

- Felicitation** **Dr. J Johnson**  
Principal, AVC
- Vote of thanks** **Prof. M Latha Beatrice**  
Head, Department of Physics, AVC
- 10.30-11.30 **Keynote lecture** **Prof. Kuruville Joseph**  
Senior Professor and Dean (SA, SW & Outreach) Indian  
Institute of Space Science and Technology, Trivandrum  
*"Micro to Nano: Challenges and Opportunities"*
- 11.30-11.45 **Tea**
- 11.45-12.30 **Invited Lecture 1** **Dr. T P D Rajan**  
Principal Scientist, CSIR-National Institute for  
Interdisciplinary Science and Technology, Trivandrum  
*"Smart Composites and Coatings"*
- 12.30-1.15 **Invited Lecture 2** **Dr. K S Santhosh Kumar**  
Scientist, Vikram Sarabhai Space Centre, ISRO, Trivandrum  
*"Non isocyanate polyurethanes: synthesis and new materials"*
- 1.15-2.00 **Lunch**
- 2.00-2.45 **Invited Lecture-3** **Dr. K Y Sandhya**  
Associate professor,  
Indian Institute of Space Science and Technology, Trivandrum  
*"Nanomaterials for sensing applications"*
- 2.45-3.45 **Contributory Oral and Poster Session**

**December 7, 2019 (Saturday)**

- 10-10.45 **Invited Lecture-4** **Dr. Roy Joseph**  
Scientist G and Head, Medical Devices Engineering, Sree Chitra  
Tirunal Institute for Medical Sciences & Technology, Trivandrum  
*"3D Bioprinting - Future of Organs"*
- 10.45-11.30 **Invited Lecture-5** **Dr. Kana M Sureshan**  
Associate Professor,  
Indian Institute of Science Education and Research, Trivandrum  
*"Organogels and their applications"*
- 11.30-11.45 **Tea**
- 11.45-12.30 **Invited Lecture-6** **Dr. Achu Chandran**  
Scientist,  
CSIR-National Institute for Interdisciplinary Science and Technology, Trivandrum  
*"Soft Materials for Device Applications"*
- 12.30-1.15 **Invited Lecture-7** **Dr. J Mary Gladis**  
Associate Professor,  
Indian Institute of Space Science and Technology, Trivandrum  
*"Lithium Sulfur Batteries – A Potential Energy Storage System"*
- 1.15-2.00 **Lunch**
- 2.00-3.00 **Contributory Oral and Poster Session**
- 3.00-3.30 **Valedictory Function**

**Patrons**

Mr. A Mariadhas, President  
Rev. Dr. E John Kulandai, Correspondent  
Dr. B Alex Johnson Paul, Treasurer

**Chairman**

Dr. J Johnson, Principal

**Convener**

Dr. S. Mary Helen,  
Associate Professor and Head, Department of Chemistry

**Co- Convener**

Mrs. M Latha Beatrice  
Associate Professor and Head, Department of Physics  
Dr. Bhoje Gowd  
Principal Scientist, CSIR-NIIST, Trivandrum  
Convener, MRSI, Trivandrum Chapter

**Co-ordinators**

Dr. M Jaya Rajan  
Dr. A Rejoice

**Members**

Faculty of Chemistry & Physics

**For further details contact**  
9442057747, 9442304480, 9994029918  
8807841121



# National Conference on Advances in Materials Chemistry and Physics (NCAMCP-2019) 6 - 7 December 2019

*Jointly Organised by*

*Research Departments of Chemistry and Physics,  
Annai Velankanni College, Tholayavattam Kanyakumari District &  
Materials Research Society of India Trivandrum Chapter*

**Venue:**

**Fr. Lucas Auditorium Annai Velankanni College**

## About the conference

National Conference on Materials Chemistry and Physics (NCAMCP-2019) aims to motivate the young researchers and academicians and to impart awareness on the recent developments in nanomaterials, soft materials, polymer composites, smart materials, organic functional materials, biomaterials, and energy materials. This conference would discuss the latest advances in design, processing and applications of novel materials. In light of this, the conference provides a platform for researchers from various disciplines of chemistry, physics and materials science to share their latest cutting-edge research findings and create an environment to have collaborative discussions.

