



**International Conference on Nonlinear Applied Analysis and Optimization  
(On the occasion of National Mathematics Day)**

**December 21-23, 2021**

**(Via online mode)**



## List of Accepted Abstracts

Sr.no	Name	Title
1.	Sneha Garg	Zipper Rational Trigonometric Fractal Interpolation.
2.	Prabhu S	A Comprehensive Study on Image Feature Extraction Techniques.
3.	Puna Ram Sahu	A New Type of Pythagorean Fuzzy Relations
4.	K. Mahalik	Solvability of the System of implicit generalized order complementarity problems.
5.	Akash Pradhan	Pythagorean Fuzzy Relation Equations and New Composition For Pythagorean Fuzzy Relations
6.	Ankit Kumar Nain	On Unique Positive solution of Hadamard fractional Differential Equation involving $p$ -Laplacian.
7.	Ankita Panwar	Qualitative and Quantitative Assessment of Hostel and mess facilities
8.	Basharat Hussain	A Collocation Method for Solving Proportional Delay Riccati Differential Equations of Fractional Order
9.	Bidhan Modok	A bootstrap Control chart for Beta percentiles.
10.	Jauny	Multi-objective Environmentally Friendly and Economically Feasible Electric Power Distribution Problem with Primal-Dual Interior-Point Method.

11.	Kanika	Implicit Hilfer Fractional Differential Equations with Non-local Boundary Conditions
12.	Mohd Asad	Strong Convergence Algorithm for the Split Problem of Variational Inclusions, Split Generalized Equilibrium Problem and Fixed Point Problem
13.	T.M.C. Priyanka	Fractional Operator Associated with the Fractal Integral of a-fractal function
14.	Subhash Chandra	On the Box Dimension of mixed Riemann-Liouville fractional Integral.
15.	Vivek Dhingra	Parametric prospective for a nondifferentiable class consisting a vector of quotients of functionals of curvilinear integral type with cone constraints.
16.	Tirth Ram	On Nonsmooth Univex Functions and Vector Variational- like inequality problems .
17.	Shikher Sharma	Splitting algorithms for solving inclusion problems on Hadamard manifolds with applications.
18.	Saroj Kumar Sahoo	Price penalty factor-based approach for the solution of combined economic emission dispatch problem by hybrid moth flame optimization algorithm.
19.	Supriya Mukherjee	A New approach towards Solution of generalised KdV Burgers Kuramoto Equation using Bernstein Polynomials.
20.	Kaushik Dehingia	Hopf bifurcation analysis of a tumor-immune interaction delay differential model.
21.	Alamgir Hossain	Dimensions of the Attractors corresponding to the Product iterated function systems.
22.	MD Arzoo Jamal	Fixed-time Stability of Dynamical systems with impulsive effects.
23.	M.U.Khairiowala	Inertial type Krasnoselski-Mann iterative method for finding a common solution of split monotone variational inclusion problem and hierarchical fixed point problem
24.	N.K.Singh	Iterative Learning Control for a Class of Switched Discrete-Time Systems with Model Uncertainties, External Noises and Time-Delay

25.	Nirmala Veeramanni	Hybrid and Automated Segmentation Algorithm for Malignant Melanoma using Chain Codes and Active Contours
26.	Salsabeela V	A Similarity measure of Picture Fuzzy Soft Sets and its application
27.	Athira T M	Divergence Measures of Pythagorean Fuzzy Soft Sets
28.	Shashikant Kumar	A posteriori error estimation for quasilinear singularly perturbed problems with integral boundary condition
29.	Neha Trivedi	Interaction of three collinear cracks in a composite medium subjected to time-harmonic wave disturbance
30.	Vivek Laha	On mathematical programs with equilibrium constraints under data uncertainty
31.	Jayanta Biswas	A generalized rational type fixed point theorem in I-generalized metric spaces
32.	Fathima Perveen P.A	Algebraic Properties of Spherical Fuzzy Sets
33.	Sapna Baluni	Quasi projective synchronization of time varying delayed complex valued Cohen-Grossberg neural networks with mismatched parameters
34.	Himanshu Kumar Pandey	Fixed point theorems under rational contraction in $b_2$ -metric space
35.	Vishal Agrawal	A Note on Complex-valued Fractal Functions on the Sierpiński Gasket
36.	Manoj Kumar	Optimal Extension of the Fourier Transform and Convolution Operator on compact groups
37.	Kuldeep	An efficient finite difference method for coupled systems of singularly perturbed parabolic convection-diffusion problems
38.	Archana K. Prasad	Soft Almost $s$ -Regular and Soft Almost $s$ -Normal Spaces

