



# SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY  
(DEEMED TO BE UNIVERSITY)

Accredited with Grade "A" by NAAC

Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai - 600 119, Tamil Nadu, India.



## NATIONAL SYMPOSIUM ON THE RECENT ADVANCES IN BIOTECHNOLOGY AND BIOINFORMATICS OF MARINE MICROBES (BBMM 2019)

Dates: 25<sup>th</sup> & 26<sup>th</sup> September 2019

Venue: Col. Dr. Jeppiaar Research Park  
Sathyabama Institute of Science and Technology

SPONSORED BY



सत्यमेव जयते

DEPARTMENT OF BIOTECHNOLOGY  
MINISTRY OF SCIENCE & TECHNOLOGY  
GOVERNMENT OF INDIA

ORGANIZED BY



**CENTRE FOR OCEAN RESEARCH**

*(DST-FIST Sponsored Centre)*

**MoES - Earth Science & Technology Cell  
COL. DR. JEPPIAAR RESEARCH PARK  
Sathyabama Institute of Science and Technology  
Chennai - 600 119, Tamil Nadu, India**

## ABOUT SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

Sathyabama Institute of Science and Technology (SIST), a Christian Minority Institution, formerly known as Sathyabama Engineering College was established in 1987 by Dr. Jeppiaar. It is a premier institute imparting knowledge in the areas of engineering, science, technology and education. The institution's progress and contribution to the field of technical education for over two decades resulted in granting Deemed University status on 16th July, 2001 and University status on 13th September, 2006 under section(3) of the UGC Act, 1956 by the Ministry of Human Resources Development, Government of India. The SIST has been awarded as Category "A" institute by Ministry of Human Resources Development (MHRD), Government of India and accredited by NAAC and also certified with DNV- GL ISO 9001 standard. Untiring efforts of faculty, students, management and positive academic ambience prevailed in the campus has led SIST to be ranked in 41th position by National Institutional Ranking Framework (NIRF 2019), Ministry of Human Resource Development, Government of India. SIST has been ranked as one among the top 50 Universities in NIRF for the 4 consecutive years. The SIST has a sprawling campus of 129 acres. The SIST offers 27 programmes at UG level and 41 programmes at PG level in all disciplines. The SIST has excellent infrastructure facilities including modern laboratories, library with multimedia facilities, internet and other general amenities. The SIST is also having 14 research centres to carry out research and extension in the domains of Ocean Research, Remote Sensing And Geoinformatics, Nanoscience And Nanotechnology, Climate Change Studies, Earth And Atmospheric Sciences, Waste Management, Laboratory Animal Technology, Drug Discovery And Development, Space Technology, Robotics And Automation, Quality Assurance And Non Destructive Evaluation, Advanced Electronic Test Engineering ([www.sathyabama.ac.in](http://www.sathyabama.ac.in)).

## ABOUT CENTRE FOR OCEAN RESEARCH

Centre for Ocean Research (COR) is one of the premier research and innovation centre managed by Sathyabama Institute of Science and Technology to focus on Marine Science Research and Technology. Centre has been established in 2007 as a joint initiative of National Institute of Ocean Technology (NIOT) Chennai and Sathyabama Institute of Science and Technology to encourage targeted sectors of Ocean Research. To its credit COR was supported by DST-FIST. COR plays a key role in marine research and development through trainings/workshops and transfer of technology. Centre has successfully completed many nationally and internationally funded research projects, while some are still ongoing and few are initiated which are sponsored by various Agencies and research organizations like Department of Biotechnology (DBT), Department of Science and Technology (DST), Bharatiya Nabikiya Vidyut Nigam Ltd. (DAE-BHAVINI), Ministry of Steel, Board of Research Nuclear Sciences (DAE-BRNS), University Grants Commission (UGC), International Foundation of Science (IFS, Sweden), Atomic Energy Regulatory Board (AERB), Indian Council of Agricultural Research (ICAR) and Ministry of Earth Sciences (MoES). Centre gathers and disseminates the knowledge to public in the major areas of Mariculture, Marine Technology and Engineering, Marine Ecology, Marine Nanotechnology, Marine Biotechnology, and Marine Education & Extension.

