

DAY | 02

December 22, 2016 (to be held at UET Lahore)

| TIME | ACTIVITY | LOCATIONS |
|---------------|--|--------------|
| 09:00 – 11:00 | Technical Session 3 | Hall A, B, C |
| 11:00 – 11:30 | Refreshments & Poster Session | |
| 11:30 – 13:30 | Technical Session 4 | Hall A, B |
| 13:30 – 14:30 | Lunch/Prayer Break | |
| 14:30 – 15:00 | Keynote Lecture: Accident prevention through data analysis and behavior modifications <i>Mr Muhammad Dawood GM SBS</i> | |
| 15:00 – 16:00 | Closing Session | |
| 16:00 – 17:00 | Panel Discussion | |

DETAILED PROGRAM

DAY | 01

December 21, 2016 (to be held at PU Lahore)

| | |
|---|--|
| 09:30 – 11:00 | INAUGURAL SESSION |
| CHIEF GUEST: GUEST OF HONOR: | Vice Chancellor, University of the Punjab, Lahore Vice Chancellor, UET, Lahore |
| 09:30 – 11:00 | PROGRAM OF INAUGURATION SESSION |
| | <ul style="list-style-type: none"> - Recitation from the Holy Qur'an - National Anthem - Presentation of the conference program - Welcome address by the Dean Faculty of Engg. & Tech. - Words by the guest of honor - Words by the Chief Guest - Souvenir Distribution |
| 11:00 – 11:30 | REFRESHMENTS |

DAY | 02

December 21, 2016 (to be held at UET Lahore)

| | |
|---|---|
| 15:00 – 16:00 | CLOSING SESSION |
| CHIEF GUEST: GUEST OF HONOR: | Fazal Ahmad Khalid, Vice Chancellor, UET, Lahore Prof. Dr. Niaz Ahmad Akhtar, President PICHE & VC UET Taxila |
| | Closing Session Recitation from the Holy Qur'an National Anthem Remarks by the Guest of Honor Closing remarks by the Chief Guest Souvenir Distribution |



6TH
**SYMPOSIUM
ON ENGINEERING
SCIENCES**

EVENT PROGRAM

December 21,22 2016



FINAL PROGRAM

DAY | 01

December 21, 2016 (to be held at PU Lahore)

| TIME | ACTIVITY | LOCATIONS |
|---------------|---|--------------|
| 09:00 – 10:00 | Registration | |
| 10:00 – 11:00 | Inaugural Session | Hall A |
| 11:00 – 11:30 | Refreshments, Poster Session and Flow Sheet Competition | |
| 11:30 – 13:30 | Technical Session 1 | Hall A, B, C |
| 13:30 – 14:30 | Lunch/Prayer Break | |
| 14:30 – 16:30 | Technical Session 2 | Hall A, B, C |

TECHNICAL SESSION | 01 A

 December 21, 2016 (11:30 – 13:30)
 Hall A, Chemical Engineering, PU Lahore

| TIME | TITLE/AUTHOR |
|---------------|---|
| 11:30 – 12:00 | Coal fired power plants in Pakistan for energy <i>Muhammad Suleman Tahir (Invited Talk)</i> |
| 12:00 – 12:30 | Micro hydropower potential of Azad Jammu & Kashmir <i>Mushtaq Ahmed (Invited Talk)</i> |
| 12:30 – 12:50 | Studies relating to adsorption and recovery of ultra trace uranium from seawater by amidoxime resin <i>H. M. Azeem Ashraf</i> |
| 12:50 – 13:10 | Competitive adsorption of cationic and anionic dye from an aqueous solution: Equilibrium isotherm analysis in a single and binary system <i>Muhammad Imran Akbar, Muhammad Zaheer, Muhammad Ayyub Khawar, Irfan Yousaf</i> |
| 13:10 – 13:30 | Energetic and exergetic analysis of rice husk fired steam turbine power plant in an existing fertilizer industry by using Aspen HYSYS® V8.8 <i>Haris Hamayun</i> |

