



PAKTÜRK 2023

Türkiye's 100th Anniversary.



**We are stronger together, our beloved
Turkish Nation.**

6th Pak-Turk Conference on Emerging Technologies in the Field of Sciences
and Engineering

4 – 6 May, 2023, Karabük University, Karabük, Türkiye

SCIENTIFIC PROGRAMME

May 4, 2023 Thursday

Morning Session 08.00 – 10.10

Time Zone Istanbul (GMT+3)

Chair: Necla Çakmak (Karabük Un., Karabük, Türkiye)

08.00 – 08.30 Opening Remarks

08.30 – 08.55 **Jameel-Un Nabi** (University of Wah, Wah Cantt, Pakistan)

Investigations on effects of pairing gaps on charge-changing transitions

08.55 – 09.10 **Tuncay Bayram** (Karadeniz Technical Un., Trabzon, Türkiye)

An Approach for Estimation of β -delayed Neutron Emission Probability

09.10 – 09.25 **Javeria Amin** (University of Wah, Wah Cantt, Pakistan)
Semantic Segmentation of Brain Tumor and Classification based on Quantum Neural Network

09.25 – 09.40 **Javid Shabbir** (University of Wah, Wah Cantt, Pakistan)
Estimation of Sensitive Proportion Based on Kuk's Randomized Response Model Using the Auxiliary Data

09.40 – 09.55 **Abdullah Kepceoğlu** (Koç University, Istanbul, Türkiye)
The Role of Ion Properties in Reflection System Design for Time-of-Flight Mass Spectrometry: A SIMION Simulation-Based Investigation

09.55 – 10.10 **Abdullah Kepceoğlu** (Koç University, Istanbul, Türkiye)
Electrospin biotin- and streptavidin-coated quartz crystal microbalance surfaces: characterization and mass sensing performance using Open QCM

10.10 – 10.30 COFFEE BREAK

Morning Session 10.30 – 12.00 Time Zone Istanbul (GMT+3)

Chair: Nihal Büyükçizmeci (Selçuk Un., Konya, Türkiye)

10.30 – 10.45 **Aamra Urooj** (University of Wah, Wah Cantt, Pakistan)
Analysis of Analytical Approximate Solutions of Relaxation Oscillation Differential Equation of Fractional Order

10.45 – 11.00 **Kashaf Tehreem** (University of Wah, Wah Cantt, Pakistan)
Techno-Economic Evaluation of Bio-Ethylene Production from Zea-Mays (Biorefinery as a sustainable solution for the utilization of waste)

11.00 – 11.15 **Anas Ibrar** (University of Wah, Wah Cantt, Pakistan)
Design And Development of Voice and Gesture Controlled Smart Wheelchair for Specially Able Persons Using Dc Motors

11.15 – 11.30 **Attaullah Sial** (University of Wah, Wah Cantt, Pakistan)
Advance Exponential Expansion Method via Modified Kawahara Equation in Mathematical Physics

11.30 – 11.45 **Ayesha Bibi** (University of Wah, Wah Cantt, Pakistan)
Effective Energy Management System and Bill Calculation using PLC and SCADA

11.45 – 12.00 **Amna Ali A. Mohamed** (Tripoli Un., Tripoli, Libya)
A Hybrid machine learning techniques with Deep Neural Network Model for Colon Cancer Diagnosis

12.00 – 13.00 LUNCH BREAK

Afternoon Session 13.00 – 14.55 Time Zone Istanbul (GMT+3)

Chair: Savaş Ağduk (Karabük Un., Karabük, Türkiye)

13.00 – 13.25 **Zahid Halim** (GIKI, Khyber Pakhtunkhwa, Pakistan)
AI-Based Early Identification of an Accident and Profiling Utilizing Driver Dependent Vehicle Driving Features: A Scheme for Critical Infrastructure Protection

13.25 – 13.40 **Bushra Shakoor** (University of Wah, Wah Cantt, Pakistan)
Synthesis, Spectral Study and Comparative Pharmacological Assessment of Silver (I) Complexes Based on Electron Donor Ligands

13.40 – 13.55 **Fazeel Ahmad** (University of Wah, Wah Cantt, Pakistan)
Effect of optimized cycle of concentration on cooling tower for water conservation: A case study for cement plant (Pakistan)

13.55 – 14.10 **Seyran Ibrahimov** (Karabük University, Karabük, Türkiye)
On a Pillai-type Problem Associated with Lucas Numbers

14.10 – 14.25 **Ahmet Öztürk** (Karabük University, Karabük, Türkiye)
Modeling of Average Temperature Values in Turkey for 2050 and 2096

