

Journal of Discrete Mathematical Sciences & Cryptography

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Special Issue on

**Applied Discrete Mathematics, Combinatorics,
Cryptography, Computer Science and Computation**

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FOREWORD

This special issue of “**Applied Discrete Mathematics, Combinatorics, Cryptography, Computer Science and Computation**”, presents a selection of cutting-edge research in the fields of cryptography, algebra, and module theory. These areas continue to evolve and provide foundational insights for modern technology, particularly in the realms of secure communication and mathematical modeling.

We received over 100 high-quality research submissions for this issue, reflecting the significant interest and ongoing advancements in these critical areas of mathematics and cryptography. After a thorough review process, 40 papers were selected for publication. These papers explore a wide array of topics, including new cryptographic systems, algebraic structures, operator theory, and advanced techniques in the resolution of complex algebraic terms.

The selected papers in this issue cover:

- Innovations in cryptographic methods, including the development of multidimensional public key cryptosystems and more secure encryption schemes.
- Advances in module theory, such as the study of absorbing sub-modules, flat modules.
- New approaches in algebraic graph theory, focusing on zero-divisor graphs, Wiener index, and the resolution of complex algebraic partitions.
- These contributions not only extend the theoretical framework of their respective fields but also provide practical tools and methods that can be applied to real-world problems, particularly in cryptography and security.

The guest editors of this special issue would like to express their heartfelt gratitude to the authors for sharing their valuable research and to the publication partner for their support and collaboration in making this special issue a reality. Guest editors would especially like to thank Prof. B. K. Dass, Chief Editor, for his continuous encouragement and guidance throughout the process of publishing in the *Journal of Discrete Mathematics Sciences & Cryptography (JDMSC)*, published by Taru Publications, New Delhi.

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