

SRI S.RAMASAMY NAIDU MEMORIAL COLLEGE

(AFFILIATED TO MADURAI KAMARAJ UNIVERSITY)

A Co-educational, Autonomous and Linguistic Minority Institution

Re-accredited with 'A' Grade by NAAC ,

SATTUR , Virudhunagar District



International Conference on Multidisciplinary Approaches in Engineering, Management & Science (EMS-2022)

04th March 2022

In Association With:



ISBN: 978-93-91535-23-0

**International Conference on Multidisciplinary
Approaches in Engineering, Management & Science
(EMS-2022)**

04th March 2022

Editors

Dr. K. Arunesh

Dr. A. Rajeshkanna

Publish By:

A.R. Research Publication

Preface

Conference World and AR Research Publication is fast growing group of academicians in Engineering, Sciences and Management. AR Research Publication is also known for fast reply and zero error work. Conference world has organized a various conferences at renowned places namely Delhi University; New Delhi, Jawaharlal Nehru University; New Delhi, PHD Chamber of Commerce and Industry New Delhi, YMCA New Delhi, India International Centre New Delhi Sri Venkateswara college of Engineering and Technology, Andhra Pradesh, Dhananjay Mahadik Group of Institutions (BIMAT), Shivaji University, Maharashtra, Vedant Engineering Kota and many more places across the country.

We are very pleased to introduce the proceedings of the International Conference on Multidisciplinary Approaches in Engineering, Management & Science (EMS-2022) As for previous conferences, the theme was the link between the information provided by conference world and the use made of this information in assessing structural integrity. These were the issues addressed by the papers presented at the conference. The level of interest in the subject matter of the conference was maintained from previous events and over 26 suitable papers were submitted for presentation at the conference.

Papers were well represented in the conference to arouse a high level of international interest. Three countries were represented in the final program from Europe, North America and Asia. In the event, the conference was highly successful. The presented papers maintained the high promise suggested by the written abstracts and the program was chaired in a professional and efficient way by the session chairmen who were selected for their international standing in the subject. The number of delegates was also highly gratifying, showing the high level of international interest in the subject. This is also indicated by the large number of countries, 04 represented by the delegates. This Proceeding provides the permanent record of what was presented. They indicate the state of development at the time of writing of all aspects of this important topic and will be invaluable to all workers in the field for that reason. Finally, it is appropriate that we record our thanks to our fellow members of the Technical Organizing Committee for encouraging participation from those areas. We are also indebted to those who served as chairmen, without their support, the conference could not have been the success that it was. We also acknowledge the authors themselves, without whose expert input there would have been no conference. Their efforts made a great contribution to its success.

About the College

Sri S. Ramasamy Naidu, familiarly known as "SR", was a dedicated educationist and freedom fighter. His realisation that political freedom will be of no value unless there is freedom from illiteracy led him to work tirelessly for the great cause of education. Thanks to his keen interest and initiative, this part of the state of Tamilnadu is today blessed with a number of educational institutions. Four decades ago, some great philanthropists of this region founded our College in memory of this visionary leader in order to realize his noble ambition.

At present the College is offering 13 Under-Graduate courses, 8 Post-Graduate courses, 4 diploma courses, 6 M.Phil. courses and 4 Ph.D. programmes. The UGC conferred Autonomous status to the college in the academic year 2010-2011 and the same was extended for six more years in the year 2016-2017. The National Assessment and Accreditation Council (NAAC) accredited the college with 'B++' Grade in 2005, reaccredited it with 'A' Grade with 3.22 CGPA in 2012 and now again reaccredited it with 'A' Grade with 3.38 CGPA in 2017. These crown achievements have spurred the institution towards academic transcendence and social service.

About the Conference

This International Conference is a global event organized by Sri S.Ramasamy Naidu Memorial College & Conference World . This conference provides an international forum for researchers, developers, engineers and practitioners who are involved in real time projects that provide solutions to exchange their valuable ideas and showcase the ongoing works which may lead to path breaking foundation of the futuristic engineering. It accentuates indispensability of interdisciplinary and cross – linked thinking with respect of innovation and market opportunities.

Hon. Chief Patron:

Thiru. V. Venkataraman,
Secretary, Sri S.R.N.M College, Sattur.

