Event Summary: International Conference on Advances in Pure and Applied Mathematics Vision India @2047

From 8th to 10th Feb 2024, Shyam Lal College hosted a three-day International Conference on Advances in Pure and Applied Mathematics: Vision India @2047, organized by the Department of Mathematics and IQAC under the leadership of Principal Professor Rabi Narayan Kar. The event aimed to advance the field of mathematics and shed light on its significance in India's future. Professor Kar's commitment to advancing the field of mathematics and emphasizing its importance in shaping India's future, set the tone for the conference.

The conference was inaugurated by Professor Balaram Pani, Dean of Colleges at University of Delhi. Notable figures, such as Dr. Shriram Chauthaiwale, All India Convenor of Vedic Mathematics at Shiksha Sanskriti Uthan Niyas, New Delhi, and Professor Ruchi Das from the Department of Mathematics at the University of Delhi, graced the inaugural session as guests of honor."

The success of the conference was made possible by the collaborative efforts of Professor Kusha Tiwari (IQAC Director), Dr. Subodh Kumar (Convenor), Shri Balram Kindra (Co-Convenor), and a dedicated organizing committee. The committee played a pivotal role in the seamless execution of the event, with notable members including Dr. Seema Guglani, Dr. Anuj Kumar Sharma, Dr. Virender, Dr. Rajni Arora, Dr. Saubhagyalaxmi Singh, Dr. Vinod Kumar, Mr. Sandeep Kumar, Dr. Sudhir Kumar Yadav, Dr. Swati Yadav, Dr. Mukesh Kumar, and Dr. Rahul Boadh.

During the three days of this conference, Eighteen parallel sessions were conducted. There were fourteen online and four offline sessions. More than 200 research papers, covering diverse areas of mathematics, were presented by research scholars and teachers from all over India. These parallel sessions were chaired by subject experts from reputed colleges and universities of India.

Eminent mathematicians from national and international universities delivered invited talks, addressing the latest developments in number theory, algebra, geometry, analysis, probability, cryptography and statistics. Some details of the invited talks are as follows:

Day 1: Talk 1: Stability For The Viscoelastic Damped Swelling Porouselastic Soils With Delay by Prof. Hazal Yuksekkaya (Dic1e University, Turkey), Talk 2: New excitation wave-patterns and analytical solutions to higher-order nonlinear partial differential equations by Dr. Sachin Kumar (University of Delhi), Talk 3: Navigating Uncertainty with Crisp, Probability, and Fuzzy Logic: Supply Chain Model for Deteriorating Items with Shortages under Imprecise Environment by Dr. Chaman Singh (University of Delhi), Talk 4: Burst Distance and Linear Codes by Dr. Pankaj Kumar Das (Tezpur Unversity, Assam, India), Talk 5: Versions of Browder's Theorem Arising from Fredholm Theory by Dr. Ankit Kumar (Punjab Engineering College, Punjab, India).

Day2: Talk 6: Frames in Greedy Approximations and Quantum Information Theory by Prof. S. K. Kaushik (Unversity of Delhi), Talk 7: A Hybrid Machine Learning Approach for the Bias Correction of Global Climate Model by Dr. Aniruddha Bora (Brown Ubniversity, USA), Talk 8: Code-based cryptography by Dr.

Harshdeep Singh (DRDO, Delhi, India), Talk 9: Blockchain Technology and Its Application in Internet of Drones by Prof. Ashok Kumar Das (IIIT, Hedrabad, India), Talk 10: Bridging Intelligence: Unraveling the Role of Mathematics and Statistics in Artificial Intelligence by Dr. Srinivas Jangirala (O. P. Jindal Global University, Harayana, India), Talk 11: 4-Dimensional Multi Objective Green Transportation System for Disaster Relief under Time-Sequential Complex Fermatean Framework by Prof. Mukesh Kumar Sharma (CCS University, Meerut, India), Talk 12: Best Proximity Point Results and Applications by Dr. Manu Rohilla (J. C. Bose Unversity of Science and Technology, YMCA, Faridabad, Haryana, India), Talk 13: Applications And Methods Of Solutions To Certain Partial Differential Equations by Prof. V. Ambethkar (University of Delhi, India), Talk 14: Long-Term Cryptographic Security by Dr. S. K. Pal (DRDO, Delhi India). Talk 15: Some Recent Fixed Point results and their Applications by Dr. Izhar Uddin (Jamia Millia Islamia, Delhi, India), Talk 16: Commutativity of Operators by Prof. Gopal Datt (University of Delhi, Delhi, India), Talk 17: Mathematical Modelling and Simulations for Shocked Hydrodynamic Instability by dr. Satyvir Singh (RWTH, Aachen, University, Germany), Talk 18: Visible and Invisible Mathematics by Prof. Todor Jordanov Todorov (University of Veliko, Tarnovo, Bulgaria), Talk 19: Role of Mathematics in Day-Today Life by Dr. Ajay Kumar (DRDO, Delhi, India), Talk 20: Extrapolation in Lebesgue Spaces by Prof. Arun pal singh (University of Delhi, India). Talk 21: Supply Chain Management by Prof. Chandra K. Jaggi (University of Delhi).

The closing ceremony, attended by Chief Guest Professor B.K. Dass from the Department of Mathematics at the University of Delhi, and Guest of Honor Professor Chandra K. Jaggi from the Department of Operational Research at the University of Delhi, marked the conference's success. Dr. Subodh Kumar expressed gratitude to all participants, highlighting the conference's role in fostering collaboration among leading researchers and promoting mathematics education and research in India. The event also recognized and encouraged the outstanding work of young researchers in the field.