TECHNICAL SESSION | 01 C

 December 21, 2016 (11:30 – 13:30)
 Hall C, Chemical Engineering, PU Lahore

| TIME | TITLE/AUTHOR |
|---------------|--|
| 11:30 – 12:00 | Development and Mechanical Properties of Graphene Reinforced Epoxy Composites <i>Mohsin Ali Raza, Muhammad Waris, Faizan Ali Ghauri, Allah Ditta, Adnan Ramzan, Rafiq Ahmad</i> |
| 12:00 – 12:30 | Functionalized UiO-66-SO ₃ H ISA Membranes for Gas Separation <i>Zaman Tahir, Asim Laeeq Khan</i> |
| 12:30 – 12: | Study of Polarization Behavior of Zinc Based Casted Anode for Sacrificial Cathodic Protection of Steel Pipelines in Soil <i>Ameeq Farooq, Fiaz Ahmad, Abdullah Zia, Behram Zulfiqar, Jahangir Khan Lodhi, Rafiq Ahmad</i> |
| 12:50 – 13:10 | Silver Plating of Copper from Non-Cyanide Baths <i>Mohsin Ali Raza, Sana Ayub, Nosheen Maryam Awan, Faizan Ali Ghauri, Bakhtawar Shahid Parvaiz, Rafiq Ahmad</i> |
| 12:10 – 13:30 | Development and Mechanical Properties of Graphene Reinforced Epoxy Composites <i>Mohsin Ali Raza, Muhammad Waris, Faizan Ali Ghauri, Allah Ditta, Adnan Ramzan, Rafiq Ahmad</i> |

TECHNICAL SESSION | 01 B

 December 21, 2016 (11:30 – 13:30)
 Hall B, Chemical Engineering, PU Lahore

| TIME | TITLE/AUTHOR |
|---------------|--|
| 11:30 – 12:00 | Reaction mechanism of ethylene glycol reforming on Pt(111) in vapor and aqueous phases <i>Muhammad Faheem, Andreas Heyden (Invited Talk)</i> |
| 12:00 – 12:30 | Advanced oxidation process for degradation of pharmaceutical waste <i>Shagufta Ishtiaque (Invited Talk)</i> |
| 12:30 – 12:50 | Smooth profile method for dispersed colloids <i>Adnan Hamid, Atta Ullah, Muhammad Nadeem</i> |
| 12:50 – 13:10 | Fabrication of silica hollow spheres with drug delivery and potential ultrasound contrast agents properties <i>Syed Mujtaba-ul-Hassan, Tayyab Ali Khan, Jamil Ahmad</i> |
| 13:10 – 13:30 | Effect on yield of pyrolysis of municipal solid waste (MSW) by using alumina catalyst, co-impregnated alumina, and Ni-impregnated alumina <i>Muhammad Ali, Rizwan Qasim, Muhammad Usman Rath, Hasham Awan, Mahmood Saleem</i> |

TECHNICAL SESSION | 02 A

 December 21, 2016 (14:30 – 16:30)
 Hall A, Chemical Engineering, PU Lahore

| TIME | TITLE/AUTHOR |
|---------------|--|
| 14:30 – 15:00 | Parametric investigation of production of biofuels at a pilot plant facility <i>Muhammad Tayyeb Javed (Invited Talk)</i> |
| 15:00 – 15:30 | Process hazard analysis techniques: Present and future challenges <i>Naveed Ramzan (Invited Talk)</i> |
| 15:30 – 15:50 | Optimization of regenerative-reheat steam cycle of a nuclear power plant <i>Muhammad Shahid Amin, Atta Ullah, Muhammad Zaman</i> |
| 15:50 – 16:10 | Simulation of furnace for coal slurry fuel combustion on computational fluid dynamics <i>Mehboob Alam, Muhammad Suleman Tahir, Sajjad Miran, Naila Amin</i> |
| 16:10 – 16:30 | A simulation approach to investigate the effect of liquid film rings on drying performance <i>Hafiz Tariq Mahmood, Saqib Javed</i> |

TECHNICAL SESSION | 02 A

 December 21, 2016 (11:30 – 13:30)
 Hall C, Chemical Engineering, PU Lahore

| TIME | TITLE/AUTHOR |
|---------------|--|
| 14:30 – 15:00 | Parametric investigation of production of biofuels at a pilot plant facility <i>Muhammad Tayyeb Javed (Invited Talk)</i> |
| 15:00 – 15:30 | Process hazard analysis techniques: Present and future challenges <i>Naveed Ramzan (Invited Talk)</i> |
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TECHNICAL SESSION | 02 C

