CONIAPS XXVII

26th -28th October 2021 (ONLINE)

27th International Conference of International Academy of Physical Sciences

on

Recent Advances in Mathematical and Computational Optimizations (RAMCO-2021)

Teaching &
Research
in the inter-disciplinary areas

Organized by

School of Computational and Integrative Sciences, J.N.U., New Delhi-110067, India

in association with

International Academy of Physical Sciences (IAPS)

No Registration Fee

Audience: Students, Researchers, Faculty Members & Research Scholars

E-certificate* will be given to the registered participants after successful completion of the event and feedback form submission

*Submission of Feedback form is mandatory for receiving E-Certificate

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Zoom Link for Recent Advances in Mathematical and Computational Optimizations (RAMCO-2021)

Time: Oct 26, 2021 10:30 AM India Join Zoom Meeting
https://us02web.zoom.us/j/82419498613?pwd=TDl6Q2pTVjdjdkZ3R3RVV2RoeG5kZz09

Meeting ID: 824 1949 8613
Passcode: 098451

Event and Contact Details

Date: 26th -28th October 2021
CONTACT: +91- 9910136414 (GPS)
For any query please E-mail**:
jnuconiaps@gmail.com

☞ http://ccbb.jnu.ac.in/ramco21/

Online Venue:

SC&IS, JNU, New Delhi-110067, India

Dr Gajendra Pratap Singh (Program Chair & Convener),

School of Computational and Integrative Sciences, JNU, New Delhi, India
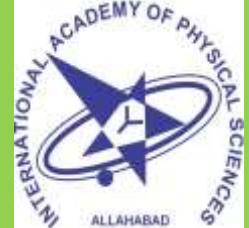
Program Details
Recent Advances in Mathematics and Computational Optimizations (RAMCO-2021)
26th–28th October 2021 (ONLINE)

CONIAPS XXVII

27th International Conference of iaps (online) on
Recent Advances in
Mathematical and Computational Optimizations (RAMCO-2021)
Jointly organized by
School of Computational and Integrative Sciences, JNU, New Delhi-110067
&
International Academy of Physical Sciences (IAPS)

26th –28th October 2021 (ONLINE)

GENERAL INSTRUCTIONS FOR THE PARTICIPANTS

Dear Participants/Friends,

Thank you for your registration to attend this Webinar. The webinar will be held on **Zoom App**. We request you to download the Zoom App on your laptop or mobile phone prior to start of the event. **The link is being shared in the mail.** We request you to kindly follow the instructions mentioned below for smooth conduction of the webinar:

☞ Join the webinar 15 minutes prior to the **session as per schedule and as per Indian time** (IST) **-** avoid last moment technical rush. The webinar shall start **sharp at 10:45 am (IST)** on **(Day 1).** Late comers may not be admitted!!! In case we exceed the capacity limit, participants may be asked to join via Facebook / YouTube, etc. The link will be shared through **RAMCO-2021** Whatapps group only.

☞ Please find the zoom android application link here
https//:play.google.com/store/apps/details?id=us.zoom.videomeetings&hl=en

☞ iPhone users can find zoom app link here https://apps.apple.com/in/app/zoom-cloud-meetings/id546505307

☞ For zoom tutorials use the link https://zoom.us/resources

☞ You will need a stable internet connection;

☞ If you are using **mobile phone or tab** to access the webinar you are requested to **install "Zoom cloud meetings"** from play store or app store. Click "**open**" Then click on the link provided and give necessary access permissions. Click **"Join a Meeting".** Enter **"Meeting ID".** Then click **"join Meeting".**

☞ If you are using the **laptop or desktop** then please **click on the link above** to join the webinar, give necessary access permissions and click on **"join Meeting".**

☞ Enter the meeting Room with your "Registered Name" only (You need to rename yourself to your Registered name - From the Zoom Room click on the "Participants" icon at the bottom of the window > Click the "Rename" button > Enter your new name in the "New Screen Name" field and be sure to have the "Remember my name for future meetings" checked >"OK".

☞ Use chat only when you have something to ask or Say.

☞ Don't type 'Good morning', 'Good Evening', Your Introduction and other greetings along with your affiliation in the CHATBOX.

☞ Kindly put your microphone on mute and switch off your camera throughout the session for an uninterrupted experience.

☞ Please note that upon joining, you will be automatically muted, which means, you can hear what the Speaker/hosts say but you will not be able to speak. If you wish to ask any question, please type in your **Q&A Tab which will be visible on your screens.** Request you to please keep it very professional and only ask questions related to the content of the webinar only.

☞ Questions related to the lecture can be posted in the chat box and shall be answered by the speaker at the end of the webinar.

☞ If you face issues in audio/video or any other technical issues, please check your system configurations as this app is very user friendly and should not have any major issues. Please ensure that your firewall does not block the app and the audio of your systems is not muted.

☞ Use headphones for better audio.

☞ You are requested not to share the link with others who have not registered for the webinar.

☞ **The participants who will attend the 3-day session of the conference and fill the feedback form will be provided with E-certificate.**

☞ Attendance will be strictly monitored by the organizing team. E-certificates will be awarded on the basis of that.

☞ In case of any queries you can get in touch with the ADMINS of RAMCO-2021 Whatapps group, or via phone call or whatsapp message to Dr Gajendra Pratap Singh +91 9910136414 or email: jnuconiaps@gmail.com

Note: The Participants are requested to observe patience regarding the E-certificate and kindly do not bother the organizers by constantly mailing and calling back.

We look forward to see you in Conference   Regards, Team Conference

Program Details
Recent Advances in Mathematics and Computational Optimizations (RAMCO-2021)
26th-28th October 2021 (ONLINE)

Distinguished Guests

Professor Rana Pratap Singh
(Pro-Vice Chancellor)
Jawaharlal Nehru University,
New Delhi-110067, India

Chief Guest	Guest of Honor	Guest of Honor
Professor S.K. Neogy, Indian Statistical Institute, New Delhi-110016, India	Professor H S Dhami (Former Vice Chancellor) Uttarakhand Residential University; Kumaun University, Nainital, India	Professor Avanish Kumar, Department of Mathematics, Bundelkhand University, Jhansi, U.P., India

Professor Binod Kumar Kanaujia
Dean, SC&IS, JNU

Dr. Gajendra Pratap
Singh(Convenor, RAMCO-
2021) SC&IS, JNU, India
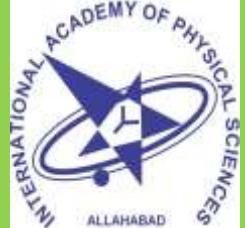
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Recent Advances in Mathematics and Computational Optimizations (RAMCO-2021)
26th-28th October 2021 (ONLINE)

Plenary Speakers

Dr. D. S. Hooda, Emeritus Professor, G.J. University, Hisar, India

Prof. Durgesh Nandini Sinha, Temple University (USA), Community College of Philadelphia

Prof S.K. Neogy, Indian Statistical Institute, New Delhi-110016, India

Prof. Nita H. Shah, (HOD, Mathematics, Gujarat University, Gujarat, India)

Prof Dmitry Zaitsev, Odessa State Environmental University, 15 Lvivska Str., Odessa, 65016, Ukraine (Dr.Sci., Professor, Senior Member of ACM and IEEE)

Professor Pankaj Gupta, Department of Operational Research, University of Delhi, Delhi, India

Professor V Sree Hari Rao, Foundation for Scientific Research and Technological Innovation, Hyderbad-500102, India

Professor Kusum Deep, Department of Mathematics, Indian Institute of Technology, Roorkee, U.K., India

Professor Vijay Gupta, Department of Mathematics, Netaji Subhas University of Technology, New Delhi, India

Professor Sangita Kansal, Department of Applied Mathematics, Delhi Technological University, Delhi, India

Professor Avanish Kumar, Department of Mathematics, Bundelkhand University, Jhansi, U.P., India

Professor Anu Gupta Aggarwal, Department of Operational Research, University of Delhi, Delhi, India

Prof. Sanjeev Kumar Department of Mathematics, (Dr. Bhimrao Ambedkar University, Agra), India

Professor Anuradha Sharma, Department of Mathematics, IIIT-Delhi, India

Professor Vusala Ambethkar, Department of Mathematics, University of Delhi, Delhi, India

Link for Day 1, Day 2, Day 3(October 26-28, 2021)

Gajendra Pratap Singh is inviting you to a scheduled Zoom meeting.