## Annai Velankanni College

Annai Velankanni College, Tholayavattam, Kanyakumari District is established in the year 1987 and administered by the Friends of Kottar Society (Reg.No.9/1980). The college is affiliated to the Manonmaniam Sundaranar University and recognized by the UGC Act under sections 2 (f) and 12 (B). The National Assessment and Accreditation Council (NAAC) assessed and accredited the college with B++ grade in December 2016 with a CGPA of 2.95. The college now offers 10 UG, 8 PG, 6 predoctoral and 7 doctoral programmes. Around 70 scholars are pursuing their doctoral programme in the college. Department of Chemistry and physics plays a vital role in the growth of our college in higher education and research. The departments have been producing knowledge enriched and professionally competent students. Nano composites, crystal growth, polymer chemistry, nuclear physics, non-linear optics, quantum mechanics, environmental chemistry, phytochemistry and photo catalysis are the various thrust areas of the departments.

## Materials Research Society of India (MRSI)

Materials Research Society of India (MRSI) is an interdisciplinary professional society brought into being when there was a world-wide appreciation of the role of materials science and engineering in the design, development and performance of nearly every system associated with a wide spectrum of sectors like chemical industry, heavy engineering, machinery, transportation, energy, aerospace, ocean technologies, instrumentation, micro-electronics, communication systems, bioengineering, defence, agriculture and construction. MRSI is designed to stimulate accelerated growth of indigenous research and development of a wide range of materials and their application. One of its objectives is to establish information banks and disseminate knowledge on materials through education, training courses, workshops, seminars, symposia, visits, lectures, publications, films and other appropriate means. MRSI, Trivandrum Chapter is one of the most dynamic chapters periodically organise national and international conferences and outreach programs for the benefit of student community. The chapter has active members from various prominent organisations in Trivandrum such as CSIR-NIIST, ISRO-VSSC, IIST, SCTIMST, IISER, University of Kerala, CUSAT etc.

## Conference Themes

- Polymeric and Composite Materials
- Crystal Growth
- Organic Synthesis
- Vibrational Spectroscopy
- Nano materials
- Smart materials
- Sensors
- Environmental analysis

## Call for Contributory Papers

Interested participants should submit their original research work in the topics mentioned above in text format with abstract not exceeding 2 Pages and send to [ncamcp2019@gmail.com](mailto:ncamcp2019@gmail.com) on or before 25-11-2019. Selected papers will be published as proceedings with ISBN .

## Guidelines for preparation of paper/poster

Title of the paper should be in Bold, Times New Roman font size 12. Author name with initials in capital should be one space below with font size 10, affiliations and address of authors should be in font size 9. All the above matters should be centered .The papers should starts with 2 spaces below the address with 1.5 line spacing in font size 12.

## Registration Fee

*Students - ₹ 400*

*Research Scholars - ₹ 600*

*Faculties / Industrialist - ₹ 750*

## Programme

**December 6, 2019 (Friday)**

**9.30-10.00**

**Registration**

**Inauguration**

**Prayer song**

**Welcome address**

**Introductory Remarks**

**Presidential Address**

**Inaugural address**

**Dr. S Mary Helen**

Head, Department of Chemistry, AVC

**Dr. T P D Rajan**

Chairman, MRSI-Trivandrum Chapter &  
Principal Scientist, CSIR-NIIST, Trivandrum

**Rev. Dr. E John Kulanthai**

Correspondent, AVC

**Prof. Kuruvilla Joseph**

Senior Professor and Dean (SA, SW & Outreach)  
Indian Institute of Space Science and Technology,  
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