 December 21, 2016 (14:30 – 16:30)
 Hall C, Chemical Engineering, PU Lahore

| TIME | TITLE/AUTHOR |
|---------------|--|
| 11:30 – 11:50 | Study of Hydrodynamics Parameters for Liquid-Solid Fluidization Using Semolina Particles <i>Usman Asghar, Waqar Ali Khan, Imran Shamshad, Saqib Javed</i> |
| 11:50 – 12:10 | Statistical Investigation and Mapping of Monthly Modified Refractivity Gradient over Pakistan at the 700 Hectopascal Level <i>Muhammad usman Saleem</i> |
| 12:10 – 12:30 | Effects of Diazonium salt on low density Polyethylene <i>Muhammad Ahmed Saleem</i> |
| 12:30 – 12:50 | Conversion of Municipal Solid Waste to Energy Alternatives <i>Rofice Dickson, Mahmood Saleem</i> |
| 12:50 – 13:10 | Removal Of Ammonium Nitrate From Leachate By Chemical Precipitation <i>Kamran Hassan, M S Tahir, Muhammad Sajid, M Sagir, Saba Afzal</i> |
| 13:10 – 13:30 | Industrial Energy saving Strategies in FMCG plant <i>Ahmad Abdullah Khan</i> |

TECHNICAL SESSION | 02 B

 December 21, 2016 (14:30 – 16:30)
 Hall B, Chemical Engineering, PU Lahore

| TIME | TITLE/AUTHOR |
|---------------|--|
| 14:30 – 15:00 | Surface mechanical characterization of polymers <i>Tanveer Iqbal (Invited Talk)</i> |
| 15:00 – 15:30 | Foaming surfactant formulation for CO2 mobility control for enhanced oil recovery applications <i>Muhammad Sagir (Invited Talk)</i> |
| 15:30 – 15:50 | Investigating hydrocracking of actual waste plastics mixture using composite mesoporous zeolite catalysts <i>Dureem Munir, Mahmood Saleem, Rabya Aslam, Bilal Fareed, Muhammad Rashid Usman</i> |
| 15:50 – 16:10 | Upgradation of biomass feedstock as solid fuel <i>Umair Aslam, Naveed Ramzan, Muhammad Zaheer</i> |
| 16:10 – 16:30 | Study of the heat transfer effect in CFBC co-firing 15% corncob with coal <i>Mobeen Abbas, Hammad Ashraf, Luqman Hakeem</i> |

TECHNICAL SESSION | 03 A

 December 22, 2016 (09:00 – 11:00)
 Seminar Hall, Chemical Engineering, UET Lahore

| TIME | TITLE/AUTHOR |
|---------------|---|
| 09:00 – 09:30 | Tapping solar energy: A way forward in 21st century <i>Mahmood Saleem (Invited Talk)</i> |
| 09:30 – 09:50 | Secondary side deposit built-up (sludge pile) in steam generator of K-1: Lab test investigation <i>Qasim Zia Butt</i> |
| 09:50 – 10:10 | Process intensification in heat-integrated distillation columns <i>Kanwal Shabbir, Sadaf Javed, Ammarah Hasan, Muhammad Faheem</i> |
| 10:10 – 10:30 | Development of low cost adsorbents for the removal of water hardness: An experimental study and modeling of newly developed adsorbent consisting of coconut shell activated carbon, polystyrene resin, and chemically modified sugarcane bagasse <i>Qazi Muhammad Omar</i> |
| 10:30 – 10:50 | Removal of suspended solid and turbidity from wastewater using natural and primary coagulant <i>Waqar Ali Khan</i> |