Topic: Recent Advances in Mathematical and Computational Optimizations (RAMCO-2021)

Time: Oct 26, 2021 10:30 AM India
Join Zoom Meeting
https://us02web.zoom.us/j/82419498613?pwd=TDl6Q2pTVjdjdkZ3R3RVV2RoeG5kZz09

Meeting ID: 824 1949 8613
Passcode: 098451
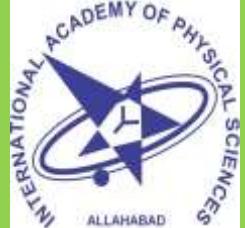
Eminent Invited Speakers

Prof. Albert Shikongo, Mathematical Science Department , University of Namibia	Prof Tandra Pal, Department of Computer Science and Engineering, National Institute of Technology, Durgapur, India	Professor A.K. Mohapatra, Department of Information Technology, IGDTUW, Delhi, India
Prof Devendra K. Tayal, Indira Gandhi Delhi Technical University for Women, Kashmere gate Campus, Govt. of NCT Delhi, Delhi, India	Professor Kajla Basu, Department of Mathematics, National Institute of Technology, Durgapur, India	Professor Anital Pal, Department of Mathematics, National Institute of Technology, Durgapur, India
Prof Samarjit Kar, Department of Mathematics, National Institute of Technology, Durgapur, India	Prof. Deepa Sinha, Department of Mathematics, South Asian University, New Delhi, India	Dr. Mukesh Kumar Mehlawat, Department of Operational Research, University of Delhi, Delhi, India
Professor H S Dhami (Former Vice Chancellor) Uttarakhand Residential University; Kumaun University, Nainital, India	Prof. Jagdish Chand Bansal, Department of Mathematics, South Asian University, New Delhi, India	Professor S. Ramanarayana Reddy, Department of Computer Science and Engineering, IGDTUW, Delhi, India
Professor Mansaf Alam, Department of Computer Science, Jamia Millia Islamia, New Delhi, India	Prof Tarkeshwwara Singh, Birla Institute of Technology, Goa Campus, Goa, India	Dr Prashant Kumar, Department of Applied Mathematics, National Institute of Technology, Delhi, India
Professor T.V. Vijay Kumar, School of Computer and System Sciences, Jawaharlal Nehru University, New Delhi, India	Dr. Shashi Kant Scientist C, National Weather Forecasting Centre O/o Director General Meteorology India Meteorological Department Mausam Bhawan, New Delhi, India	Prof. R.K. Brojen Singh, School of Computational and Integrative Sciences, JNU, India
Dr. Anurag Singh, Department of Computer Science and Engineering, National Institute of	Dr. Goutam Panigrahi, Department of	Dr, Ratneshwer, School of Computer & Systems Sciences, Jawaharlal Nehru
Dr. Kaushal Kumar, Department of Operational Research, Faculty of	Dr. Pratima Rai, Department of Mathematics, University of Delhi, India	Dr. Arunima Jaiswal, department of Computer Science and Engineering, IGDTUW, Delhi, India

Technology, Delhi, India	Mathematics, NIT Durgapur, India	University, New Delhi, INDIA	Mathematical Sciences, University of Delhi, Delhi, India		
Dr. Amita Sharma, Department of Mathematics, Netaji Subhas University of Technology, Delhi, India	Dr. Kumud Tripathi, Department of Computer Science & Engineering, National Institute of Technology Sikkim, Sikkim, India	Dr. Goonjan Jain, Department of Applied Mathematics, Delhi Technological University, Delhi, India	Dr. Anupam Gautam, Department of Mathematics, Netaji Subhas University of Technology, Delhi, India	Dr. Dhirendra Kumar, Department of Applied Mathematics, Delhi Technological University, Delhi, India	Dr.Gajendra Kumar Vishwakarma Department of Mathematics and Computing, IIT ISM, Dhanbad, India
Dr. Varun Kumar Professor, Department of Mathematics. College of Natural and Computational Sciences Aksum University, Axum , Ethiopia	Professor Sapna Ratan Shah, SCIS, JNU, New Delhi, India	Prof. Ebenezer Bonyah, Department of Mathematics and Statistics, Kumasi Technical University, Kumasi, Ghana, Department of Mathematics, Vaal University of Technology, Vanderbijlpark, South Africa	Dr Nanda Dulal Jana, Computer Science & Engineering Department of National Institute of Technology Durgapur, India	Dr. Sangram Ray, dept of Computer Science and Engineering, NIT Sikkim, Sikkim, India	Prof Manju Khari, SCSS, JNU, New Delhi, India
Dr. Neetu Gupta, Professor and Head, Department of Mathematics, YMCA, Faridabad, Haryana, India	Dr. Gajendra Pratap Singh, SC&IS, JNU, India				

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Recent Advances in Mathematics and Computational Optimizations (RAMCO-2021)
26th–28th October 2021 (ONLINE)

Program Schedule (RAMCO Day-1) Tuesday   10:45 a.m. – 08:00 pm (IST)   26 October 2021

Day 1 (26-October-2021), Tuesday
Inaugural Session and Opening Remarks (10:45am-11:45am IST time)

Time (IST)	Event/Activity	Speaker
10:45 am – 10:50 am	About the conference	Dr. Gajendra Pratap Singh, Convenor, RAMCO-2021, JNU, New Delhi, India
10:52 am – 11:00 am	Welcome address by	Prof. B.K. Kanaujia, (Dean, SC&IS), JNU, New Delhi, India/Prof. A. Krishnamachari, SCIS, JNU, New Delhi
11:02 am – 11:12 am	Address by Guests of Honour	Prof. H.S. Dhami, (Vice-President, IAPS, Pragraj, India)
11:14 am – 11:20 am		Dr. Avanish Kumar, Professor, Department of Mathematics, Bundelkhand University, Jhansi, U.P., India
11:22 am – 11:37 am	Inaugural Address by Chief Guest	Prof. Samir Kumar Neogy, Head, Indian Statistical Institute, Delhi Centre, India
11:39 am – 11:50 am	Presidential Address by	Prof. Rana Pratap Singh, Pro-Vice Chancellor, JNU, New Delhi
11:51 am – 11:55 am	Vote of Thanks	Dr. Gajendra Pratap Singh, SC&IS, JNU, New Delhi, India/Prof. Sapna Ratan Shah, SC&IS, JNU, New Delhi
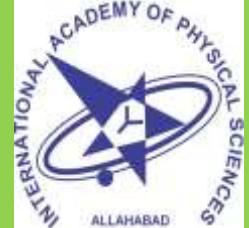
Program Details
Recent Advances in Mathematics and Computational Optimizations (RAMCO-2021)
26th-28th October 2021 (ONLINE)

Day 1 (26-Oct-2021) Tuesday	Technical Sessions	

Session-1 (Plenary Talk-1)
Chaired by: Professor T.V. Vijay Kumar, School of Computer and System Sciences, Jawaharlal Nehru University, New Delhi, India

| Time (IST)	Topic	Name of Speaker
12:00 pm - 12:35 pm	Sine Cosine Algorithm for Global Optimization	Professor Kusum Deep, Department of Mathematics, Indian Institute of Technology, Roorkee, U.K., India

Session-2 (Plenary Talk-2)
Chaired by: Professor T.V. Vijay Kumar, School of Computer and System Sciences, Jawaharlal Nehru University, New Delhi, India

Time (IST)	Topic	Name of Speaker
12:36 pm - 01:10 pm	Infinite Petri Nets	Prof Dmitry Zaitsev, Odessa State Environmental University, 15 Lvivska Str., Odessa, 65016, Ukraine (Dr.Sci., Professor, Senior Member of ACM and IEEE)

Break (01:10pm to 02:00pm)

Session-3 (Plenary Talk-3)
Chaired by: Dr. Sapna Ratan Shah, SCIS, JNU, New Delhi, India

Time (IST)	Topic	Name of Speaker
02:00 pm - 02:35 pm	Petri Nets and Reachability Applications	Dr. Gajendra Pratap Singh, SCIS, JNU, New Delhi-110067

Session-4 (Invited Talk-1)
Chaired by: Prof Manju Khari, SCSS, JNU, New Delhi, India

Time (IST)	Topic	Name of Speaker
02:36 pm - 03:10 pm	Metaheuristic Optimization	Professor T.V. Vijay Kumar, School of Computer and System Sciences, Jawaharlal Nehru University, New Delhi, India

Program Details
Recent Advances in Mathematics and Computational Optimizations (RAMCO-2021)
26th-28th October 2021 (ONLINE)

Session-5 (Plenary Talk-4)
Chaired by: Prof Manju Khari, SCSS, JNU, New Delhi, India

Time (IST)	Topic	Name of Speaker:
03:11 pm - 03:55 pm	Role of Management Reviews in Software Reliability	Professor Anu Gupta Aggarwal, Department of Operational Research, University of Delhi, Delhi, India

Session-6 (Invited Talk-2)
Chaired by: Professor Mansaf Alam, Department of Computer Science, Jamia Millia Islamia, New Delhi, India

Time (IST)	Topic	Name of Speaker:
03:56 pm - 04:25 pm	Applying Fuzzy Sets in Natural Language Processing Applications	Prof Devendra K. Tayal, Indira Gandhi Delhi Technical University for Women, Kashmere Gate Campus, Govt. of NCT Delhi, Delhi, India

Session-7
(Invited Talk-2)
Chaired by: Professor Mansaf Alam, Department of Computer Science, Jamia Millia Islamia, New Delhi, India

Time (IST)	Topic	Name of Speaker
03:56 pm - 04:25 pm	Challenges and issues in cyber security	Prof Manju Khari, SCSS, JNU, New Delhi, India

Session-7
(Invited Talk-3)
Chaired by: Professor Mansaf Alam, Department of Computer Science, Jamia Millia Islamia, New Delhi, India

Time (IST)	Topic	Name of Speaker
04:26 pm - 04:55 pm	An application of fuzzy and neutrosophic logic on an economic order quantity model	Professor Anital Pal, Department of Mathematics, National Institute of Technology, Durgapur, India

Parallel Sessions (Day 1) 5:00pm-7:30pm(IST)

Parallel Sessions P1   5:00pm-8:00pm(IST)

Day 1(26-Oct-2021)	Parallel Sessions Presentations followed by Invited Talks	Coordinator Names:	Session Chairperson(s):
		Dr. Neha Bhardwaj, Amity University Noida, India Mobile no. +91-9560102707 E-mail: nbhardwaj1@amity.edu	Dr. Sanjay Kango, Department of Mathematics, Government College Barsar, Hamirpur, HP, India, E-mail: skkango72@gmail.com Mobile no. +91-9418158892 Dr. Ramesh Chand, Department of Mathematics, Government College Nupur, Kangra, HP, India E-mail: rameshnahan@yahoo.com
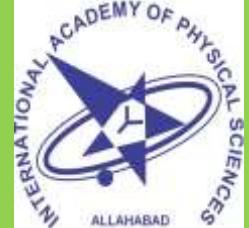
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Time (IST)			Time(IST)	Title of Talk	Speaker(s) Name
	Parallel Session P1:	Speaker 1: (IT-4)	05:00pm-5:25 pm	Application of Mathematics and statistics in weather forecasting, meteorology and other allied areas	Dr. Shashi Kant, Scientist C, National Weather Forecasting Centre Meteorological Department Mausam Bhawan, New Delhi, India
		Speaker 2: (IT-5)	05:26pm-5:50 pm	Performance Analysis of DRX Mechanism in LTE-A Networks using Markov Modeling	Dr. Anupam Gautam, Department of Mathematics, Netaji Subhas University of Technology, Delhi, India