14.25 – 14.40 **Ahmet Öztürk** (Karabük University, Karabük, Türkiye)
Assessment of Annual Average Drought Conditions in Turkey Based on Surface Soil Moisture, Soil Moisture Anomaly, and Soil Moisture Profile Parameters

14.40 – 14.55 **Hakan Öcal** (Bartın University, Bartın, Türkiye)
Comparison of Baseline Unet and Depthwise Separable Unet models on Slices Left Atrium Segmentation from MRI

May 5, 2023 Friday

Morning Session 08.00 – 10.00

Time Zone Istanbul (GMT+3)

Chair: Necla Çakmak (Karabük Un., Karabük, Türkiye)

08.00 – 08.25 **Serkan Akkoyun** (Sivas Cumhuriyet University, Sivas, Türkiye)
Artificial Intelligence Supported B(E2) Values Determination and An Online Calculation Tool

08.25 – 08.40 **Huseyngulu Quliyev** (National Aviation Academy, Baku, Azerbaijan)
Investigation of the level structures of Giant and Pygmy dipole excitations

08.40 – 08.55 **Javad Rahebi** (Istanbul Topkapi Un., Istanbul, Türkiye)
A blockchain based to intrusion detection system in Software-defined networking

08.55 – 09.10 **Khalid Agayr** (Polytechnic University, Ben Guerir, Morocco)
Sulfuric Acid Recovery from Phosphate Waste Using Electro-Membrane Technology

09.10 – 09.25 **Bilal Karaduman** (Istanbul Ticaret Un., Istanbul, Türkiye)
Effect of Microcracks on Solar Module Efficiency

09.25 – 09.40 **Bilal Karaduman** (Istanbul Ticaret Un., Istanbul, Türkiye)
Prevention Methods of Microcracks on Solar Module

09.40 – 09.55 **Arzu Cevdetoğlu** (Mosi Textile R&D Center, Izmir, Türkiye)

A Review on Computer Aided Manufacturing Systems Used in the Apparel Industry

10.00 – 10.30 COFFEE BREAK

Morning Session 10.30 – 12.00 **Time Zone Istanbul (GMT+3)**

Chair: Khalid Hadi Mahdi Aal-Shabeeb (Karabük Un., Karabük, Türkiye)

10.30 – 10.55 **Ayben Karasu Uysal** (KTO Karatay University, Konya, Türkiye)

Recent Results from the ALICE Experiment

10.55 – 11.10 **Irum Jamil** (University of Wah, Wah Cantt, Pakistan)

A Facile Multicomponent Synthesis and antibacterial activity of Spiro Nitrogen Heterocycles

11.10 – 11.25 **Nihal Büyükçizmeci** (Selçuk Un., Konya, Türkiye)

Quality control of radiation dose estimation by using treatment plans on 3d phantom

11.25 – 11.40 **Madiha Rashid** (University of Wah, Wah Cantt, Pakistan)

Assessment of Prevalence of Hypertension-Related Heart Diseases Among Diabetic Patients

11.40 – 11.55 **Moin Khan** (University of Wah, Wah Cantt, Pakistan)

Numerical Modeling for Stresses Analysis in Single Lap Joints for Aerospace Applications

12.00 – 13.00 LUNCH BREAK

Afternoon Session 13.00 – 14.45 **Time Zone Istanbul (GMT+3)**

Chair: Necla Çakmak (Karabük Un., Karabük, Türkiye)

13.00 – 13.15 **Volodymyr V. Tkach** (Chernivtsi National Un., Chernivtsi, Ukraine)

The theoretical description for sucralose and perillartine CoO(OH)-assisted electrochemical determination in beverages

13.15 – 13.30 **Volodymyr V. Tkach** (Chernivtsi National Un., Chernivtsi, Ukraine)

The mathematical modeling for galvanostatic heavy metal removal from wastewater by a green conducting polymer, based on three poisonous mushrooms

13.30 – 13.45 **Masoud Giyathaddin Obaid** (Karabük Un., Karabük, Türkiye)

Impact of Aluminum Addition on The Melting Point and Wettability of The Sn-2Ag-0.5Cu-1In Solder Alloy System

13.45 – 14.00 **Serkan Oguz** (Karabük Un., Karabük, Türkiye)

Effect of Melting Temperature on Wettability of (96.5-x)Sn-2Ag-0.5Cu-1Bi-xAl Solder Alloy Systems

14.00 – 14.15 **Muhammad Idrees** (University of Wah, Wah Cantt, Pakistan)

