



**BITS Pilani**  
Dubai Campus

# International Conference on Graphs, Combinatorics and Optimization

February 6 - 8, 2022

## Plenary and Technical Sessions

<p><b>06.02.2022</b> <b>Day 1</b></p>	<p><b>Inauguration</b> <b>(09:00-9.45am)</b></p>	<p><b>Invited Talk 1</b> <b>(10:00-10:45 am)</b></p> <p>PROF. S. ARUMUGAM Adjunct Professor, Department of Mathematics, Amrita Vishwa Vidyapeetham, Coimbatore, India</p>	<p><b>Invited Talk 2</b> <b>(11:00-11:45 am)</b></p> <p>PROF. AYMAN BADAWI Professor Department of Mathematics and Statistics, American University of Sharjah. UAE</p>	<p><b>Invited Talk 3</b> <b>(12:00-12:45 pm)</b></p> <p>PROF. TAMIZH CHELVAM CSIR Emeritus Scientist Manonmaniam Sundaranar University, Tirunelveli, India</p>	<p><b>Paper Presentation</b> <b>(02:00-04:00 pm)</b></p>	<p><b>Invited Talk 4</b> <b>(4.15-05:00 pm)</b></p> <p>PROF. LOWELL W. BEINEKE Schrey Professor Emeritus Purdue University, Fort Wayne, USA &amp; PROF. JAY BAGGA Professor of Computer Science, Ball State University, USA</p>
<p><b>07.02.2022</b> <b>Day 2</b></p>	<p><b>Invited Talk 1</b> <b>(9:00-9:45 am)</b></p> <p>PROF. TARKESHWAR SINGH Professor, Department of Mathematics, BITS Pilani K K Birla Goa Campus, Goa, India</p>	<p><b>Invited Talk 2</b> <b>(10:00-10:45 am)</b></p> <p>PROF. SHARIEFUDDIN PIRZADA Professor, Department of Mathematics, University of Kashmir, India</p>	<p><b>Invited Talk 3</b> <b>(11:00-11:45 am)</b></p> <p>PROF. AMBAT VIJAYAKUMAR Emeritus Professor of Mathematics, Cochin University of Science and Technology, Cochin, India.</p>	<p><b>Invited Talk 4</b> <b>(12:00-12:45 pm)</b></p> <p>PROF. ANDREA FENOVCIKOVA Associate Professor Department of Applied Mathematics and Informatics, TUKE Kosice, Slovakia.</p>	<p><b>Paper Presentation</b> <b>(02:00-04:00 pm)</b></p>	<p><b>Invited Talk 5</b> <b>(4.15-05:00 pm)</b></p> <p>PROF. KIRAN R BHUTANI Department Chair &amp; Professor, Department of Mathematics The Catholic University of America, USA</p>
<p><b>08.02.2022</b> <b>Day 3</b></p>	<p><b>Invited Talk 1</b> <b>(9:00-9:45 am)</b></p> <p>PROF. B. S. PANDA Professor, Department of Mathematics, Indian Institute of Technology Delhi, New Delhi, India</p>	<p><b>Invited Talk 2</b> <b>(10:00-10:45 am)</b></p> <p>PROF. PURNIMA GUPTA Professor (Retired) Sri Venkateswara College, University of Delhi, India</p>	<p><b>Invited Talk 3</b> <b>(11:00-11:45 am)</b></p> <p>PROF. SLAMIN Faculty of Computer Science, Informatics Study Program, Universitas Jember, Indonesia.</p>	<p><b>Paper Presentation</b> <b>(12:30-02:30 pm)</b></p>	<p><b>Valedictory Function</b> <b>(02:30-03:00 pm)</b></p>	



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## Inauguration Ceremony (06/02/2022, 9:00 am) [[Google Meet Link](#)]

SI No	Speaker	Title	Date, Time & Link
1	<b>PROF. S. ARUMUGAM</b> Adjunct Professor, Department of Mathematics, Amrita Vishwa Vidyapeetham, Coimbatore, India	Nullity of a Graph <a href="#">[Link to Abstract]</a>	06.02.2022, (10:00-10:45 am) <a href="#">[Google Meet Link]</a>
2	<b>PROF. AYMAN BADAWI</b> Professor, Department of Mathematics and Statistics, American University of Sharjah, UAE	N-Zero-Divisor Graph of a Commutative Semigroup <a href="#">[Link to Abstract]</a>	06.02.2022, (11:00-11:45 am) <a href="#">[Google Meet Link]</a>
3	<b>PROF. TAMIZH CHELVAM</b> CSIR Emeritus Scientist Manonmaniam Sundaranar University, Tirunelveli, India	Additive graphs from commutative rings <a href="#">[Link to Abstract]</a>	06.02.2022, (12:00-12:45 pm) <a href="#">[Google Meet Link]</a>
4	<b>PROF. JAY BAGGA</b> Professor of Computer Science, Ball State University, USA & <b>PROF. LOWELL W. BEINEKE</b> Schrey Professor Emeritus Purdue University, Fort Wayne, USA	New Results and Open Problems in Line Graphs <a href="#">[Link to Abstract]</a>	06.02.2022, (04.15-05:00 pm) <a href="#">[Google Meet Link]</a>



