



DEPARTMENT OF MATHEMATICS, CHEMISTRY, PHYSICS & COMPUTER SCIENCE

Report on

2nd NATIONAL CONFERENCE 2021 Virtual

National Conference On Future Perspective For Basic Science-NCFPBS-2021

8th & 9th APRIL-2021

The aim of Second National Conference organized by department of Mathematics, Chemistry, Physics & Computer Science, School of arts and Science, AVIT Campus, old Mahabalipuram Road, Paiyanoor was to bring together the best of minds to share their knowledge and provide a platform to promote the exchange of opinions on the issue pertaining to the theme.

The papers received and accepted for this conference would be published in Proceeding book.

Welcome Addresses

The event started with devotional invocation song followed by lightning the lamp by guests as a symbol of knowledge and wisdom. In the opening address,

Dr. R.Shanmugavalli, Dean & Director, School of Arts and Science, AVIT Campus, Vinayaka Mission's Research Foundation, welcomed the gathering and emphasized on the valuable insight of the conference.

Inaugural Address

Dr.S.A.V. Sathya Murty, Director-Research, Vinayaka Missions Research Foundation, Salem, delivered a wide range of Nano materials, Semiconductor Materials, Smart Materials, Bio materials, Thin films, Material Science, Artificial intelligence, Data mining, Mathematical Modelling, Cryptography etc. All these areas are highly relevant in this fast changing world of Science, Engineering and Medicines.

In his address, chief guest of conference Dr. S.Nagarajan, Department of Chemistry, National Institute of Technology, Warangal-506004, Telugana. He delivered a lecture on synthesizing a new class of structuring agents by a judicious combination of gluconolactone and ricinoleic acid compounds were classified using simple steps in good yield.

The vote of thanks was delivered by Convener Dr. S.Kavitha, HOD, Associate professo,r Department of Computer Science, School of Arts and Science, AVIT Campus.

Paper presentations

- The National Conference received 60 abstracts and research papers from different states of India such as , Telugana, Andrapradesh , Tamil Nadu, Pondicherry etc.
- 28 papers were selected for presentation.
- 28 participants presented research papers through online via Zoom.

Day:1-(08/04/2021) Paper Presentation- FN

Department of Chemistry:

Key Note speaker and Chief Guest Dr.S.Nagarajan, Department of Chemistry, National Institute of Technology, Warangal, Telugana.

Chief Guest introduction Dr.M.Surrender, Assistant professor, Department of Chemistry, School of arts and Science, AVIT Campus.

Papers are presented by various research scholars and students from various college, selected best paper NCFPBS_41, Differential Aeration corrosion studies of AIS1410 externally joined with AISI-316L alloys in Acid Medium.

Day:1-(08/04/2021) Paper Presentation- AN

Department of Computer Science:

Computer Science Technical Key note Speaker Dr.S.Srinivasan, Associate Professor, School of Computer Science & IT, Jain Deemed to be university, #44/4, District Fund Road, Jayanagar, 9-th Block, Jayanagar Campus, Bengaluru, Karnataka-560069.

Papers are presented by various research scholars and PG students, the best innovative paper was select NCFPBS2021_056, Machine learning and Deep learning Techniques in NLP to process Tamil Languages.

Day-2-(09/04/2021) Paper presentation- FN

Department of Mathematics:

Mathematics Technical Key Notes Speaker Dr.M.Radhamadhavi, Associate Professor, Department of Mathematics, K.L. University, Vddeswaram, Guntur District, Andrapradesh, India.

Papers are presented by Various research scholars and PG students, the best paper was selected NCFPBS_014, Implication-based Fuzzy Ternary semigroups for isolated systolic Hypertension Using pentagonal Fuzzy Number Matrix.

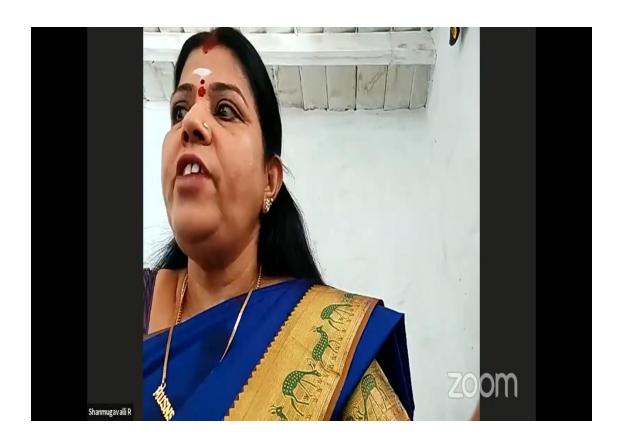
Department of Physics:

Physics Technical Key Notes Speaker Dr.Chitra, Head & Associate professor, S.I.V.E.T College, Gowrivakkam, Chennai-600073.

Papers are presented by various research scholars and PG students, the best paper & best innovative paper award are gave the following papers NCFPBS_57 and NCFPBS_59

Valedictory and awards presentation

- The Concluding remarks was delievered by Mr I. Ameethbhasha, Associate Professor, HoD, Department of Chemistry, Conference coordinator.
- Conference Convener Dr. R.Shanmugavalli, Dean and Director, School of arts and Science, gave away the best paper awards and best innovative paper award to the winners under three catagories namely student, academics and research scholar.







FT-IR SPECTROPHOTOMETRY

- Infrared spectra were recorded on a Bruker FT-IR tensor 27 spectrophotometer directly on small samples of the compounds in the range 200-4000 cm⁻¹. The formation of complex between metal ion and acetylacetone was confirmed by the FT-IR data.
- The IR spectrum of the acetylacetone shows the stretching frequency of v_{as}(C=O) and v_s(C=O) stertching vibrations of C=O group of acetylacetone are observed at 1714cm⁻¹ and 1598cm⁻¹ respectively. In the Ni(II)— acetylacetanato complex a shift of these bands were observed at 1584cm⁻¹ and 1508cm⁻¹ respectively, which confirmed the complexation of Ni(II) ion with oxygen of the C=O group of acetylacetone. In the Co(II)— acetylacetanato complex a shift of these bands were observed at 1645cm⁻¹ and 1543cm⁻¹ respectively, which also confirmed the complexation of Co(II) ion with oxygen of the C=O group of acetylacetone.

