



KOCAELİ SCIENCE CONGRESS 2-4 OCTOBER 2024

CONGRESS PROGRAM

2 October 2024, WEDNESDAY

OPENING CEREMONY - Baki Komsuoğlu Kongre Merkezi

Time Zone (GMT+3)		ONLINE LINK
9 :00	REGISTRATION	
11:00	Ümüt AY - Opening speech by the congress president	
11:10	Nuh Zafer CANTÜRK - Speech by the rector of Kocaeli University	
11:20	Hafsa KORRI-YO USSOUFI - "Innovative biosensors and sensors devices for diagnosis and analysis"	
12:00	LUNCH	

CONGRESS SESSIONS - DAY 1 – Ahmet Yesevi Hall

KEYNOTES	Chair : Asgar KAYAN	ONLINE LINK
13:00	Keynote Speaker - Mustafa AKIN – "Veteriner uygulamalarında yağ bazlı aşı adjuvanları"	
13:15	Keynote Speaker - Mehmet Erdi ONAN – "UV Kürlenmeli Fonksiyonel Reçinelerin Sentezi"	
13:30	Keynote Speaker - Nagihan ÖZTÜRK – "Biyobazlı Polyester Reçine Geliştirilmesi"	
SESSION 1	Session Chair : Asgar KAYAN	ONLINE LINK
13:45	Önder ÇELİK - "Poly(ϵ -Caprolactone-co-Lactic Acid)/PEG – Lithium Salt Electrolytes For Lithium-Ion Batteries"	
14:00	Yusuf Can DEMİR – "A Study on the Performance of Photovoltaic Panels Dated April 6, 2023"	
14:15	Ceyhun KÜÇÜK – "Investigation of Electronic and Spectroscopic Properties of 2-(3-formyl-1H-indol-1-yl) propanoic acid Molecule, an Indole Derivative, Using Density Functional Theory (DFT)"	
14:30	COFFEE BREAK	
14:45	POSTER SESSION	
SESSION 2	Session Chair : Bahar KIRIK RÁCZ	ONLINE LINK
15:00	Bahar KIRIK RÁCZ – ""On Some Symmetries in 4-Dimensional Manifolds of Neutral Signature and Their Applications to Ricci Solitons"	
15:15	Lakshmi Narayan Mishra – "A comprehensive analysis for weakly singular nonlinear functional Volterra integral equations using discretization techniques"	
15:30	Lakshmi Narayan Mishra – "Approximation properties of residual neural networks for fractional differential equations"	
15:45	Munir Arslan – "Certain New Generalized Fractional Hermite-Hadamard Type Inequalities For Twice Differentiable Functions"	
16:00	Munir Arslan – "Some new parameterized fractional inequalities for hermite-hadamard type with application"	

SESSION 3	Session Chair : Arzu COŞKUN	ONLINE LINK
16:15	Arzu Coşkun - "The concept of 2-normed structures on soft vector spaces"	
16:30	Sadi Bayramov – “A innovative methodology for the analysis of hesitant fuzzy soft topological spaces”	
16:45	Murat SALDAMLİ – “On Bipolar Fuzzy Soft Clusters”	
17:00	Sneha Agarwal – “Characteristics of residual neural networks in approximating fractional differential equations”	
SESSION 4	Session Chair : İrem ÇAY	ONLINE LINK
17:15	Alice Antony – “The importance of residual neural networks lies in their ability to advance the study of fractional differential equations”	
17:30	Asia Shehzadi – “Advanced Euler-Maclaurin-Type Inequalities via Tempered Fractional Integrals: A Focus on Bounded Variation Functions”	
17:45	Wali Haider - "Tempered Fractional Integrals and Their Applications: New Euler-Maclaurin-Type Inequalities for Various Function Classes"	
18:15	Abdul Mateen – “Some Novel Weddle’s formula type inequalities for convex functions with their computational analysis on quantum calculus”	

3 OCTOBER 2024, THURSDAY

CONGRESS SESSIONS – DAY 2 – Ahmet Yesevi Hall

SESSION 5	Session Chair : Arzu COŞKUN	ONLINE LINK
9:30 (GMT+3)	Sadi Bayramov – “Analysing the symptoms of the ongoing pandemic caused by the SARS-CoV-2 virus, using the fuzzy soft-set theory”	
9:45	Hande POŞUL – “Some Properties of Soft A-metric Spaces”	
10:00	Zeynep DEMİREL – “Some Identities of the Generalized Fibonacci Hyperbolic Functions”	
10:15	İbrahim ŞANLIBABA – “Sufficiency calculation of neutrosophic fuzzy sets and their usage areas”	
10:30	Akbala YERNAZAR – “Inverse Coefficient Analysis in Semi-Linear Parabolic Heat Conduction Models”	
10:45	COFFEE BREAK	
KEYNOTES	Chair : Evrim GÜVEN	ONLINE LINK
11:00	Keynote Speaker - Turgay Seçkin – “Polybenzimidazole tabanlı yüksek sıcaklık PEM yakıt hücrelerinin tasarımı”	
SESSION 6	Session Chair : Evrim GÜVEN	ONLINE LINK
11:15	Fatih Hezenci – “Fractional Newton-type inequalities by using Bounded and Lipschitzian functions”	
11:30	Hasan Kara – “Fractional Newton-Type Inequalities for Twice Differentiable Convex Functions Using Riemann-Liouville Integrals”	
11:45	Akbala YERNAZAR - "Analytical and Computational Solutions for Nonlinear Hyperbolic Equations with Inverse Coefficient under Periodic Boundary Conditions"	
12:00	Akbala YERNAZAR - "Analysis of Inverse Coefficient Non Linear Pseudo-Hyperbolic Equation with Periodic Boundary Condition"	
12:15 -13:00	LUNCH	
SESSION 7	Session Chair : Hüseyin BUDAK	ONLINE LINK
13:00	Hüseyin Budak – “Weighted Generalizations of Some Fractional Integral Inequalities”	
13:15	Melisa Dervişoğlu – “Lacunary Statistical Convergence of Soft Point Sequences”	
13:30	Zahira Khettab – “Nonparametric estimation of spectral density functions of sample covariance matrices with correlated entries”	
13:45	Laxmi Rathour – “A Green Solid Capacitated Transportation System in the Decomposed Pythagorean Fuzzy Configuration”	
14:00	Ayesha Sadiqa – “Numerical Solutions of Higher-Order Differential Equations by the Laguerre Collection Method”	
14:15	COFFEE BREAK	