	S.No.	Paper Code	Time	Presenter's Names	Title
05:00 pm - 08:00 pm	1	AMATH/001		Dr.K.Kalaiarasi	ORDER SUBSTITUTE FUZZY MODEL EOQ TO REDUCE REPLACEMENT
	2	AMATH/002		Anju Khandelwal	The Computational Algorithm for Employee Recruitment Process
	3	AMATH/003	**(05:50 pm to 08:00 pm)**	DR. EKATA	Reliability Measures of Two Dissimilar Units Connected by a Switch Using Neural Networks Approach
	4	AMATH/004		Shavitha M	THE COMPARATIVE STUDY OF PRODUCTION-USING FUZZY INVENTORY MODEL FOR DETERMINING EFFECTIVE PRODUCTION QUANTITY AND SAFETY STOCK LEVEL
	5	AMATH/005		Jenitha Vinnarasi R	Improved Correlation Coefficients of Intuitionistic Fuzzy Sets for MADM
	6	AMATH/006		M.Hymavathi	Mittage leffler stability of fractional order fuzzy neural networks
	7	AMATH/007	**Presentation Duration 7min**	Dr. Abhishek Mehta	A Mathematical Techniques for Fast Image Restoration Algorithm Based on a Fixed Point and Optimization Method
	8	AMATH/008		Vineet Kumar	Solution of Pythagorean Fuzzy Linear Programming Problem by using Similarity Measure
	9	AMATH/009		Surbhi Gupta	Reliability Evaluation of fire Alarm Control Panel containing PESD and ISD
	10	AMATH/010		Dr Anshu Malhotra	An Algorithmic approach for detection of S-consistency in Common-Edge Sigraph and its application in Matrix Encryption and Decryption
	11	AMATH/011		Sunil Kumar Sahoo	Use of Mathematical Finance in Asset and Liability Management
	12	AMATH/012		Vivek Kumar	Stochastic Debugging Process based Reliability Growth Model for Open Source Software Project
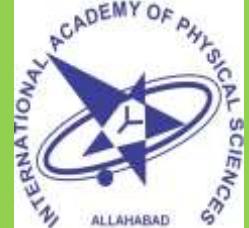
13	AMATH/013	Abdussalam Ali Ahmed	Simulation Research on Vehicle Handling and Stability Enhancement Based on PID Control Technology
14	AMATH/014	Shipra Chauhan	Existence and stability of the equilibrium points in the Robe's-Finite straight segment model
15	AMATH/015	Dr. Rahidas Kumar	Direct Numerical Approaches on Linear Optimization Problems for Analytical Solution
16	AMATH/016	Deepti	Analytical study of radiation absorption effect on unsteady MHD free convection flow past a periodically accelerated plate with variable temperature
17	AMATH/017	A.Sivagama sundari	Sustainable medical supply chain network during pandemic by using fuzzy inventory
18	AMATH/018	Dr Archana Sharma	Optimal Inventory Policy for deteriorating items under inflation with stock-dependent demand
19	AMATH/019	Bilal Ahmad Bhat	A NOTE ON KARLSSON-SRIVASTAVA TERMINATING SERIES 3F2(1) AND 3F2(1/2) WITH APLLICATIONS
20	AMATH/020	Bharti Chauhan	Extended Generalized t-Guass Hypergeometric Functions and its Applications
21	AMATH/020	Sumit Kumar	Finite straight segment model of Robe's restricted three-body problem under the effect of viscosity.
22	AMATH/020	Kavita Arora	A Biochemical Study of enzymatic biosensor using system of non-linear equations

Parallel Sessions P2   5:00pm-8:00pm(IST)

Day 1(26-Oct-2021)	Parallel Sessions Presentations followed by Invited Talks	Coordinator Names:	Session Chairperson(s):
		Dr Ratneshwer, SCSS, JNU, India E-mail: ratneshwer@gmail.com Mobile no. +91-9450533296	Dr. Neetu Gupta, Professor and Head, Department of Mathematics, YMCA, Faridabad, Haryana, India E-mail: neetuymca@yahoo.co.in, neetuymca@gmail.com +91-9953505828 Dr. Sanjay Yadav, Department of Mathematics, North Cap University, Gurugaon, Haryana, India E-mail sanjayyaday@ncuindia.edu

Program Details

Recent Advances in Mathematics and Computational Optimizations (RAMCO-2021)
26th-28th October 2021 (ONLINE)

Mobile no. +91-9818767542

Time (IST)			Time(IST)	Title of Talk	Speaker(s) Name
05:00 pm - 08:00 pm	Parallel Session P2:	Speaker 1: (IT-5)	05:00pm-5:25 pm	Fitted mesh finite difference scheme for singularly perturbed delay differential equations	Dr. Pratima Rai, Department of Mathematics, University of Delhi, India
		Speaker 2: (IT-7)	05:26pm-5:50 pm	Performance analysis of Queueing theory	Dr. Neetu Gupta, Professor and Head, Department of Mathematics, YMCA, Faridabad, Haryana, India

S.No.	Paper Code	Time	Presenter's Name	Title
1	MATH/001		Ajay Sharma	Fractional Differential Equations with Hilfer-Hadamard Fractional Derivative
2	MATH/002		Pratibha Manohar	Generalized Differential Transform for Caputo-Katugampola Fractional Order Circuits
3	MATH/003	(05:50 pm to 08:00 pm)	Amit Kumar	Lie symmetry Analysis for obtaining the Analytical wave solutions and dynamics of solitons of the (3+1)–dimensional generalized KP equation
4	MATH/004		R. Radha	Generalized Pre-closed Sets in Pentapartitioned Neutrosophic Pythagorean Topogical Spaces
5	MATH/005		Lata Chanchlani	On Katugampola Fractional q-Integral and q -Derivative
6	MATH/006		Faizan Ahmad Khan	A Class of Random Generalized Variational-like Inclusion with Random Fuzzy Mappings
7	MATH/007		Mohd Iqbal	$H(., ., ., .)$-ϕ- η-COCOERCIVE OPERATOR WITH AN APPLICATION TO VARIATIONAL INCLUSIONS
8	MATH/008	Presentation Duration 7min	Javid Majid	A CLASS OF EXTENSIONS AND GENERALIZATIONS OF K\"{U}MMER'S THIRD SUMMATION THEOREM
9	MATH/009		Hemant Kumar	On Multiple Hurwitz-Lerch Type Zeta Function and Lauricella Function
10	MATH/010		Surbhi Beniwal	Tensor products of local operator systems
11	MATH/011		Deepak Tiwari	A STUDY ON THE NON-ASSOCIATIVE RINGS AND DEVELOPMENTS
12	MATH/012		P. Elavarasan	On K𝑔̂𝑠̂* Closed Set
13	MATH/013		M Fareeda Banu	On Weak B-bi regular in bi-near subtraction semigroup
14	MATH/014		DEVENDRA KUMAR	A Linear and Nonlinear Study Of Soret Driven Instability In Darcy Oldroyd-B Nanofluid
15	MATH/015		ANAND KUMAR	A SPECIAL TYPE OF OPERATOR CALLED (4,2)- JECTION

	16	MATH/016	Iqbal Kour	Normal families of holomorphic functions of several complex variables
	17	MATH/017	Yashwant Kumar Panwar	On Some Identities of Bivariate Fibonacci and Bivariate Lucas Polynomials
	18	MATH/018	Krithika V	On fuzzy semi open sets
	19	MATH/019	M Fareeda Banu	Strong Bi-ideals in Bi-near Subtraction Semigroup
	20	MATH/020	ANKIT MAURYA	STUDY ON SEMI –SYMMETRIC CONTACT RIEMANNIAN MANIFOLD
05:00	21	MATH/021	Anita	Certain Definite Integral associated to Complete Elliptical Integral

Parallel Sessions P3   5:00pm-8:00pm(IST)

Day 1(26-Oct-2021)	Parallel Sessions Presentations followed by Invited Talks	Coordinator Names:	Session Chairperson(s):
		Dr. Ashwani Kumar, School of Engineering, JNU, New Delhi, India E-mail: ashwanikumar@mail.jnu.ac.in ashwanikumar7@yahoo.com Mobile no. +91-9999654486	Dr. Randheer Singh, Department of Mathematics, University of Delhi, Delhi-110007, India E-mail: randheernsit@gmail.com Mobile no. +91-9716482186 Dr. Pramod S. Nair Professor & Head Department of Computer Science and Engineering Medi-Caps University. Indore, M. P. India E-mail: pramods.nair@medicaps.ac.in hodcse@medicaps.ac.in Mobile: +91-9179197691