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## Session 1 - (06-02-2022 From 02.00 PM to 04.00 PM) - [[Google Meet Link](#)]

SI No	Presenting Author	Title [ <a href="#">Link to Abstracts</a> ]
1	Alka Goyal	Bounds of point-set domination number
2	Deepti Jain	On Characterizing Graphoidally Independent Infinite Cactus
3	Jismy Varghese	Domination Parameters on Generalized Sierpiński Graphs
4	James Joseph	Roman Domination Number of Signed Graphs
5	Jishnu Sen	Broadcast Domination of Lexicographic and Modular Products of Graphs
6	Ruby R	Coalition Number of Some Graphs
7	Seethu Varghese	Power Domination in Mycielskian of Spiders
8	W. Jinesha	Domsaturation polynomial of a graph
9	Zahid Raza	Zagreb connection indices for metal trihalides
10	M. Murugan	On the total monophonic number of a graph
11	Rajesh Singh	On graphs with graphoidal length one

## Session 2 - (06-02-2022 From 02.00 PM To 04.00 PM) - [[Google Meet Link](#)]

1	Aloysius Godinho	Local Distance Antimagic Labeling of Graphs
2	Anusha C	On S3 - Magic Graphs
3	Aparna Lakshmanan	Two extensions of Leech labeling to the class of all graphs
4	D. Nivedha	Antimagic Labeling of Few Edge Corona Graphs
5	Divya Antoney	S-Cordial and total S-Cordial Labeling in Signed Graphs
6	Jawahar Nisha	Geometric Mean Cordial Labeling of Butterfly Graph
7	Joseph Varghese Kureethara	Characterization of Product Cordial Dragon Graphs
8	Maria Angelin Visithra J	Total Edge Irregularity Strength of Some Graphs of Convex Polytopes
9	R. Hemalatha	Weighted PI Index of Edge corona product of some classes of Graphs
10	Seena Varghese	Leech Graphs
11	Vijayalakshmi G	Vertex k - Prime Labeling on graphs



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Day 2			
SI No	Speaker	Title	Date, Time & Link
1	<b>PROF. TARKESHWAR SINGH</b> Professor, Department of Mathematics, BITS Pilani K K Birla Goa Campus, India	On Local Distance Antimagic Labeling of Graphs <a href="#">[Link to Abstract]</a>	07.02.2022, (09:00-09:45 am) <a href="#">[Google Meet Link]</a>
2	<b>PROF. SHARIEFUDDIN PIRZADA</b> Professor, Department of Mathematics, University of Kashmir, India	On the eigenvalues of the distance Laplacian matrix of graphs <a href="#">[Link to Abstract]</a>	07.02.2022, (10:00-10:45 am) <a href="#">[Google Meet Link]</a>
3	<b>PROF. AMBAT VIJAYAKUMAR</b> Emeritus Professor of Mathematics, Cochin University of Science and Technology, Cochin, India.	Split graphs with four distinct eigenvalues <a href="#">[Link to Abstract]</a>	07.02.2022, (11:00-11:45 am) <a href="#">[Google Meet Link]</a>
4	<b>PROF. ANDREA FENOVCIKOVA</b> Associate Professor Department of Applied Mathematics and Informatics, TUKE Kosice, Slovakia.	Reflexive strength of graphs <a href="#">[Link to Abstract]</a>	07.02.2022, (12:00-12:45 pm) <a href="#">[Google Meet Link]</a>
5	<b>PROF. KIRAN R BHUTANI</b> Department Chair & Professor, Department of Mathematics, The Catholic University of America, USA	Some Graph Theoretic Properties of Multi-Hooking Networks <a href="#">[Link to Abstract]</a>	07.02.2022, (04.15-05:00 pm) <a href="#">[Google Meet Link]</a>



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## Session 1 - (07-02-2022 From 02.00 PM to 04.00 PM) - [[Google Meet Link](#)]

