Program Schedule

of

International Webinar on

CONTEMPORARY PROBLEMS ON MECHANICS AND VIBRATIONS (CPMV-2021)

MAY 20-22, 2021

Kindly join the webinar on Google meet link: https://meet.google.com/syx-skrn-pzp

Time	Event	Title
Day-1 (May 20, 2022) – Session I **(Chairperson: Dr. Santanu Koley)**		
10:00 AM – 10:30 AM	**I N A U G U R A T I O N O F T H E W E B I N A R**	
10:30 AM – 11:30 AM	**KEYNOTE 1** Prof. S. Gupta, IIT (ISM) Dhanbad, India	Torsional surface wave in non-homogeneous media
11:45 AM – 12:00 PM	Jyoti Kori	Mathematical Study of the Flow, Deposition and Filtration of Needle Prolate Nanoparticles from the Upper Generation of Human Lung
12:00 PM – 12:15 PM	Ananya Tripathy	New solitary solutions of the perturbed Fokas-Lenells equation with full nonlinearity
12:15 PM – 12:30 PM	Aradhana Mishra	On integration of i functions of several complex
12:30 PM – 12:45 PM	Basharat Hussain	An efficient approximation method for solving simultaneous proportional delay differential equations using Haar wavelet.
12:45 PM – 1:00 PM	Neetu Garg	Numerical simulation of multi-term time-fractional differential equations
1:00 PM – 2:30 PM	**L U N C H - B R E A K**	
Day-1 (May 20, 2022) – Session II **(Chairperson: Dr. Sumit Kumar Vishwakarma)**		
2:30 PM – 3:30 PM	**KEYNOTE 2:** Prof. Xu Runzhang, HEU, China	Kindly join this keynote talk titled "Global well-posedness of coupled parabolic systems" on Zoom in the link: https://zoom.us/j/96443951227?pwd=eGpkWEJJRk xsNUxWYWY0ck8yR0M0QT09 Meeting ID: 964 4395 1227 Passcode: Dsk4Kj
3:30 PM – 3:45 PM	Sowndarrajan P T	Analysis of optimal control of a system of tumor invasion model with nonlinear diffusion

Time	Event	Title
3:45 PM – 4:00 PM	Pratibha Verma	An Analytical Solution of Linear/Nonlinear Fractional-Order Partial Differential Equations and with New Existence and Uniqueness Conditions
4:00 PM – 4:15 PM	Kottala Panduranga	Wave trapping by a perforated semi-circular breakwater placed near a rigid wall using HOBEM
4:15 PM – 4:30 PM	Kshma Trivedi	Surface gravity waves scattering with floating poroelastic plate over variable bottom topography
4:30 PM – 4:45 PM	Nama Kumar Goswami	Qualitative Analysis of Dynamics of Japanese Encephalitis with Saturated Incidence and Saturated Treatment
4:45 PM – 5:00 PM	Pyare Lal	An optimised exploration on SWIR Gain of InAlGaAs/InP under Mathematical Modelling
5:00 PM – 5:15 PM	Gayathri P	The Impact of Electro-Magetohydrodynmics near Stagnation Regions
5:15 PM – 5:30 PM	Pooja Singh	Relation between Hypergeometric Function with Legendre Functions

Day-2 (May 21, 2022) – Session I
(Chairperson: Dr. Manish Kumar)

Time	Event	Title
10:00 AM – 11:00 AM	**KEYNOTE 3**: Prof. T. Sahoo, IIT, KGP, India	Mathematical challenges associated with blocking dynamics of flexural gravity waves
11:00 AM – 12:00 PM	**KEYNOTE 4**: Prof. S. Neelamani, KISR, Kuwait	Physical modeling aspects related to Wave-Structure interaction
12:00 PM – 12:15 PM	Chakravarthula S K Raju	Dissipative thermal convective flow in suspension of nanoparticles
12:15 PM – 12:30 PM	A. Ponmana Selvan	Hyers-Ulam stability of linear differential equation of higher order
12:30 PM – 12:45 PM	Venkateswarlu Malapati	Mathematical Examination of Laminar Mixed Convection Flow in an Inclined Channel in the Proximity of Time Periodic Boundary Conditions
12:45 PM – 1:00 PM	Pabitra Kumar Jena	Integral operators on the Bergman space
1:00 PM – 1:15 PM	Neha	A Study of Different Summability Methods of an Infinite series
1:15 PM – 2:30 PM	L U N C H B R E A K	

Day-2 (May 21, 2022) – Session II
(Chairperson: Dr. J. Jagan Mohan)

Time	Event	Title
2:30 PM – 3:30 PM	**KEYNOTE 5**: Prof. Peter Malischewsky, FSUJ, Germany	Surface waves
3:30 PM – 3:45 PM	Raghu Piska	Hybrid phase field damage model for the analysis of thick plates subjected to transverse loads
3:45 PM – 4:00 PM	Manju Rani	A hybrid approach for the formation control of multiple AUVs with leader-follower strategy
4:00 PM – 4:15 PM	Amandeep Kaur	Modelling of an elastic plate in the presence of uneven bottom

Time	Event	Title
4:15 PM – 4:30 PM	Rupinderjit Kaur	Modeling the mechanical vibrations of Rayleigh surface wave in a medium exhibiting heterogeneity as elementary transcendental functions of depth.
4:30 PM – 5:30 PM	**KEYNOTE 6:** Dr. Pawan Gupta, UMB, USA	Mathematical Modeling in Pharmaceutical Sciences – a case study

Day-3 (May 22, 2021) – Session I **(Chairperson: Dr. Nijjwal Karak)**		
Time	**Event**	**Title**
10:15 AM – 10:30 AM	Manish Kumar	A framework of linear canonical transforms on pseudo-differential operators and its application in engineering problems
10:30 AM – 10:45 AM	Tapas Ranjan Panigrahi	Love-type surface wave in a two-layered corrugated anisotropic model
10:45 AM – 11:00 AM	Vipin V	Parameter Estimation of Log-normal Distribution Based on Local Information
11:00 AM – 12:00 AM	**KEYNOTE 7** Prof. S. C. Martha, IIT, Ropar, India	Water Waves
12:00 PM – 2:30 PM	L U N C H B R E A K	
2:30 PM – 3:30 PM	**KEYNOTE 8** Dr. K. G. Vijay, IIT Madras, India	Water Waves
3:30 PM – 4:00 PM	V A L E D I C T O R Y - S E S S I O N	

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