Time (IST)			Time(IST)	Title of Talk	Speaker(s) Name
	Parallel Session P3:	Speaker 1: (IT-8)	05:00pm-5:25 pm	Bias-corrected intuitionistic fuzzy c-means with spatial neighborhood information approach for human brain MRI image segmentation	Dr. Dhirendra Kumar, Department of Applied Mathematics, Delhi Technological University, Delhi, India
05:00		Speaker 2: (IT-9)	05:26pm-2:50	Gene Expression Data Analysis Using Bayesian	Dr. Gajendra Kumar Vishwakarma Department of Mathematics and
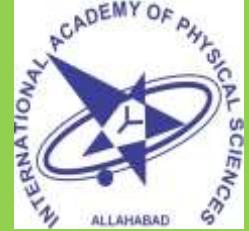
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pm - 08:00 pm			pm	State-Space Modeling	Computing, IIT ISM, Dhanbad, India
	S.No.	**Paper Code**	**Time**	**Presenter's Name**	**Title**
	1	MATH/022		Aruna Sakthi K	R-LUCKY LABELING OF SOME ALGEBRAIC GRAPHS
	2	MATH/023	**(05:50 pm to 08:00 pm)**	Nishant	Applications of Redundant System in Science and Technology
	3	MATH/024		Ved Nath Jha	Extinction Ratio and its effect on the Nonlinearity in Optical Fiber Networks
	4	MATH/025		Bhavneet Kaur	Perturbed Robe-Finite Straight Segment model with arbitrary density parameter
	5	MATH/026		DINESH KUMAR	Effect of straight segment on the restricted problem of 2+2 bodies
	6	MATH/027		R.Radha	Pentapartitioned Neutrosophic Pythagorean Pre-open Sets
	7	MATH/028		PANKAJ KUMAR BHARTI	Flow Between Parallel Plates for Non-NewtonianFluids
	8	MATH/029	**Presentation Duration 7min**	Baljinder Kour	Analysis of generalized form of fractional KdV system for analytic solution and conservation laws
	9	MATH/030		Harindri Chaudhary	Controlling Hyperchaos in Non-Identical Systems via Active Combination-Combination Synchronization
	10	MATH/031		SANJEEV GUPTA	Generalized systems of relaxed cocoercive variational inequalities
	11	MATH/032		Samina Boxwala	Some Bounds For Product Dimension of a class of Trees
	12	MATH/033		KAPIL SHANKAR GAUR	CYCLIC GENERALIZED REED MULLER CODE
	13	MATH/034		ANURAG KUMAR	A modified fifth order shock capturing scheme for hyperbolic conservation laws
	14	MATH/035		Savita Panwar	Multi-Indexed Whittaker Function and Its Properties
	15	MATH/036		Pradeep Kumar Singh	Binary Adaptive Differential Transform Method and Application to linear Differential Equation
	16	MATH/037		Ashish Kumar Pandey	ON POLYGONAL MERSENNE AND POLYGONAL FERMAT NUMBERS
	17	MATH/038		Yashwant Kumar Panwar	Sums and Product of New Generalization of Fibonacci and Lucas Sequences
	18	MATH/039		L. M. Angadi	Wavelet Based Full Approximation Scheme for the Numerical Solution of Non-linear Parabolic Partial Differential Equations
	19	MATH/040		Nirjala T Sarode	Study of Fractional Differential Equation and Its Applications
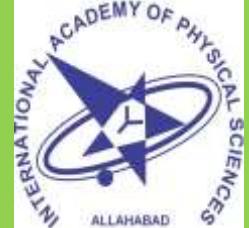
20	MATH/041	Neha Bhardwaj	Approximation properties of King type modified p,q Bernstein Schrurer operators
21	MATH/042	TAFAZ UL RAHMAN SHAH	ANALYTICAL SOLUTIONS OF SOME TYPICAL DEFINITE INTEGRALS USING HYPERGEOMETRIC APPROACH

Parallel Sessions P4   5:00pm-8:00pm(IST)

Day 1(26-Oct-2021)	Parallel Sessions Presentations followed by Invited Talks	Coordinator Names:	Session Chairperson(s):
		Dr. Sumit Kaur Bhatia, Amity University Noida, UP, India E-mail: skbhatia@amity.edu Mobile no. +91-9650535278	Dr. Anubhav kumar Professor, Computer Science Department, EITM, Mekelle University, Mekelle Ethopia E-mail: ds.dranubhakumar@kumar.gmail.com Mobile no. +91-8826369360 Dr. Pratap Narayan Pathak Professor, Department of Mathematics. Axis College, Kanpur, India. E-mail: pnpathak71@gmail.com Phone no. +919956441064

Time (IST)			Time(IST)	Title of Talk	Speaker(s) Name
	Parallel Session P4:	Speaker 1: (IT-10)	05:00pm-5:25 pm	Natural Language Processing	Dr. Goonjan Jain, Department of Applied Mathematics, Delhi Technological University, Delhi, India
		Speaker 2: (IT-11)	05:26pm-5:50 pm	Artificially Intelligent Approach to Speech Recognition in Multilingual and Multimode Environment	Dr. Kumud Tripathi, Department of Computer Science & Engineering, National Institute of Technology Sikkim, Sikkim, India

05:00 pm - 08:00 pm	S.No.	Paper Code	Time	Presenter's Name	Title
	1	CSIT/001		Silky Sharma	Artificial Intelligence applications in higher education 4.0
	2	CSIT/002		Rajni Goel	Inferences for joint type-II censored k populations
	3	CSIT/003	(05:50 pm to 08:00 pm)	Abhishek Rajeshkumar Mehta	Advances in mathematical morphology applied to geoscience and remote sensing
	4	CSIT/004		P.Rizwan Ahmed	Verification of Data Integrity Using Distributed Machine Learning Algorithms

5	CSIT/005		P.Rizwan Ahmed	Data integrity verification techniques in the cloud computing environment using block chain technology
6	CSIT/006		Vinod Kumar	ECC based Secure Authenticated Framework for Cloud-TMIS Networking
7	CSIT/007		Varun Shukla	A New Authentication Method Using Random Image Decomposition: Replacements of Passwords
8	CSIT/008		Prabhat Kumar	How do optimizers influence the deep learning model's behavioral patterns?
9	CSIT/009	**Presentation Duration 7min**	Akhilesh Kumar	EEG Signal-based emotion recognition using Machine Learning Algorithm
10	CSIT/010		Javed Azmi	An investigation into application of machine learning techniques in healthcare
11	CSIT/011		Jivyanshu Priya	Quantum Computation and Quantum Algorithms
12	CSIT/012		Suman Sindhwani	Thermal Instability in a Couple Stress Nanofluid in presence of vertical magnetic field
13	CSIT/013		Hiten Sachan	Predicting Academic Outcomes of Students Enrolled in an Open University using Machine Learning
14	CSIT/014		Bunty Virwani	Web-Page Phishing Detection using Machine Learning
15	CSIT/015		Shazmeen Shamsi	Symptom-based Diagnosis of Covid-19, Cold, Flu and Allergy using Machine Learning
16	CSIT/016		Vikas Mittal	Artificial Intelligence for Flood Warning Systems
17	CSIT/017		S. Karthik	POWER QUALITY IMPROVEMENT BY PV INTEGRATED UPQC USING MULTI-LEVEL INVERTER WITH AI NETWORK
18	CSIT/018		Sumit Kumar	Deep Learning for Biomedical Image Analysis
19	CSIT/019		Shailender Singh	Deep Learning for Crop Disease Detection
20	CSIT/020		S. Nithyashree	Implementation of smart rescue robot
21	CSIT/021		Ajay Kumar	Reliability Measures Analysis of Computing Machines using Stochastic Process Subject to Hardware Failure under Server Arrival Facility
22	CSIT/022		Rajesh Yad	CYCLE-2021 A TRENDING COMPREHENSIVE YEAR OF CLOUD AND EDGE COMPUTING

Parallel Sessions P5   5:00pm-8:00pm(IST)

| Day 1(26-Oct-2021) | Parallel Sessions Presentations followed by Invited Talks | Coordinator Names: Dr. Mukesh Kumar Khandelwal, School of Engineering, JNU, New Delhi, India E-mail: mukeshkhandelwal@mail.jnu.ac.in mukesh.khandelwal89@ieee.org | Session Chairperson(s): Dr. Mukesh Kumar Giluka, School of Engineering, JNU, New Delhi, India E-mail: mkgiluka@mail.jnu.ac.in gilukagiluka@gmail.com |

Program Details

Recent Advances in Mathematics and Computational Optimizations (RAMCO-2021)
26th-28th October 2021 (ONLINE)

Mobile no. +91-9015580922

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Time (IST)		Time(IST)	Title of Talk	Speaker(s) Name
Parallel Session P5:	Speaker 1: (IT-12)	05:00pm-5:25 pm	Mathematical Modelling of Biological System	Dr. Sapna Ratan Shah, SCIS, JNU, New Delhi, India
	Speaker 2: (IT-13)	05:26pm-5:50 pm		.....

S.No.	Paper Code	Time	Presenter's Name	Title
1	PCBMS/001		ROHIT RASTOGI	Examining Effects of Electronic Gadgets Agnihotra: 21st Century New Paradigm shift for Healthcare 4.0 and Smart Cities Perspective
2	PCBMS/002		GAURAV VERMA	Pressure Analysis of Spherical Shell By using Generalized Strain Measures
3	PCBMS/003		Kamala Kumar Pradhan	THERMAL ANALYSIS OF NANOFLUID PAST ON AN IMPERMEABLE STRETCHING SURFACE DUE TO THE REVISED MODEL OF NANOPARTICLE CONCENTRATION
4	PCBMS/004	(05:50 pm to 08:00 pm)	SHEELU SAGAR	SURYA NAMASKAR (SUN SALUTATION): A NOVEL APPROACH FOR QUALITY OF LIFE OF MANAGERS AND FOR PRODUCTIVE DYNAMICS FROM HEALTH CARE 4.0 PERSPECTIVE.
5	PCBMS/005		Drishti	ANALYSIS OF A BUTTER CHURNER AND CONTINUOUS BUTTER MAKING USED IN A MILK PLANT
6	PCBMS/006		M Nirmala	Ambient Air Quality Analysis based on Air Quality Index
7	PCBMS/007		Sumit Kaur Bhatia	SVEIR Model with Immigration: Dynamical Analysis
8	PCBMS/008	Presentation Duration 7min	Prerna Sharma	Statistical Approximation by differences of some variants of Lupus Operators
9	PCBMS/009		Muneshwar Hembram	LRS Bianchi I Model with a Variable Λ-term in Self-Creation Theory of Gravitation in General Relativity
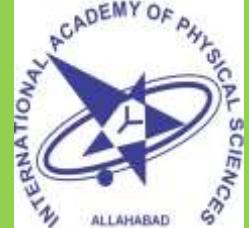
Time (IST) 05:00 pm - 08:00 pm