KEYNOTES	Chair : Özlem AKSOY	ONLINE LINK
14:30	Keynote Speaker - Aliye ARAS – “Kenevirin Geleceği: Türkiye’deki Araştırma ve Geliştirme (Ar-Ge) Çalışmaları”	
SESSION 8	Session Chair : Özlem AKSOY	ONLINE LINK
14:45	Esin Güvenir Celik – “Ruxolitinib inhibits colony formation in Tamoxifen-resistant BT474 breast cancer cell line”	
15:00	Syed Zaheer ud Din – “Comparative RNA-expression meta-analysis of antennae and leg appendages in insects and the impact of distal-less (Dll) gene knockdown on appendages in (broad-horned flour beetle) <i>Gnathocerus cornutus</i> ”	
15:15	Abdulsalam Redhwan – “Effects of Gibberellic Acid and Kinetin Treatments on In vitro Seedling Development, Total Phenolic Substance, and Flavonoid Contents in Arugula”	
15:30	Vishnu Narayan Mishra – “Bivariate Generalization of Durrmeyer operators based on beta function”	
SESSION 9	Session Chair : İlim Kişi	ONLINE LINK
15:45	Artion Kashuri – “Novel Fractional Integral Inequalities of Bullen-Mercer Type Pertaining to Differentiable Convex Functions with Applications”	
16:00	Muhammad Zakria Javed – “Error Bounadries of Newton-Cotes Schemes Based on m-Convex Functions”	
16:15	Rakesh Manilal Patel – “Behaviour of Deformable Elliptical Plates with Micropolar Fluids”	
16:30	Murat Bayram – “Comparative Analysis of BB84 and E91 Quantum Cryptography Protocols”	
SESSION 10	Session Chair : Aylin BAYRAK	ONLINE LINK
16:45	Usama Asif – “Development of Fractional Ostrowski-Mercer Type Inequalities Involving s-Convex Function”	
17:00	Muhammad Salihu Isa – “Reliability Estimation of Five Reboot Delay Configurations with Warm and Cold Standby Units”	
17:15	Muhammad Abdul Basit – “Mathematical Modelling of Bio-Convective Casson nanofluid flow over a curved stretching surface subject to thermal radiation and chemical reaction”	
17:30	BEWAR SALAHADDEEN FAREEQ – “A New Approach for the Solution of Space Fractional Navier-Stokes Equations by the Homotopy Analysis Method and Residual Power Series Method”	
SESSION 11	Session Chair : Banu PAZAR VAROL	ONLINE LINK
17:45	Ali Turab – “Analyzing Animal Behavior Through Functional Equations: Mathematical Modeling and Machine Learning Approaches”	
18:00	Muhammed Toseef – “Error Bounds of Boole's formula for twice differentiable convex functions with their computational analysis”	
18:15	Ramsha Shafqat “Mathematical Modeling of Polio Transmission and Hospitalization with the Effects of Vaccination using a Modified ABC Fractional Operator and Artificial Neural Networks”	

4 OCTOBER 2024, FRIDAY

SESSION 12	Session Chair : Caner YALÇIN	ONLINE LINK
09:30	Şevval Taşdemir – “Electronic and optical properties of weyl semimetals”	
09:45	Muhammed Karabulut - “Analysis with Box-Behnken design for methyl blue dye removal by inorganic-organic hybrid containing tyrosine”	
10:00	Sebahat Yılmaz – “Investigation of Medical Cu Isotope Production in Accelerators”	
10:15	Chafik Abdelbasset – “Carbon dioxide sequestration into calcium carbonate using a novel carbonic anhydrase from camel (<i>Camelus dromedarius</i>)”	
10:30	İlker Dönmez – “The Effect of Dielectric Constant on Power Conversion Efficiency in P3HT-Based Organic and Hybrid Solar Cells”	
10:45	Şöhret Turhan – “Equation Containing Fractional Derivative and Periodic Boundary Condition”	
11:00	Elif Aslan – “Study of the Cross Section of the $^{133}\text{Cs}(p,3n)^{131}\text{Ba}$ Reaction for the Production of the Medical Isotope Ba-131”	
11:00 – 16:00	EXCURSION	
17:00	CLOSING CEREMONY	