TECHNICAL SESSION | 03 B

 December 22, 2016 (09:00 – 11:00)
 Model Classroom, Chemical Engineering, UET Lahore

| TIME | TITLE/AUTHOR |
|---------------|---|
| 09:00 – 09:30 | Gas sweetening plant optimization <i>Muhammad Afzal Kahloon (Invited Talk)</i> |
| 09:30 – 09:50 | A comparative study of kinetic rate models for the dehydrogenation reaction of methylcyclohexane <i>Muhammad Sarfraz Akram</i> |
| 09:50 – 10:10 | MOF-5 based mixed matrix membranes for solvent resistant nanofiltration <i>Muhammad Raees</i> |
| 10:10 – 10:30 | Recycling of waste water from Flour mill <i>Umair Arshad, Muhammad Suleman Tahir, Muhammad Sagir, Zafar Shakoor</i> |
| 10:30 – 10:50 | Study of different parameters affecting absorption of carbon dioxide in a packed-bed gas absorption column <i>Sharjeel Waqas</i> |

TECHNICAL SESSION | 04 A

 December 22, 2016 (11:30 – 13:30)
 Seminar Hall, Chemical Engineering, UET Lahore

| TIME | TITLE/AUTHOR |
|---------------|--|
| 11:30 – 12:00 | Carbon dioxide removal from natural gas using hollow fiber membrane contactors: Experimentation, modeling, and simulation <i>Muhammad Younas (Invited Talk)</i> |
| 12:00 – 12:30 | Hydrogen loading assessment in potential liquid organic hydrogen carriers (LOHCs): A promising solution for energy storage and transportation <i>Rabya Aslam (Invited Talk)</i> |
| 12:30 – 12:50 | The regeneration of contaminated lubricating oil by solvent extraction <i>Hassan Raza</i> |
| 12:50 – 13:10 | Synthesis, characterization, and testing of metal based catalyst for the pyrolysis of biodegradable component of municipal solid waste <i>Abdul Mateen Jalal, Mahmood Saleem</i> |
| 13:10 – 13:30 | Potential of CO ₂ bio-fixation by microalgae culturing in closed photobioreactors: Advancement towards addressing global environmental challenge <i>Muhammad Ilyas</i> |

TECHNICAL SESSION | 03 C

 December 22, 2016 (09:00 – 11:00)
 Hall C, Chemical Engineering, UET Lahore

| TIME | TITLE/AUTHOR |
|---------------|--|
| 09:00 – 09:30 | Barriers to energy efficient design in industrial projects <i>Saqib Sajjad</i> |
| 09:30 – 09:50 | Concerns over formation of nitrosamines and nitramines during post-combustion CO ₂ capture <i>Shaukat Mazari</i> |
| 09:50 – 10:10 | Thermal Analysis Of Mixing Of Low Grade Coal And High Grade Coal Blends From Pakistan <i>Saad Aziz</i> |
| 10:10 – 10:30 | Effect Of Temperature Gradient On Power Production Using Alumina Based Thermoelectric Generator <i>Muhammad Waqas Jabbar, Muhammad Sajid, Usman Nazir, Muhammad Mubeen Khan, Asad Munir</i> |
| 10:30 – 10:50 | Optimization of Regenerative-Reheat Steam Cycle of a Nuclear Power Plant <i>Muhammad Shahid Amin, Atta Ullah, Muhammad Zaman</i> |

TECHNICAL SESSION | 04 B

 December 22, 2016 (11:30 – 13:40)
 Model Classroom, Chemical Engineering, UET Lahore

| TIME | TITLE/AUTHOR |
|---------------|--|
| 11:30 – 12:00 | Advanced membranes based on intrinsically conducting polymers <i>Asif Ali Qaiser (Invited Talk)</i> |
| 12:00 – 12:20 | Evaluation of dye adsorption characteristics of commercial multi-walled carbon nanotubes (MWCNT's) <i>Irfan Yousaf, Muhammad Zaheer, Muhammad Imran Akbar, Ayyub Khawar</i> |
| 12:20 – 12:40 | Performance improvement of organic phosphate based flame retardant chemical for cellulose <i>Haji Ghulam Qutab</i> |
| 12:40 – 13:00 | Adsorptive removal of Rhodamine B from aqueous solution using carbonaceous material derived from lawn grass <i>Ahmed Abdullah</i> |
| 13:00 – 13:20 | Eulerian simulation of sedimenting particles: Liquid-solid and gas-solid systems <i>Atta Ullah, Muhammad Zaheer, Adnan Hamid, Muhammad Nadeem</i> |