10	PCBMS/010	YOGESH DADHICH	Magnetized Dissipative Soret Effect on ChemicallyReactive Sisko Fluid over a Exponential Stretching Sheet
11	PCBMS/011	KANAK MODI	Truncated Geometric-Kumaraswamy Mixture Distribution: Properties and Application
12	PCBMS/012	Aditya Kumar Pati	Modelling of Heat and Mass Transfer in Stagnation Point Nanofluid Flow towards an Exponentially Stretching Sheet with Nanoparticle Electrification and Viscous Dissipation
13	PCBMS/013	Pankaj Kumar Agarwal	Mathematical Modelling and the Development of the Optimization Technique for the Stability Analysis of Earthen Slopes.
14	PCBMS/014	Priya Mathur	Analytical approach on the water-based nanofluid for the influence of dissipative heat energy
15	PCBMS/015	Rojalin Pattnaik	IMPACT OF NANOPARTICLE ELECTRIFICATION AND VISCOUS DISSIPATION ON RADIATIVE NANOFLUID FLOW WITH HEAT TRANSFER OVER A NON-LINEAR PERMEABLE STRETCHING SHEET
16	PCBMS/016	Akhilesh Kumar Singh	A Dynamic and Differential Mathematical Model(DDMM) for Covid-19 in India : Dynamic and Sensitive Analysis, Behaviour Prediction, Issues and Optimal Solution
17	PCBMS/017	Mrs. Saraswati	Effect of Heat Transfer on Peristaltic Mechanism of a Non-Newtonian fluid in an Inclined Elastic Tube with Porous Walls
18	PCBMS/018	Vijay Sahu	Dielectric Study of Soil and Physiochemical Properties
19	PCBMS/019	Neeti Tandon	Analyzing Statistically the Happiness Through Alternative Therapies : Yagya and Mantra, A Boon From Indian Vedic Science
20			

Parallel Sessions P6   5:00pm-8:00pm(IST)

Day 1(26-Oct-2021)	Parallel Sessions Presentations followed by Invited Talks	Coordinator Names:	Session Chairperson(s):
		Dr. Ritu Gupta, Amity University Noida, UP, India E-mail: rgupta@amity.edu Mobile no. +91-8742973371	Dr. Rambir Singh Visiting Professor, College of Post Harvest Technology Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut E-mail: rambir29@gmail.com Mobile no. +91-9456833548

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Mobile no. +91-9654669005

Time (IST)			Time(IST)	Title of Talk	Speaker(s) Name
05:00 pm - 08:00 pm	Parallel Session P6:	Speaker 1: (IT-14)	05:00pm-5:35 pm	Modern Optimization Techniques: Principles and Applications	Dr Nanda Dulal Jana, Computer Science & Engineering Department of National Institute of Technology Durgapur, India
		Speaker 2: (IT-15)	05:35pm-6:05 pm	To be announced	Dr. Arunima Jaiswal, Department of Computer Science and Engineering, IGDTUW, Delhi, India

S.No.	Paper Code	Time	Presenter's Name	Title
1	PCB/001		Ankur Srivastava	Electrochemical dopamine biosensor based on Au doped La2O3 nanocomposites
2	PCB/002	(05:50 pm to 08:00 pm)	Divya Mishra	TRANSCRIPTOME PROFILING TO IDENTIFY AND VALIDATE THERAPEUTIC BIOMARKERS FOR PROGNOSIS PREDICTION IN COLORECTAL CANCER
3	PCB/003		shraddha vishwakarma	Subtractive gene analysis of Bovine involved in biological pathway and gene network
4	PCB/004		Durgesh N Sinha	Dynamic Mathematical Modeling of Hepatitis C Virus infection
5	PCB/005		Ram Nayan Verma	Identification of key proteins in host pathogen interactions between homo sapiens and mycobacterium tuberculosis: A network theoretical approach
6	PCB/006		KAPIL SHEKHAR	EFFECTS OF CARTILAGE POROSITY AND VISCOSITY VARIATION OF THE SYNOVIAL FLUID UNDER JUMPING CONDITION
7	PCB/007	Presentation Duration 7min	Amendra Singh	Analysis of blood flow parameters by K-L model through a non-uniform inclined artery with multiple stenoses
8	PCB/008		Athira P	A survey on the methods of identifying and extracting the fetal brain images
9	PCB/009		Rohit Goel	Numerical Simulation of Oncolytic M1 Cancer Virotherapy Reaction-Diffusion Model by Collocation of B-Splines
10	PCB/010		Rajkamal Bharti	Identification of Potential Ftsz Inhibitors by Docking, ADME Prediction and Molecular

				Dynamics Simulations for anti-Tubercular Therapeutics
11	PCB/011		Anson Thomas	A Potential drug for Parkinson's: Computational study
12	PCB/012		Shobhit Maurya	STUDY ON APPLICATIONS OF BEAM FANNING
13	PCB/013		Anshul Ujlayan	A Comprehensive Framework to Analyze the Medical Research Literature Using Ontology and Natural Language Processing
14	PCB/014		H DHILSHATH RAIHANA	EXPLORING THE BINDING INTERACTION OF THIOL FUNCTIONALISED TERPYRIDINE WITH BOVINE SERUM ALBUMIN (BSA): MOLECULAR DOCKING STUDY
15	PCB/015		Akhilesh Kumar Singh	Study of Infectious Diseases by A Novel Mathematical Model with Fractional Differential Equation and Non-linear Models in Applied Dynamic Science
16	PCB/016		Karen Felicita C	IMPLEMENTATION OF GENETIC ALGORITHM IN TRAVELLING SALESMAN PROBLEM
17	PCB/017		Kamala Kumar Pradhan	THERMAL ANALYSIS OF NANOFLUID PAST ON AN IMPERMEABLE STRETCHING SURFACE DUE TO THE REVISED MODEL OF NANOPARTICLE CONCENTRATION
18	PCB/018		Bhavna Singh	A clinical comparative study of some herbs and castor oil in the management of rheumatoid arthritisA Clinical Comparative Study of Some Herbs and Castor oil in the Management of Rheumatoid arthritis
19	PCB/019		Richa Singh	In Silico Documentation of Medicinal Flora in Lacchiwala Range, Dehradun Forest Division, Uttarakhand (India)

Parallel Sessions P7   5:00pm-8:00pm(IST)

Day 1(26-Oct-2021)	Parallel Sessions Presentations followed by Invited Talks	Coordinator Names: Dr. Gajendra Pratap Singh, SCIS, JNU, New Delhi, India E-mail: gajendra@jnu.ac.in Mobile no. +91-9910136414	Session Chairperson(s): Dr. Gajendra Pratap Singh, SCIS, JNU, New Delhi, India

Time (IST)			Time(IST)	Title of Talk	Speaker(s) Name
Parallel		Speaker 1: (Plenary talk-5)	05:00pm-5:35 pm	Dynamic Tasks Allocation in Distributed System	Professor Avanish Kumar, Professor Department of Mathematics, Bundelkhand University, Jhansi, U.P., India
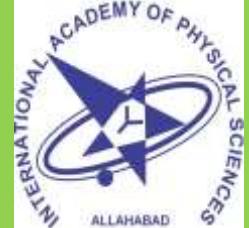
	Session P7:	Speaker 2: (IT-16)	05:35pm-6:05 pm	Mathematics for Cyber Security	Dr. Sangram Ray, Department of Computer Science and Engineering, NIT Sikkim, Sikkim, India
				Application of Mathematics in Image Processing	Prof Varun Vajpai, Aksum University, Ethopia

