylene Composites Partially Filled With Calcium Carbonate through Co-Rotating Conical Twin-Screw Extrusion
12:30-12:45	GSD-03	Ali Ahmed Durrani (UET Peshawar)	Multivariable regression analysis for Super-hydrophobic PVDF flat sheet membranes in DCMD
12:45-13.00	GSD-04	Amna Bashir (Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Topi)	Synthesis, Characterization and Comparison of Raw, Pelletized and Torrefied Biomass Fuel Using Saw Dust
13:00-13.15	GSD-05	Muhammad Raheel khan (US-Pakistan Center for Advanced Studies in Energy, University of Engineering & Technology Peshawar)	Comparative Analysis of Conventional and Concentrated photovoltaic technologies for power generation in Pakistan

Technical Session 4B (John Coulson Hall) ENERGY ENGINEERING-2			
Session Chair: Prof. Dr. Abdul Waheed Bhutto Session Co-Chair: Prof. Dr. Farid Khan			
11:40-12:00	Keynote-11	Prof. Dr. Mahmood Saleem (<i>ICET, University of Punjab</i>)	Entropy Generation and Work Lost Analysis of Rice Husk Fired Thermal Power Plant; A Case Study
12:00-12:15	EE-06	Zeeshan Hameed (<i>NUST Islamabad</i>)	Synergetic Effect and Kinetic Evaluation of Biomass and Sewage Sludge blends in Co-Pyrolysis Environment
12:15-12:30	EE-07	Inzamam Ul Haq (<i>UET Peshawar</i>)	Basin Design Optimization of Gravitational Water Vortex Power Plant
12:30-12:45	EE-08	Shahi Mulk (<i>USPCAS-E UET Peshawar</i>)	Development and Testing of Electromechanical Over-Speed Controller for Vertical Axis Wind Turbine System
12:45-13:00	EE-09	Qurat Ul Ain (<i>USPCASE, UET Peshawar</i>)	Lightning Protection Analysis of Shiekh Muhammadi Grid Station by Effective Placement of Surge Arresters
13:00-13:15	EE-10	Sana Ullah (<i>Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Topi</i>)	Application of modified activated charcoal by bentonite clay for the isolation of dibenzothiophene from model oil
Technical Session 4C (Robert H. Perry Hall) PRODUCT AND PROCESS DEVELOPMENT			
Session Chair: Dr. Muhammad Yasir Khan Session Co-Chair: Dr. Nehar Ullah Khan			
11:40-12:00	Keynote-12	Dr. Muhammad Yasir Khan (<i>Department of Chemical Engineering, University of Karachi</i>)	Synthesis of Metal Oxide Nanostructures by Low Cost Solution Process for Optoelectronics Applications
12:00-12:15	PPD-01	Ramesha Tariq (<i>UET, Lahore</i>)	Small Scale Production of H ₂ via Autothermal Reforming in an Adiabatic Packed Bed Reactor
12:15-12:30	PPD-02	Muhammad Bilal Israr (<i>UET Peshawar</i>)	Impact of Horizontal Urban Sprawl on the Road Construction and Financing – A Case Study for Peshawar Based Terrain Exchangers
12:30-12:45	PPD-03	Muhammad Ahmad (<i>OGDCL Lahore</i>)	Characterization and rheological behavior of various Pakistani crude oils
12:45-13:00	PPD-04	Faizan Halim (<i>UET Peshawar</i>)	Masonry Retrofitting for out of Plane bending using Fiber Reinforced Plastic bands
13:00-13:15	PPD-05	Shehbaz Ahmad (<i>UET Peshawar</i>)	Optimization of Heat Exchanger using Quasi- Newton Method
13:15-14:15 Lunch and Prayer Break, Poster Session 4 (Carl Bosch Hall)			

14:15-14:45
Plenary Lecture-3 (George E. Davis Hall)

By

Engr. Younas Khan
(Askari Cement Wah)

Industrial Psychology & Engineering Management

Closing Ceremony (George E. Davis Hall)

15:00-15:05	Recitation from Holy Quran
15:05-15:15	Wrap-up by Prof. Dr. M. Younas (Conference Chair)
15:15-15:30	Award distribution announcement by Prof. Dr. Saeed Gul (Conference Co-Chair)
15:30-15:40	Vote of thanks, Prof. Dr. M. A. Irfan Mufti (Dean, Faculty of Mechanical, Chemical & Industrial Engineering)
15:40-15:50	Closing remarks, Prof. Dr. Iftikhar Hussain (VC, UET Peshawar)
15:50-16:00	Address by Chief Guest

16:00- 16:20 High Tea (Carl Bosch Hall)

POSTER PRESENTATIONS (24th October, 2018, Morning)

