

Abstracts of the International Conference on Recent Trends in Mathematics and Computer Science 2023

Editors

- V. Santiagu Theresal
- S. Arul Amirtha Raja
- Joseph Clement

Organized by

Department of Mathematics and Computer Science,
Auxilium College of Arts and Science for Women, Regunathapuram, Tamil Nadu, India



ICRTMCS-2023
19-21 October 2023

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V. Santiago Theresal
S. Arul Amirtha Raja
Joseph Clement
(Editors)

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ICRTMCS-2023

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ICRTMCS-2023

Foreword

The first International Conference on Recent Trends in Mathematics and Computer Science (ICRTMCS-2023), 19 – 21, October, 2023, was organized by the Department of Mathematics and Computer Science. This made it a bit special as it brought together the faculty, researchers and students from different disciplines of Mathematics and Computer Science, which in turn also opened the portal to embark on new research and cooperation among them. Over 600 participants registered for the conference. Five individual sessions with different themes provided a perfect platform for the attendees to share and present their research ideas.

Special thanks to our beloved Secretary, Sr. S. Magnificat, Principal, Dr. Sr. Sebasti Jeya Pushpam, Vice Principal, Dr. Sr. V. Santiago Theresal and the staff members for their constant support, encouragement and motivation. In addition, we kindly acknowledge the unwavering support received from the Scientific Committee Dr. S. Arul Amirtha Raja, Dr. Joseph Clement academic expert Mrs. Suvetha for their availability in chairing the sessions and other involvement in the process of ICRTMCS-2023. Finally, and most importantly we would like to thank all the participants individually for their active participation in the sessions of the conference.

About ICRTMCS - 2023

The “International Conference on Recent Trends in Mathematics and Computer Science” was organized by the Department of Mathematics and Computer Science on 19th to 21st October 2023. ICRTMCS-2023 (Hybrid) was a multidisciplinary conference organized with the objective of bringing together eminent academicians, research scholars and students to exchange ideas, communicate, to discuss research findings and new advances on recent and emerging trends in the field of Mathematics and Computer Science. Moreover, the conference would also enable the participants to explore new fields and gain immense knowledge. It aims to cover a diverse range of topics such as Numerical Analysis, Approximation Theory, Analysis, Linear Algebra, Computational Number Theory, Differential Equations, Operational Research, Probability and Statistics, Computational Fluid Mechanics, Mathematical Modeling and Simulation, Applications of Fuzzy Set Theory, Discrete Mathematics, Artificial Intelligence, Cryptology and Cyber Security, Network Security, Digital Image Processing, Digital Watermarking, Wireless Networks, Mobile, Distributed, & Parallel Computing, Internet of Things, Machine and Deep Learning, Green Computing, Big Data and Block chain.

The conference will strengthen contacts and foster cooperation among academicians, research scholars, and students. The participants will learn the new strategies to write research articles in the emerging field of Mathematics and Computer Science.

Message from the Secretary



Greetings from ICRTMCS2023!

As the Secretary of Auxilium College of Arts and Science for Women, it's my pleasure to welcome all speakers and delegates to the International Conference on Recent Trends in Mathematics and Computer Science (ICRTMCS2023). With the theme, of Recent Trends in Mathematics and Computer Science, I hope that the ICRTMCS2023 will provide a platform for faculties, researchers, and students from diverse backgrounds, perspectives, and interests to meet, exchange ideas, and strengthen their collaboration. I am sure that when our hundreds of delegates come together, hand in hand, in the spirit of learning and discussing, we will be extremely fortunate to have the opportunity to relearn and share knowledge in the best of the academic environment.

I would like to express my sincere gratitude to the Principal Dr.Sr.M.Sebasti Jeya Pushpam Convener Sr.Dr.V. Santiago Theresal, all the committee members, and volunteers who have worked tirelessly and made this conference possible. This conference would not be possible without the coordination and cooperation of many people. I thank each one who has been instrumental in Organizing this Conference, for offering their heart and soul for the grand success. Special thanks to the presenters and the participants for their thought-provoking contributions.

Let's make the most of this conference, and create lasting memories and valuable insights that impel us toward a brighter future.

I extend my very best wishes to you wherever you may be around the world. I wish the ICRTMCS2023 a grand success.

Thank you!

Sr. S. Magnificat

Secretary.

Message from the Principal



Greetings from ICRTMCS2023!

It is indeed my great pleasure and privilege to invite you to attend the three days International Conference on “Recent Trends In Mathematics and Computer Science” (ICRTMCS-2023) being organized by the Department of Mathematics and Computer Science, Auxilium College of Arts and Science for Women, Regunathapuram, on 19th to 21st October 2023. The conference provides a platform to interact, share ideas, and research in areas of Mathematics and Computer Science. In response to our efforts, we have received a total of 77 papers and contributions from academicians, research scholars, postgraduate students, undergraduate students, and working professionals from industries around the globe. I sincerely thank the Keynote Speakers, Advisory Committee, Scientific Committee, Convener Sr.Dr.V. Santiagu Thersal, and all other Committee members for your commitment and dedication towards the success of ICRTMCS-2023.

On behalf of the Department of Mathematics and Computer Science, I extend a warm welcome to all the participants attending this conference. I thank all the participants wholeheartedly for being a part of the conference and appreciate their eagerness to keep learning.

I congratulate all of you for your commitment and active participation and wish you all the success.

Thank you!

Dr. Sr. M. Sebastia Jeya Pushpam

Principal.

Message from the Convener



Welcome to ICRTMCS-2023!

It is my great pleasure to welcome all the respected dignitaries, and all the delegates to the International Conference on “Recent Trends In Mathematics and Computer Science” (ICRTMCS-2023), organized by the Department of Mathematics and Computer Science, Auxilium College of Arts and Science for Women, Regunathapuram, on 19th to 21st October 2023. I am happy to acknowledge an overwhelming response from the delegates all over the world.

I am sure that ICRTMCS-2023 will provide an excellent opportunity for all the participants to connect, present, and discuss their research relevant to the field. I am glad to announce that the abstracts of these papers are published as proceedings with ISBN and DOI identified at the book level. I sincerely hope that this Conference will provide a good platform for sharing ideas and making good academic and professional connections. This abstract book includes all the abstracts of 77 papers presented at the 1st International Conference on Recent Trends in Mathematics and Computer Science, 19-21 October 2023.

I express my sincere gratitude to the Eminent Speakers and National Advisory Committee for their willingness to be part of the ICRTMCS-2023. A special note of thanks to the scientific committee members, Dr. Arul Amirtha Raja, Dr. Joseph Clement, and academic expert Mrs. Suvetha for their enormous help, support, and cooperation throughout the conference. Words can't express their extreme generosity and availability. I congratulate Dr. S. Padma, Dr. A.Leema Rose, Ms. R. Allirani, the Organizing Secretaries, and all the committee members of the Conference for the successful implementation of the objectives.

On behalf of the entire Organizing Committee, I take great pride in welcoming all and wish the conference a great success.

Thanking You!

Dr. Sr. Santiago Theresal

Convener of ICRTMCS-2023

ICRTMCS-2023 Committees

Keynote Speakers

Dr. Kassem A.Saleh, Department of Information Science, College of Computing Science & Engineering, Kuwait University, Kuwait

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