SI No	Presenting Author	Title [ <a href="#">Link to Abstracts</a> ]
1	Barkha Baloda	Laplacian spectrum of the cozero-divisor graph of ring
2	Bilal A. RATHERA	On the spread of the geometric-arithmetic matrix of graphs
3	B. FATHIMA	Generalized eccentricity $K^{\text{th}}$ power sum energy of graphs
4	Jitender Kumar	Commuting graph of an aperiodic Brandt semigroup
5	Arun Anil	Classical Graph-Theoretic Parameters of Cover-Incomparability Graphs
6	Lekshmi Kamal	Cycle transit function and betweenness
7	Muhammad Imran	General Randic index of unicyclic graphs with given maximum degree
8	Najiya V K	On the $A\alpha$ spectrum and energy of coalescence of complete graphs
9	Priyanka Pandey	Bounds for the average distance for certain classes of graphs
10	Radha R	Edge binary encoding of Cayley graphs
11	Hilal Ahmad	Reciprocal distance Laplacian spectral radius of graphs

## Session 2 - (07-02-2022 From 02.00 PM To 04.00 PM) - [[Google Meet Link](#)]

1	A. Pauline Ezhilarasi	Hamilton-Waterloo Problem with Uniform Cycle Factors
2	Pinki	Linear Time Constructing of Floor plans for Plane Triangulations
3	Pinki	An annotated review on graph drawings and its applications
4	Saranya D	Decomposition of hypercube graphs into paths and cycles of length four
5	Saritha Chandran C	Common Multiples of Paths and Stars with Crowns
6	Vaishnavi. S	A note on Fold Thickness of Graphs
7	Yasmeen Akhtar	A Hyperedge Coloring and Application in Combinatorial Testing
8	Reji T	Decomposition of Multistars into Multistars



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Day 3			
SI No	Speaker	Title	Date, Time & Link
1	<b>PROF. B. S. PANDA</b> Professor, Department of Mathematics, Indian Institute of Technology Delhi, New Delhi, India	Hardness and Approximation Results of Roman {3}-Domination in Graphs <a href="#">[Link to Abstract]</a>	08.02.2022, (09:00-09:45 am) <a href="#">[Google Meet Link]</a>
2	<b>PROF. PURNIMA GUPTA</b> Professor (Retired) Sri Venkateswara College, University of Delhi, India	Domination in Graphoidally Covered Graphs: Least Kernel Graphoidal Graphs III <a href="#">[Link to Abstract]</a>	08.02.2022, (10:00-10:45 am) <a href="#">[Google Meet Link]</a>
3	<b>PROF. SLAMIN</b> Faculty of Computer Science, Informatics Study Program, Universitas Jember, Indonesia.	Some topics in Graph Theory and their applications <a href="#">[Link to Abstract]</a>	08.02.2022, (11:00-11:45 am) <a href="#">[Google Meet Link]</a>



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## Session 1 - (08-02-2022 From 12.30 PM to 02.30 PM) - [[Google Meet Link](#)]

SI No	Presenting Author	Title [ <a href="#">Link to Abstracts</a> ]
1	K. Sathish Kumar	Power Dominator Chromatic Numbers of Splitting Graphs of Certain Classes of Graphs
2	M. Gokulnath	Indicated coloring of some families of graphs
3	Navaneeth R	Total Colorings of Some Classes of Four Regular Circulant Graphs
4	Nibedita Mandal	L(2,1)-coloring and Irreducible No-hole Coloring of Lexicographic Product of Graphs
5	Nivedha Baskar	Characterization of semi splitting block graph
6	Pavithra R	Coupon Coloring of Direct Product of Graphs
7	Priyamvada	Exact square coloring of graphs resulting from some graph operations and products
8	S. Gomathi	Balanced Pk-designs
9	Sandhiya T P	Total Chromatic Number For Certain Classes of Lexicographic Product Graphs.

## Session 2 - (08-02-2022 From 12.30 PM to 02.30 PM) - [[Google Meet Link](#)]

1	C. Sheeja	Geosaturation Polynomial of a Graph
2	A. Balasubramanian	Social Network Analysis in a Media Production House Bridging the Gap between Executives and Employees
3	Manju S C	PI index of Bicyclic graphs
4	K. Kavitha	Type I Sensitivity Analysis of Mid-Width Transportation Problem
5	K. Pattabiraman	QS PR Analysis for Status-Based Descriptors of Molecular Graphs
6	Mohammad Bataineh	A-Constacyclic Codes Over a Finite Ring
7	Nithya. K	An Optimal and Dynamic Allocation Model for Distributed Multimedia Objects
8	Rajpal Rajbhar	Constrained effective bin selection algorithm for solving 0-1 knapsack problem
9	S Rajeswari	Graph theoretical approach to find rheumatoid arthritis-related protein biomarkers for drug target

**Valedictory Function (02:30-03:00 pm) [[Google Meet Link](#)]**