39.	Archana Yadav	Common Fixed Point Theorems for Faintly Compatible And Subsequently continuous Mappings in Cone Metric Space
40.	Shagun Sharma	Existence of Best Proximity point with an application to nonlinear integral equations
41.	Sandhya S. Pai	A note on connectedness in soft $L$ -topological spaces
42.	Shilpa Samaddar	Effect of Nonlinear Prey Refuge on Predator-Prey Dynamics
43.	Uqba Rafat	Algorithm for Higher order Variational Inequalities in Hadamard Manifold
44.	Aparna Sivadas	Fermatean fuzzy interaction aggregation operators and their application to decision making
45.	Sanchari Ganguly	Pricing Policy with the effects of fairness concern, imprecise greenness and prices in a imprecise market for a dual channel
46.	K.Anitha	Fuzzy-Rough Optimization Technique for Breast Cancer Classification
47.	Rakhi Tiwari	Effects of Magnetic field and thermal conductivity variance on thermal excitation developed by laser pulses and thermal shock
48.	Anshika Tanwar	Study of interactions among three embedded cracks in an orthotropic material
49.	Jaya Bisht	Some new Integral Inequalities for Higher Order Strongly Exponentially Convex Functions
50.	Sunny Kumar	A study of Geometric Properties of Normed Linear space.
51.	Watanjeet Singh	Gornicki- Proinov type contractions in $S$ -metric spaces
52.	Madhubrata Bhattacharya	Time Series analysis of earthquake signals using Multifractal Detrended Fluctuation Analysis

53.	Manuj Verma	Fractal Dimension for a class of complex valued fractal interpolation functions.
54.	Megha Pandey	Dimensional analysis of Mixed Riemann-Liouville Fractional integral of vector-valued functions
55.	Sudipta Mishra	Modeling & Optimization of Multi-objective signomal Programming Problems
56.	R.Radha	Pentapartitioned Neutrosophic Pythagorean Dombi Aggregation operators and its application in multiple decision making problems
57.	MD Nazimul Islam	The area of Regions bounded by Fractal curves
58.	Kumari Jyoti	An Extended Car-Following Model Based on Collision Sensitivity and Backward Looking Effect
59.	Rita Pal	Application of Fixed Point Theorem in Digital Metric Space
60.	Ravindra Kumar Sharma	The Generalized Hyperstability of General Linear equations in Quasi-2-Banach space
61.	Sangeeta Mishra	Water Quality Analysis Using Fuzzy Logic Based Optimisation Techniques
62.	Yao-Te Huang	Linear angle preserves of Hilbert bundles
63.	Swapnil Verma	Some New Fixed Point Results on Interpolative Reich-Rus-Cirić and Hardy- Rogers type Contraction in Quasi-Partial b-Metric space
64.	Jhumpa Bhadra	Entropy oriented estimation of Remaining useful life of an engineering system as prognostic health indicator
65.	T.K.Pal	Usage of Fractals in Modeling Roughness of Fracture Surface to Develop a Fluid Flow Pattern using Lattice Boltzmann Method
66.	Nihar Kumar Mahato	On the solution of Generalized Proportional Hadamard Fractional Integral equations.

67.	Ankit Kumar	Global Exponential Stability of Takagi-Sugeno Fuzzy Cohen-Grossberg Neural Network with Time-varying Delays
68.	S S Ashraf	Implementation of a novel artificial intelligence cognitive mechanism for 'Social Humanoids'
69.	Abhik Digar	On Proximal Uniform Normal Structure
70.	Bethu Srikanth	ANN and RSM based Modeling of Moringa Stenopetala Seed Oil Extraction Process Optimization and Oil
71.	Chandramohan Bhuma	Parkinson Disease Detection from spirals and wave drawings using Sequential Model Selection
72.	Manisha Mukherjee	An SIS epidemic model with variable population and fear effect
73.	Kshitij Pandey	A glimpse into the theory of multivariate fractal approximation on some function spaces with mixed
74.	Sneha	A Pneumonia Detection Approach using Multiple Deep Neural Network
75.	Mohamed Zaway	Weak solution to the Complex Hessian equation associated to an $m$ -positive closed current
76.	Souad Chentout	Eigenvalue criteria for Existence or Non Existence of positive solution for fractional differential equation with integral condition
77.	Dmitry Ivakhnik	Optimization of the company's production program

### Important Notes

- (i) There will be a few awards for the “**Best paper presentation**”. Out of all the accepted abstracts, submit the full paper by Dec 10, 2021, the award will be based on “Innovation, Quality and Presentation Style of the paper”.
- (ii) Those candidates whose abstracts are not accepted, they can attend the conference by submitting the registration fee (if not submitted earlier).

- (iii) One, who has submitted the registration fee and his abstract is not accepted for presentation, can either attend the conference or can request for the refund addressed to “The Organising Chair, ICNAAO-2021” with reasons if not willing to attend the Conference by Dec 5, 2021. In that case he needs to email his bank details to [icnaao.iitbhu.2021@gmail.com](mailto:icnaao.iitbhu.2021@gmail.com).