	S.No.	Paper Code	Time	Presenter's Name	Title
05:00 pm - 08:00 pm	1	ORMA/001		J SHAHIDHA BEGUM	PHARMACEUTICAL SUPPLY CHAIN AND INVENTORY MANAGEMENT STRATEGIES: OPTIMIZATION FOR A PHARMACEUTICAL COMPANY AND A HOSPITAL.
	2	ORMA/002	**(05:50 pm to 08:00 pm)**	Sowmiya Catherine A	A GREEN LOGISTICS SOLUTION FOR LAST MILE DELIVERIES CONSIDERING E-VANS AND E-CARS-BIKE USING FUZZY INVENTORY
	3	ORMA/003		M.PUSHPALATHA	CATEGORIZING REQUIREMENTS OF INFORMATIONAL SHORT FOOD SUPPLY CHAIN PLATFORMS USING A FUZZY INVENTORY MODEL
	4	ORMA/004		Dr. Sandeep Kumar	A Novel Two Phase Method for Determining Non-Dominant Solution of Intuitionistic Fuzzy Programming Problem
	5	ORMA/005	**Presentation Duration 7min**	N. Senthilkumaran	Identification of Distance Optimization in Sequence Alignment using Computational Method
	6	ORMA/006		RAGINI	AN OPTIMAL INVENTORY MODEL FOR ITEMS HAVING LINEAR DEMAND , VARIABLE RATE OF DETERIORATION AND BACKLOGGING PARTIALLY FULFILLED
	7	ORMA/007		Sudeep SIngh Sanga	Cost optimization for single unreliable server double orbit retrial queueing model
	8	ORMA/008		Shamshad Husan	A STUDY OF DECISION MAKING PROBLEMS BASED ON BIPOLAR SOFT SET THEORY
	9	ORMA/009		K.kalaiarasi	Optimization of refill stochastic lead time reduction fuzzy inventory order using EOQodel with machine learning using fuzzy
	10	ORMA/010		K.kalaiarasi	OPTIMIZATION OF REFILL STOCHASTIC LEAD TIME REDUCTION FUZZY INVENTORY ORDER USING EOQ MODEL WITH MACHINE LEARNING USING PYTHON
	11	ORMA/011		Dr Archana Sharma	OPTIMAL POLICY FOR DETERIORATING ITEMS UNDER INFLATION WITH STOCK-DEPENDENT DEMAND
	12	ORMA/012		PARIKSHA GUPTA	CORDIAL LABELING OF KITE GRAPH AND SHELL GRAPH
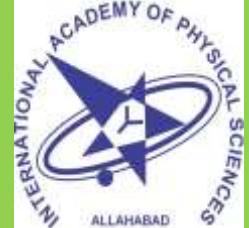
13	ORMA/013	Shruti Aggarwal	Improved lower bound of concurrence for arbitrary bipartite entangled states
14	ORMA/014	Naveen Kumar	The Role of Vedic Ganit in Complex Number System
15	ORMA/015	Ch Taliangbou	Modeling of starch metabolism in rice plant using Petri net
16	ORMA/016	Riddhi Jangid	Managing Business Processes using Petri Netmodeling
17	ORMA/017	TRANG JAIN	8 Different Ways to Solve a Single Problem
18	ORMA/018	Shivani Gupta	Petri Net Based Analysis for Early Stages Sympotomatic Detection of Cardiac Disorder
19	ORMA/019	Richa Kaushik	Study the Pathogenesis of Mycobacterium in Tuberculosis using Petri Net
20	ORMA/020	Dr. LATHA DEVI PULI	TULGEITY OF RESTRICTED SUPER LINE GRAPH OF CYCLE
21	ORMA/021	Rashmi Yadav	Advancement by using Vedic ganit sutra for multiplication of numbers
22	ORMA/022	Keilash Chirom	Network medicine in Ovarian cancer: Topological properties to drug discovery
23	ORMA/023	Preeti Rana	Prion aggregation inhibition by polyphenolic phytoalexin polydatin

ANNOUNCEMENT
FEEDBACK
DAY-1 CLOSE

Remarks: Plenary Talks duration 30 min including 05 min for discussion.

Invited Talks and Keynote Speeches duration 25 min including

05 min discussion.

Paper Presentation duration 07+01 for presentation and Q&A.
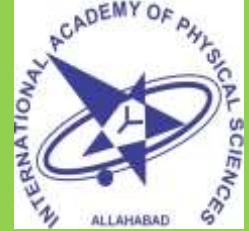
DAY 2, 27 October 2021, Wednesday (10:00am-6:00pm, IST)

Program Schedule (Day-2)	27 October 2021 Wednesday	10:00 am – 06:00 pm (IST)

Session-8 (Plenary Talk-6)
Chaired by: Professor Sangita Kansal, Department of Applied Mathematics, Delhi Technological University, New Delhi, India

Time (IST)	Topic	Name of Speaker
10:00 am - 10:35 am	Application of Fuzzy Soft and Interval Valued Fuzzy Soft Matrices in Dimension Reduction and Medical Diagnosis	Dr. D.S. Hooda, Emeritus Professor, G.J. University, Hisar, India

Session-9 (Plenary Talk-7)
Chaired by: Professor Sangita Kansal, Department of Applied Mathematics, Delhi Technological University, New Delhi, India

Time (IST)	Topic	Name of Speaker
10:36 am - 11:10 am	Enumeration formulae for self-orthogonal, self-dual and LCD codes over finite commutative chain rings	Professor Anuradha Sharma, Department of Mathematics, IIIT-Delhi, India

Session-10 (Invited Talk-17)
Chaired by: Prof. Mukti Acharya (Former Professor and Head, Department of Applied Mathematics), DTU, Delhi, Visiting Research Mentor, Department of Mathematics, CHRIST UNIVERSITY, Bengaluru, Karnataka, India

Time (IST)	Topic	Name of Speaker
11:11 am - 11:45 am	Portfolio Optimization Model Minimizing Mixed Value-at-Risk	Dr. Amita Sharma, Department of Mathematics, Netaji Subhas University of Technology, Delhi, India

Session-11 (Plenary Talk-8)
Chaired by: Prof. Mukti Acharya (Former Professor and Head, Department of Applied Mathematics), DTU, Delhi, Visiting Research Mentor, Department of Mathematics, CHRIST UNIVERSITY, Bengaluru, Karnataka, India

Time (IST)	Topic	Name of Speaker :
11:46 am - 12:20 pm	Recent Advances in Copositive Optimization and It's Application in Graph Theory	Prof S.K. Neogy, Indian Statistical Institute, New Delhi-110016, India
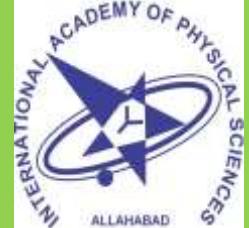
Session-12 (Invited Talk-18)
Chaired by: Professor A.K. Mohapatra, Department of Information Technology, IGDTUW, Delhi, India

Time (IST) 12:21 pm - 12:55 pm	Topic	Name of Speaker :
	Mathematical Modeling of Arbitrary Shaped Harbor with Permeable and Impermeable Breakwaters using Hybrid Finite Element Method	Dr Prashant Kumar, Department of Applied Mathematics, National Institute of Technology, Delhi, India

Session-13 (Invited Talk-19)
Chaired by: Prof. R.K. Brojen Singh, SCIS, JNU, New Delhi, India
Dr. Gajendra Pratap Singh, SCIS, JNU, New Delhi, India

Time (IST) 12:56 pm - 01:20 pm	Topic	Name of Speaker :
	Optimization Problems for Machine Learning	Prof Samarjit Kar, Department of Mathematics, National Institute of Technology, Durgapur, India

Break (01:20 pm---01:50 pm)

Session-14 (Plenary Talk-9)
Chaired by: Dr. Ruchir Gupta, Dean, School of Engineering, JNU, New Delhi, India

Time (IST) 01:50 pm – 02:20 pm	Topic	Name of Speaker
	Numerical Methods for Solution of Two-Dimensional Fluid Flow Problems	Prof. Vusala Ambethkar, Department of Mathematics, University of Delhi, Delhi, India

Session-15 (Plenary Talk-10)
Chaired by: Dr. Ruchir Gupta, Dean, School of Engineering, JNU, New Delhi, India
Dr. Kedar Singh, Dean, School of Engineering, JNU, New Delhi, India

Time (IST) 02:21 pm - 02:55 pm	Topic	Name of Speaker:
	Modelling through Signed Petri Net	Professor Sangita Kansal, Department of Applied Mathematics, Delhi Technological University, Delhi, India

Session-16 (Invited Talk- 20)
Chaired by: Dr. Kedar Singh, Dean, School of Engineering, JNU, New Delhi, India

Time (IST) 02:56 pm - 03:25 pm	Topic	Name of Speaker:
	Applications of Artificial Intelligence in Data Analytics	Professor Mansaf Alam, Department of Computer Science, Jamia Millia Islamia, New Delhi, India
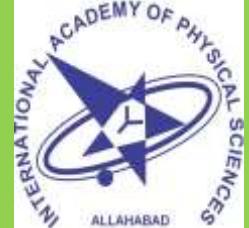
Session-17 (Invited Talk- 21)
Chaired by: Prof. Vijay Gupta, Department of Mathematics, Netaji Subhas University of Technology, New Delhi, India

Time (IST)	Topic	Name of Speaker
03:26 pm - 03:55 pm	Fractional derivative operator on quarantine and isolation principle for COVID-19	Prof. Albert Shikongo, Mathematical Science Department , University of Namibia

Session-17 (Plenary Talk-11)
Chaired by: Prof. Vijay Gupta, Department of Mathematics, Netaji Subhas University of Technology, New Delhi, India

Time (IST)	Topic	Name of Speaker
03:55 pm - 04:30 pm	What is Impact of Vaccination on Severity of COVIS 19?	Prof. Nita H. Shah, (HOD, Mathematics, Gujarat University, Gujarat, India)

Session-19 (Invited Talk-22)
Chaired by: Professor A.K. Mohapatra, Department of Information Technology, IGDTUW, Delhi, India

Time (IST)	Topic	Name of Speaker:
04:31 pm - 05:00 pm	Computational Intelligence	Prof. Jagdish Chand Bansal, Department of Mathematics, South Asian University, New Delhi, India

Session-20 (Invited Talk-23)
Chaired by: Professor A. Krishnamachari, SCIS, JNU, New Delhi, India

Time (IST)	Topic	Name of Speaker
05:01 pm - 05:30 pm	Distance Magic Index of Graphs	Prof Tarkeshwwara Singh, Birla Institute of Technology, Goa Campus, Goa, India

Session-21 (Invited Talk-24)
Chaired by: Professor A. Krishnamachari, SCIS, JNU, New Delhi, India

Time (IST)	Topic	Name of Speaker
05:31 pm - 06:00 pm	Portfolio Efficiency Evaluation with respect to Benchmark Portfolios	Dr. Mukesh Kumar Mehlawat, Department of Operational Research, University of Delhi, Delhi, India
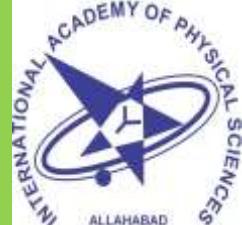
Program Details
Recent Advances in Mathematics and Computational Optimizations (RAMCO–2021)
26th–28th October 2021 (ONLINE)

Session-36 (Invited Talk-25)
Chaired by: Professsor Gajendra Kumar Vishwakarm, IIT Dhanbad, India