Physicochemical properties of Anthozoan Fluorescent proteins: an in-silico analysis for biotechnology applications

14.15 – 14.30 **Yavuz Ekincioglu** (Bayburt University, Bayburt, Türkiye)

Structural and Electronic Characterization of m-Fluoroaniline and m-Iodineaniline: A Density Functional Theory study

14.30 – 14.45 **M. Waqas Mustafa** (University of Wah, Wah Cantt, Pakistan)

Comparative Structural and Thermal Analysis of Aluminum Alloys Piston using FEA

May 6, 2023 Saturday

Morning Session 09.00 – 10.30

Time Zone Istanbul (GMT+3)

Chair: Necla Çakmak (Karabük Un., Karabük, Türkiye)

09.00 – 09.25 **Fariha K. Vardag** (Quaid-i-Azam University, Islamabad, Pakistan)

Supergravity hybrid inflation and gravitino dark matter

09.25 – 09.40 **Sajjad Saeed Ali Ali** (Selçuk Un., Konya, Türkiye)

Use of Alkylbromide-derived Calix[4]arene segments in Inhibition of Hemoglobin Pseudo-Peroxidase Activity in Patients with Thalassemia

09.40 – 09.55 **Ramadan Ahmed Ali Agoub** (Tripoli Un., Tripoli, Libya)

Optimum Modeling In Terms Of Energy Efficiency In Pv/T Solar Systems By Using New Advanced Jellyfish Algorithm

09.55 – 10.10 **Yusof-den Jamasali** (Mindanao State Un., Marawi City, Philippines)

Simulation of air pollutant dispersion around Afşin Elbistan – A Thermal Power Plant, Türkiye using Gaussian Plume Model in Freemat

10.10 – 10.15 **Yusof-den Jamasali** (Mindanao State Un., Marawi City, Philippines)

Radiological Assessment of Seyitömer Thermal Power Plant in Kütahya, Türkiye using RESRAD-ONSITE Code 7.2

10.15 – 10.30 **Samet Nohutçu** (Karabük Un., Karabük, Türkiye)

Improving The Mechanical Properties of Force TIG Welded Ti6Al4V Titanium Alloy by Post Weld Heat Treatment

10.30 – 11.00 COFFEE BREAK

Morning Session 11.00 – 12.00

Time Zone Istanbul (GMT+3)

Chair: Hüseyin Yıldırım (Karabük Un., Karabük, Türkiye)

11.00 – 11.15 **Jalaleddin Mohamed** (Karabük Un., Karabük, Türkiye)

An Approach to Alzheimer Disease Classification Based on The Artificial Neural Network

11.15 -11.30 **Hifza Azam** (University of Wah, Wah Cantt, Pakistan)

Design and development of voice and gesture controlled smart wheelchair for specially abled persons using dc motors

11.30 – 11.45 **Anes Hayder** (Karadeniz Technical Un., Trabzon, Türkiye)

The Collimator Optimization for ^{133}Xe and ^{201}Tl Isotopes on the Simulation SPECT Imaging Model

11.45 – 12.00 **Şevki Şentürk** (Karadeniz Technical Un., Trabzon, Türkiye)

Investigation of production cross-sections of ^{73}Se radioisotope via proton indicated reaction channels

12.00 – 13.00 LUNCH BREAK

Afternoon Session 13.00 – 14.00

Time Zone Istanbul (GMT+3)

Chair: Ahmet Mustafa Erer (Karabük Un., Karabük, Türkiye)

13.00 – 13.15 **Najm Abdullah Saleh Saleh** (Karabük Un., Karabük, Türkiye)

UIF Transition Properties for K-44 Isotope by pn-QRPA

13.15 – 13.30 **Mehmet Dağ** (Karabük Un., Karabük, Türkiye)

Gamow-Teller Transition Properties for Tc-100 Isotope by Pyatov Method

13.30 – 13.45 **Khalid H. Mahdi Aal-Shabeeb** (Karabük Un., Karabük, Türkiye)

Comparing the concentration of radon in the old and new residential houses in Karabük city/Türkiye using the passive method

13.45 – 14.00 **Lina Majeed Hayder Al-Haideri** (Baghdad Un., Baghdad, Iraq)

Obtaining the adsorption surfaces of some radioactive materials by DFT calculations

14.00 – 14.15 **Mohamed Juma Ali Mohamed** (Karabük Un., Karabük, Türkiye)

A New Method in Acute Myeloid Leukemia Malignancy Identification based on Neural Networks and Image Processing Methods

14.30 – 15.00 Closing Remarks