Patron

Dr. S. Ganeshram, Principal

Convener

Dr. K. Arunesh,
Dean & Associate Professor of Computer Science

Co-Convener

Dr. A. Rajeshkanna, Assistant Professor (Computer Science)

Hon. Chief Guest

Dr. Mohammad Abubakar

Vice chairman Academic Staff Union of Universities (ASUU), Nigeria,
Coordinator MIS unit of Modibbo Adama University Yola Nigeria,
Postgraduate Coordinator, Department of Information Technology,
Senate Member, Modibbo Adama University Yola, Nigeria

Guest of Honor & Keynote Speakers

P.Sagaya Aurelia

Associate Professor
CHRIST (Deemed to be) University, Bangalore

Keynote Speakers

Dr. V. Latha- EMS

Assistant Professor in Chemistry
Topic : Blended Learning Approach for Effective Science Education

Session Chair

Dr. P.Sarojini,

Assistant Professor, Chemistry

Organizing Secretaries

Dr. V. Latha, Assistant Professor (Chemistry)
Dr. A. Ranichitra, Assistant Professor (Computer Science)
Dr. V.Preetha Assistant Professor (Computer Science)

Co-ordinators

Dr. P. Sundara Venkatesh, Assistant Professor (Physics)

Dr. K. Saravana Kumar, Assistant Professor (Physics)

Dr. K. V. Geetha, Assistant Professor (Mathematics)

Dr. P. Kaliraj, Assistant Professor (Zoology)

Dr. G. Pandiarajan, Assistant Professor (Botany)

Organizing Committee Members

Dr. T. Kavitha Assistant Professor (Chemistry)

Dr. S. Nithya, Assistant Professor (Physics)

Ms. V. N. Vishali, Assistant Professor (Business Administration)

Ms. M. Thilagam, Assistant Professor (Computer Science)

Ms. B. Vaidehi, Assistant Professor (Computer Science)

Dr. M. Gayathri Devi, Assistant Professor (Nutrition & Dietetics)

All papers will undergo a double blind peer review process and the criteria for acceptance will be based on quality, originality, technical content and relevance.

Proceeding of the conference has been published with **ISBN: 978-93-91535-23-0**

International Conference on Multidisciplinary Approaches in Engineering, Management & Science (EMS-2022) Organized by: SRI S. RAMASAMY NAIDU MEMORIAL COLLEGE (AFFILIATED TO MADURAI KAMARAJ UNIVERSITY) A Co-educational, Autonomous and Linguistic Minority Institution, Re-accredited with 'A' Grade by NAAC, SATTUR, Virudhunagar District through online with the collaboration of IARDO and Conference World on **04 March 2022**

Total 68 papers were received for the conference and 32 papers were shortlisted by the committee.

1. Accepted papers will be published in the peer reviewed international journals having ISSN & High Impact factor.
2. Selected Papers will be published in the UGC Care listed international journals having ISSN & High Impact factor.
3. Few very good quality Papers will be published in the Scopus indexed journal having ISSN & High Impact factor.
4. Author will get certificates, one for paper publication in Journal other for paper presentation in conference as per their choice
5. All the papers of the conference will be published in the conference proceeding with ISBN.
6. All the accepted and presented/Non Presented papers will be indexed in Google scholar & IDIIF.

Published by

AR Research Publication,

3/186 Santpura Govindpuri Modinagar- 201201 . Dist: Ghaziabad

International Conference on Multidisciplinary Approaches in Arts, Social Sciences & Humanities (ASH-2022) (Vol-01) Copyright © 2022, by AR Research Publication (India)

No part of this publication may be reproduced or distributed in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise or stored in a database or retrieval system without the prior written permission of the publishers. The program listing (if any) may be entered, stored and executed in a computer system, but they may not be reproduced for publication.

This edition can be exported from India only by the publishers, AR Research Publication (India) ISBN: 978-93-91535-22-3

Managing Director: Gauri Sharma

Senior Researcher—Product Development: Ms. Pratima Singh

Head—Production (Higher Education and Professional): Satinder Kulkarni

Information contained in this work has been obtained by AR Research Publication (India), from sources believed to be reliable. However, neither AR Research Publication (India) nor its authors guarantee the accuracy or completeness of any information published herein, and neither AR Research Publication (India) nor its authors shall be responsible for any errors, omissions, or damages arising out of use of this information. This work is published with the understanding that AR Research Publication (India) and its authors are supplying information but are not attempting to render engineering or other professional services. If such services are required, the assistance of an appropriate professional should be sought.

Cover Design: Rishab Kumar