Time (IST)	Topic	Name of Speaker
06:01 pm - 06:30 pm	Optimizations in voluminous situations with emphasis on polynomial time solution to the maximum flow interdiction problem	Professor H S Dhami(Former Vice Chancellor, Uttarakhand Residential University; HNB Uttarakhand Medical University

Session-6 (Invited Talk-2)
Chaired by: Chaired by: Prof. Vusala Ambethkar, Department of Mathematics, University of Delhi, Delhi, India

Time (IST)	Topic	Name of Speaker:
03:56 pm - 04:25 pm	Applying Fuzzy Sets in Natural Language Processing Applications	Prof Devendra K. Tayal, Indira Gandhi Delhi Technical University for Women, Kashmere Gate Campus, Govt. of NCT Delhi, Delhi, India

ANNOUNCEMENT
DAY-2 CLOSE
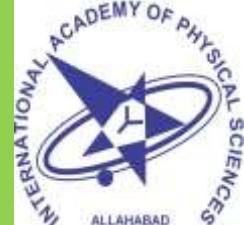
Program Details
Recent Advances in Mathematics and Computational Optimizations (RAMCO-2021)
26th-28th October 2021 (ONLINE)

DAY 3, 28 October 2021, Thursday (10:00am-6:00pm, IST)

Program Schedule   (RAMCO Day-3) 28-October-2021 Thursday 10:00 am - 06:00 pm (IST)

Session-22 (Plenary Talk-12)
Chaired by: Prof Dmitry Zaitsev, Odessa State Environmental University, 15 Lvivska Str., Odessa, 65016, Ukraine
(Dr.Sci., Professor, Senior Member of ACM and IEEE)

Time (IST)	Topic	Name of Speaker
10:00 am - 10:35 am	Dynamic Mathematical Modeling of Hepatitis C Virus Infection	Prof. Durgesh Nandini Sinha, Temple University (USA), Community College of Philadelphia

Session-23 (Plenary Talk-13)
Chaired by: : Prof Dmitry Zaitsev, Odessa State Environmental University, 15 Lvivska Str., Odessa, 65016, Ukraine
(Dr.Sci., Professor, Senior Member of ACM and IEEE)

Time (IST)	Topic	Name of Speaker
10:36 am - 11:10 am	Convergence Concerning Linear Positive Operators	Prof. Vijay Gupta, Department of Mathematics, Netaji Subhas University of Technology, New Delhi, India

Session-24 (Invited Talk-25)
Chaired by: Professor A. Krishnamachari, SCIS, JNU, New Delhi, India

Time (IST)	Topic	Name of Speaker
11:11 am - 11:40 am	Solving Multi-Criteria Decision Making(MCDM) problems under uncertain environment	Professor Kajla Basu, Department of Mathematics, National Institute of Technology, Durgapur, India

Session-25 (Invited Talk-26)
Chaired by: Professor A. Krishnamachari, SCIS, JNU, New Delhi, India

Time (IST)	Topic	Name of Speaker
11:41 am - 12:10 pm	Modeling of Neuronal Activations – Creation of Dead Zones –A new paradigm	Prof V Sree Hari Rao, Foundation for Scientific Research and Technological Innovation, Hyderbad-500102, India
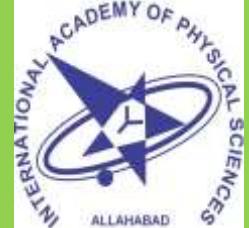
Session-26 (Invited Talk-27)
Chaired by: Dr. Sapna Ratan Shah, SCIS, JNU, New Delhi, India

Time (IST)	Topic	Name of Speaker
12:11 pm - 12:40 pm	Fuzzy Logic Based System for the Diagnosis and Prognosis of Breast Cancer	Prof. Sanjeev Kumar Department of Mathematics, (Dr. Bhimrao Ambedkar University, Agra), India

Session-27 (Plenary Talk-14)
Chaired by: Dr. Deepti, Dept. of Mathematics, Shaviji College, University of Delhi, Delhi, India
Dr. Kiran Chaudhary, Dept. of Commerce, Shaviji College, University of Delhi, Delhi, India
Dr. Gajendra Pratap Singh, SCIS, JNU, New Delhi-110067

Time (IST)	Topic	Name of Speaker
12:41 pm - 01:10 pm	Can mathematics dig out hidden patterns in our body?	Prof. R.K. Brojen, SCIS, JNU, New Delhi, India

Break (01:10 pm---02:00 pm)

Session-28 (Plenary Talk-15)
Chaired by: Professor Deepa Sinha, Department of Mathematics, South Asian University, New Delhi, India

Time (IST)	Topic	Name of Speaker
02:01 pm - 02:35 pm	Improving Supply Chain Operations: An NLP Approach	Professor Pankaj Gupta, Department of Operational Research, University of Delhi, Delhi, India

Session-29 (Invited Talk-28)
Chaired by: Professor Deepa Sinha, Department of Mathematics, South Asian University, New Delhi, India

Time (IST)	Topic	Name of Speaker
02:36 pm - 03:05 pm	Hard vs Soft Clustering	Prof Tandra Pal, Department of Computer Science and Engineering, National Institute of Technology, Durgapur, India

Session-30 (Invited Talk-29)
Chaired by: Prof Manju Khari, SCSS, JNU, New Delhi, India
Prof. Pallavi Somvanshi, SCIS, JNU, New Delhi, India

Time (IST)	Topic	Name of Speaker
03:06 pm - 03:35 pm	Some Single and Multi-Objective Network Optimization Problems(Subject area: Network Analysis & Optimization)	Dr. Goutam Panigrahi, Department of Mathematics, NIT Durgapur, India
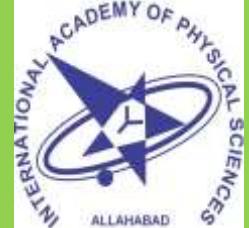
Session-31 (Invited Talk-30)
Chaired by: Prof Manju Khari, SCSS, JNU, New Delhi, India
Prof. Pallavi Somvanshi, SCIS, JNU, New Delhi, India

Time (IST)	Topic	Name of Speaker
03:36 pm - 04:05 pm	Architecture Modelling of Cyber Security	Dr, Ratneshwer, School of Computer & Systems Sciences, Jawaharlal Nehru Univeristy, New Delhi, India

Session-32 (Invited Talk-31)
Chaired by: Prof. Sanjeev Kumar Department of Mathematics, (Dr. Bhimrao Ambedkar University, Agra), India

Time (IST)	Topic	Name of Speaker
04:06 pm - 04:35 pm	Spectral Analysis in q-triangulation Networks for Calculating Hitting Times	Dr. Anurag Singh, Department of Computer Science and Engineering, National Institute of Technology, Delhi, India

Session-33 (Invited Talk-32)
Chaired by: Prof. Sanjeev Kumar Department of Mathematics, (Dr. Bhimrao Ambedkar University, Agra), India

Time (IST)	Topic	Name of Speaker
04:36 pm - 05:05 pm	Modeling of Scheduling Algorithms in Real Time System	Professor S. Ramanarayana Reddy, Department of Computer Science and Engineering, IGDTUW, Delhi, India

Session-34 (Invited Talk-33)
Chaired by: Prof. Anita Pal, Department of Mathematics, NIT, Durgapur, India
Prof. Samarjit Kar, Department of Mathematics, NIT, Durgapur, India

Time (IST)	Topic	Name of Speaker
05:06 pm - 05:35 pm	Location-Allocation Problems in Health Care	Dr. Kaushal Kumar, Department of Operational Research, Faculty of Mathematical Sciences, University of Delhi, Delhi, India

Session-35 (Invited Talk-34)
Chaired by: Prof. Anita Pal, Department of Mathematics, NIT, Durgapur, India
Prof. Samarjit Kar, Department of Mathematics, NIT, Durgapur, India

Time (IST)	Topic	Name of Speaker
05:36 pm - 06:06 pm	Spectral analysis for Signed Social Networks	Prof. Deepa Sinha, Department of Mathematics, South Asian University, New Delhi, India

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Session-35 (Invited Talk-34)
Chaired by: Prof. Vusala Ambethkar, Department of Mathematics, University of Delhi, Delhi, India

Time (IST)	Topic	Name of Speaker
06:06 pm - 06:36 pm	Cyber Threats Landscape	Professor A.K. Mohapatra, Department of Information Technology, IGDTUW, Delhi, India

(Valedictory and Feedback)

Time (IST)	Topic	Name of Speaker
	Report of the conference	To be announced
	Remark about the conference	To be announced
06:06 pm - 06:30 pm	Speech by Guest	To be announced
	Presidential remarks	To be announced
	Vote of Thanks	To be announced

Feedback form and Announcements

DAY-3 CLOSE

CONFERENCE TEAM (RAMCO-2021)