S.No	Author Names	Affiliation	Abstract Title
1.	Abdul Basit	University of Engineering and Technology, Peshawar	Seismic Fragility of Reinforced Concrete Moment Resisting Frame Structures in Pakistan
2.	Abdur Rehman	UET Peshawar	Denosing of Texture Images Based on L0 Norm Smoothing
3.	Afnan Haider Khan	CECOS University of IT and Emerging Sciences	Parametric Analysis of Bus-Bar in Silicon Cell of the Photovoltaic Module Under the Static Wind Load
4.	Ali Akbar	University of Engineering and Technology Lahore	Effects of different binder types and their mixing ratios on the quality of biomass pellets
5.	Arbaz Adil	University of Karachi	To enhance process ability of BOPP film in term of Reclaim/Breakages/Speed by multicycle dessicant dryer
6.	Azqa Khalid	Comsats University Islamabad, Lahore Campus	Economic Comparison of Various Pervaporation Based Ethanol Recovery Schemes for Syngas Bio-Refinery
7.	Farrukh Altaf	National University of	Preparation and Characterization of

S.No	Author Names	Affiliation	Abstract Title
		Science and Technology, Islamabad	Antibacterial PVA/Starch based Hydrogel membrane for wound Dressing using Essential Oils
8.	Ihtesham Ahmad	National University of Science and Technology, Islamabad	Size Optimization of Lead-Acid Batteries in Residential UPS sector, under Various Operating Conditions
9.	Inzamam Ul Haq	USPCAS-E UET Peshawar	Mathematical modelling of Power Transformer based on State Space vectors in MATLAB Simulink
10.	Kashif Ali	USPCAS-E UET Peshawar	Phase Change Materials for Personal Cooling
11.	Khurram Shahzad Baig	University of Wah	Mechanism for Adsorption onto Wheat straw
12.	Laraib Shoukat	USPCAS-E UET Peshawar	Comparison of Technical and Environmental Parameters in Different Energy Models.
13.	Micaiah Das	UET Peshawar	Technical Design for a Bio-Ethanol fermentation pilot plant from potato peels waste
14.	Muhammad Ali Tariq	University of Karachi	Water Purification Through Nano-Materials (Graphene)
15.	Muhammad Ali Tariq	University of Karachi	Synthesis of Graphene Oxide Nanostructures & its Application in Drinking Water Purification.
16.	Muhammad Altaf	UET Peshawar	Recycling of waste LCDs
17.	Muhammad Ayaz	UET Peshawar, Abbottabad Campus	IoT Based Fully Automated Lawn Mower with Cutting Level Adjustments
18.	Muhammad Ayaz	UET Peshawar, Abbottabad Campus	A Comprehensive study of Inductive Power Transfer Technology Based on High frequency H-Bridge Topology and Parallel Transmitting Coils Configuration
19.	Muhammad Hamza	University of Engineering and Technology, Peshawar	Estimation of Errors induced in domestic gas meters with age
20.	Muhammad Imran Ahmad	UET Peshawar	Deep learning through project-based learning in Chemical Engineering courses
21.	Muhammad Junaid Ammar	UET Peshawar	Design of Integrated Forward Osmosis-Reverse Osmosis (FO-RO) Wastewater Treatment System for the Production of 100 m ³ /day Potable Water
22.	Muhammad Nouman	UET Peshawar	Effect of Aspect Ratio on Seismic Behavior of Unreinforced Brick Masonry
23.	Muhammad Saad Rehan	UET Peshawar	Characterization of Dera Ismail Khan KPK Region Shale Rock using X-Ray Diffraction
24.	Muhammad Sajid Khan	University of Engineering and Technology, Lahore	Sensitive analysis of post combustion carbon capture technology with MEA/glycerol mixture as a solvent

S.No	Author Names	Affiliation	Abstract Title
25.	Muhammad Shoaib Ahmed Ansari	University of Karachi	Design study of the Isomerization unit for Light Naphtha
26.	Munazza	USPCAS-E UET Peshawar	Comparison of Socio-Economic Parameters in National Energy Models across the world
27.	Qaisar Khan	UET Peshawar	Design and Analysis of a Miniaturized Dual-band Conformal Implantable Antenna for Capsule System Applications
28.	Riazuddin	University of Karachi	Isomerization of light naphtha
29.	Saeed ur Rahman	University of Engineering and Technology, Peshawar	Removal of iron contents by flotation technique from Koga Nepheline syenite Buner, Khyber Pakhtunkhwa, Pakistan.
30.	Syed Ali Shah	UET Peshawar	Optimization of shell and tube heat exchanger by Genetic algorithm (GA) METHOD
31.	Talha Alam Siddiqui	University of Karachi	Design A Super Heated Steam Heater By Utilization Of Waste Heat Recovery From Power Plant
32.	Tariq Mahmood	University of Engineering and Technology, Lahore	Effect of absorber intercooling and rich solvent recycle for post-combustion CO ₂ capture system
33.	Zanib Khatoon	University of Engineering & Technology, Peshawar	Development of membrane for CO ₂ capture
34.	Amina Bibi, Itizaz Khan, M. Hamza Naeem	University of Engineering & Technology, Peshawar	Design of Treatment Plant for Petroleum Refinery Effluents
35.	Syed Mazhar Ali Shah	University of Engineering and Technology, Peshawar	Educational Management Information System (EMIS) in Pakistan: current practice comparison with good practices from other countries