ADVISORY COMMITTEE

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Prof. Albert Shikongo, (Faculty of Science Mathematics, University of Namibia)
Prof. A. Krishnamachari, (SC&IS, JNU, India)
Prof. Anuj Mubayi, (Department of Applied Mathematics Arizona State University, Tempe, AZ 85287-1904, USA)
Prof. Anirban Chakraborti, (SC&IS, JNU, India)
Prof. Avanish Kumar, (Vice-President, VPI and Chairman, CSTT, Min. of Edu., GoI)
Prof. Bal Ram Singh, (President, Institute of Advanced Sciences, Dartmouth, MA, USA)
Prof. Binod Kumar Kanaujia, Associate Dean (SC & IS, JNU, India)
Prof. Bonyah Ebenezer, Dept. of IT Education University, University of Education-Winneba, Ghana
Prof. D. S. Hooda, (Former Pro-Vice Chancellor, Kurukshetra University, India)
Prof. Durgesh Nandini Sinha, (Temple University, USA, Community College of Philadelphia)
Prof. H.C. Taneja, (HOD, Dept of Mathematics, DTU, Delhi, India)
Prof. H S Dhami, (Former Vice Chancellor, Uttarakhand Residential University; Kumaun University, Nainital, India).
Prof. J.B.Shukla, (IIT Kanpur, India)
Prof. Mukti Acharya, (Research Mentor, Christ University, India)
Prof. Nita H. Shah, (HOD, Mathematics, Gujarat University, Gujarat, India)
Prof. Pankaj Gupta, (HoD, Dept. of OR, University of Delhi, Delhi, India)
Prof. P.N. Pandey, (former Vice-Chancellor, Nehru Gram Bharati University, U.P., India)
Prof. Pramod Kumar, (Registrar, JNU, New Delhi, India)
Prof. Rana Pratap Singh, (Pro-Vice Chancellor, JNU, New Delhi, India)
Prof. Ranjan Kumar Mohanty, (Department of Mathematics, SAU, New Delhi, India)
Prof. Sangita Kansal, (HOD, Dept. of Mathematics, DTU, Delhi, India)
Prof. Sanjay K. Srivastava, (BCET Gurdaspur, India)
Prof. Satish Chand, (SCSS, JNU, India)
Prof. Satwindar Singh Sadhal, (Univeristy of Southern California, Los Angeles, California, USA)
Prof. Amit Bardhan, Faculty of Management Studies, University of Delhi, Delhi, India
Prof. Pankaj Gupta, Department of Operational Research, University of Delhi, India
Prof. C.K. Jaggi, Department of Operational Research, University of Delhi, India
Prof. Nita H. Shah, Department of Mathematics, Gujarat University, Gujarat, India
Prof. Vijay Gupta, Department of Mathematics,NSUT, Delhi, India
Prof. Manju Agarwal, Dept. of Mathematics & Astronomy, University of Lucknow, Lucknow, UP, India
Prof. Tandra Pal, Dept. of Computer Science & Engineering, NIT Durgapur, India
Prof. Samarjit Kaur, Department of Mathematics, NIT Durgapur, India
Prof. V. Ambethkar, Department of Mathematics, University of Delhi, India
Prof. Anita Pal, Department of Mathematics, NIT Durgapur, India.
Prof. Deepa Sinha, Department of Mathematics, SAU, New Delhi, India

PROGRAM COMMITTEE

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Prof. Amar Kumar Mohapatra, IGDTU, New Delhi, India
Prof. Anju Khandelwal, (SRMS college of Engineering, Bareilly, U.P., India)
Prof. Anirban Chakraborti, (SC&IS, JNU, India)
Dr. Alok Kumar Srivastava, (HoD Chemistry, MGPG College, Gorakhpur, UP, India)
Prof.Ashok Singh Shekhawat, (Dept. of Mathematics, JECRC, Jaipur, India)
Dr. Buddha Singh, (SCSS, JNU, India)
Dr. Gajendra Kumar Vishwakarma, (Dept. of Mathematics, IIT Dhanbad, India)
Prof. Goverdhan S. Khadekar, (RTM Nagpur University, Nagpur, India)
Dr. Jagdish C. Bansal, Dept. of Mathematics, South Asian University, New Delhi, India
Dr. Jessica Fernandes E Pareira, (Dept. of Mathematics, Goa University-India)
Prof. Kapil Kumar Sharma, (Dept. of Mathematics, SAU, New Delhi, India)
Dr. Manoranjan Kumar Singh, Magadh University, Bodh-Gaya, India
Prof. Mangey Ram, (Graphic Era University, Dehradun, India)
Dr Mukesh Kumar Khandelwal, (Deputy Director, R&D, JNU and SOE, JNU, New Delhi, India)
Dr. Navnit Jha, Dept. of Mathematics, South Asian University, New Delhi, India
Dr. Pooja Raj Verma, (SBSC, DU, Delhi, India)
Dr Praveen Kumar, (Ramjas College, DU, India)
Prof. Promila Kumar, (Principal, Gargi College (University of Delhi), Delhi, India)
Prof. Purnima Gupta, (SV College, DU, India)
Prof. Rajiv Aggarwal, (Principal, Deshbandhu College (University of Delhi), Delhi, India)
Dr. Sandeep Kumar Pandey, (SLL&CS, JNU, India)
Dr. Sanjay Kango, (Dept. of Mathematics, GC Hamirpur, H.P., India)
Dr. Sangram Ray, (National Institute of Sikkim, Sikkim, India)
Dr. Saroj Kumar Sahani, (Dept. of Mathematics, SAU, New Delhi, India)
Dr. S. N. Mishra, (BND College, Kanpur, India)
Dr. Sudhanshu Aggarwal, (INSA, New Delhi, India)
Prof. Tarkeshwar Singh, (Dept of Maths, BITS Goa, India)
Prof. Uma Srivastava, (Dept. of Maths and Statistics, DDU, Gorakhpur University, UP, India)
Dr. Randheer Singh, Department of Mathematics, University of Delhi, Delhi-110007, India
Dr. Neetu Gupta, Department of Mathematics, J.C. Bose University of Science and Technology, TMCA, Faridabad, India
Dr. Sanjay Kango, Department of Mathematics, Government College Barsar, Hamirpur, HP, India.
Dr. Sanjay Yadav, Department of Mathematics, North Cap University, Gurugaon, Haryana, India
Prof. Varun Vajpai, Department of Mathematics, College of Natural and Computational Sciences, Aksum University, Ethopia
Dr. Anubhav Kumar, Professor and Dean faculty of Engineering and Technology, Mandsaur University, MP, India
Dr. Anubhav kumar,Professor, Computer Science Department, EITM, Mekelle University, Mekelle Ethopia
Prof. Tirthankar Gayen, SCSS, JNU, New Delhi, India
Dr. Dhirendra Kumar, Dept. of Applied Mathematics, DTU, Delhi
Prof. Anita Pal, Department of Mathematics, NIT Durgapur, India
Dr. Goonjan Jain, Dept. of Applied Mathematics, DTU, Delhi, India
Dr. Kumud, NIT Sikkim, Sikkim, India
Dr. Amita Sharma, Dept. of Mathematics, NSUT, Delhi, India
Dr. Kaushal Kumar, Dept. of Operational Research, University of Delhi, India
Dr. Pratima Rai, Dept. of Mathematics, University of Delhi, India
Dr. Jagdish Bansal, Dept. of Mathematics, South Asian University, New Delhi, India
Dr. Anupam Gautam, Dept. of Mathematics, NSUT, Delhi, India
Mr. Mukesh Kumar, Department of Mathematics, Shivaji College, University of Delhi, Delhi, India

ORGANIZING COMMITTEE

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Prof. A. Krishnamachari, (SC&IS, JNU, India)
Dr. Agraj Gupta, (RA, SCIS, JNU, New Delhi, India)
Prof. Binod Kumar Kanaujia, Associate Dean (SC & IS, JNU, India)
Dr. Gajendra Pratap Singh, (SC&IS, JNU, New Delhi, India)
Dr. Kavita Arora, (AIRF, JNU, New Delhi, India)
Prof. Naidu Subbarao, (SC&IS, JNU, India)
Prof. Pallavi Somvanshi, (SC & IS, JNU, India)
Dr. Sandeep Kumar Pandey, (SLL&CS, JNU, India)
Dr. Sapna R. Shah, (SCIS, JNU, New Delhi, India)
Dr Ashwani Kumar, SOE, JNU, New Delhi, India
Prof. Raj Kumar Brojen Singh, (SC&IS, JNU, New Delhi, India)
Dr. Ravi Kumar Arya, Department of Electronics and Communication Engineering, NIT Delhi, India
Dr. Mukesh Kumar Khandelwal, SOE, JNU, New Delhi, India
Prof. Pallavi Somvanshi, SCIS, JNU, New Delhi, India

RESEARCH SCHOLAR COMMITTEE
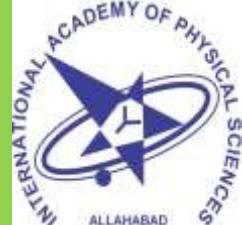
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RESEARCH SCHOLAR COMMITTEE	Miss. Aparajita Borah, (NIT Sikkim, Sikkim, India) Ms. Chanchal Rani (Banasthali Vidyapith, India) Ms. Gaurav Rani (Banasthali Vidyapith, India) Ms. Madhuri Jha, (SCIS, JNU, New Delhi, India) Mr. Ram Nayan Verma, (SCIS, JNU, New Delhi, India) Ms. Sakshi Gupta, (Amity University, Gurugram, New Delhi, India) Mr. Sujit Kumar Singh, (SCIS, JNU, New Delhi, India) Miss. Riddhi Jangid, SCIS, JNU, New Delhi, India Miss. Kirti, M.Sc., SPS, JNU, New Delhi, India Miss. Preeti Kumari, M.Sc., SPS, JNU, New Delhi, India Mr. Rohit Kumar, SCIS, JNU, New Delhi, India
PROGRAM CHAIR AND CONVENOR	**PROGRAM CHAIR AND CONVENOR** Dr Gajendra Pratap Singh, (SC&IS, JNU, India)
Session-COORDINATORS	Prof. Raj Kumar Brojen Singh, (SC&IS, JNU, New Delhi, India) Dr. Kavita Arora, (AIRF, JNU, New Delhi, India) Dr. Mamtesh Singh, (Dept. of Zoology, Gargi College, DU, India) Dr. Sapna R. Shah, (SCIS, JNU, New Delhi, India) Prof. A. Krishnamachari, (SC&IS, JNU, India) Prof. Pallavi Somvanshi, SCIS, JNU, New Delhi, India Lt. Dr. Deepti, Department of Mathematics, Shivaji College, University of Delhi, India

एक भारत श्रेष्ठ भारत

जय हिन्द !

EK Bharat Shrestha Bharat

Jai Hind !