## ABOUT "BBMM 2019"

The world's oceans, from the coasts to the abysses, harbor an incredible level of microbial diversity. This marine microbial biosphere is an enormous, untapped resource of biotechnological interest. This national symposium will draw attention to the potential of marine microbes in the recent advances of biotechnology and bioinformatics. The biotechnological potential is considerable, ranging from the synthesis of bioactive molecules to the production of biofuels, cosmeceuticals, nutraceuticals, and biopolymers; from the engineering of marine microbes for biomedical purposes to the degradation of pollutants, and the use of microbial biosensors as sentinels for environmental quality. Marine viruses have great biotechnological potential, yet the exploration of the marine virome, and the associated gene and protein pool, is only beginning. Marine archaea have so far been exploited for the isolation of enzymes, yet much biotechnological exploitation can be foreseen. Bacteria and microbial eukaryotes, especially fungi and photosynthetic protists, provide an important contribution to biotechnology; the combination of omics-driven technologies and improved cultivation techniques is widening the knowledge on their biological diversity, paving the way for new biotechnological exploitations. The exploration of the marine microbial biosphere, and its extraordinary genetic and physiological diversity, will undoubtedly continue to offer chances for the development of new and sustainable blue biotechnologies, helping to solve important societal challenges of the twenty-first century. Among microbes, the marine algae have been extensively studied for various biological and biomedical applications. Marine microalgae are typically found in the marine system and are explored for industrial applications. Microalgae have a capacity to produce polymers, toxins, fatty acids, enzymes, which can be useful for pharmaceutical, nutraceutical, and cosmeceutical developments. This national symposium will give an overview of the recent advances of biotechnology and bioinformatics inputs on the marine microbial investigation, outlining the advantages, disadvantages and future challenges.

## THEMES - BBMM 2019

- ‡ Marine microbes – Explored and Unexplored
- ‡ Microbial Evolution and Taxonomy
- ‡ Microbial genetics and molecular biology
- ‡ Marine Micro/Macro Algal Culture & Biotechnology
- ‡ Microbes in Nanomaterials Synthesis and Application
- ‡ Marine Microbial Database and Bioinformatics
- ‡ Microbes and Molecular Docking & Dynamics
- ‡ Microbes and Pharmacophore Based Drug Design
- ‡ Marine Microbial pathogens
- ‡ Microbial Oceanography in GIS & Remote Sensing
- ‡ Microbial Oceanography and Modeling/Prediction
- ‡ Microbial Oceanography and Climate Change
- ‡ Microbial Genomics, Proteomics and Metabolomics
- ‡ Marine Microbial Health Informatics
- ‡ Microbes and Antibacterial activity / Antibiotic resistance
- ‡ Microbes and Environmental process
- ‡ Microbes in Sea foods Industry
- ‡ Microbes in biodegradation and deterioration
- ‡ Microbes and Biopolymers/Byproducts/Biofuels
- ‡ Microbes in biofilms and corrosion
- ‡ Microbes in Finfish, Shellfish and Invertebrate Aquaculture
- ‡ Microbes and Marine Natural Products
- ‡ Microbes and Enzyme Technology
- ‡ Microbiome Variation and Metabolic Pathways

## CALL FOR E-POSTERS

Authors are requested to submit a one page abstract (300 words only) for the E-Poster (single power point slide) on or before **20th September, 2019** via email through **marinemicrobes2019@gmail.com**

Original Research work, Reviews, Novel Ideas, Hypothesis, Policy based Suggestion, Science and Engineering technology based articles are accepted in this National Symposium.

Acceptance abstracts will be intimated through email for the submission of **E-Posters**. The abstracts and the poster will be published in ISBN tagged proceeding. All accepted abstracts will be included in the Symposium proceedings. All E-Posters will be presented in the symposium as a single slide per participant and evaluated for best poster award.

## YOUNG RESEARCHER AND PRESENTATION AWARDS

The Young Research Award is an initiative with the intention of supporting young researchers (students) to forecast their best work. Best young researchers will receive the best price and a certificate of appreciation.

## WHO CAN PARTICIPATE?

Research Scholars, Scientists, Lecturers, Faculties, Students and Scholars from Engineering or Science background working in R&D Institutes/Universities/Colleges/Industries who are working in the themes mentioned above can participate

## GUIDELINES FOR E-POSTER PRESENTATION

E-Poster specification: Single power point slide with high resolution.

## MODE OF PAYMENT

The registration fee should be paid in favor of “**Sathyabama Institute of Science and Technology - Research**” by demand draft payable at Chennai in all national banks or it can also be paid by **CASH OR ONLINE**.

## ACCOMMODATION

External Accommodation can be arranged on payment basis in nearby hotels ranging from Rs.2000/- to 4000/- per day.

CATEGORY	REGISTRATION BY	SPOT REGISTRATION
Students / Research Scholars	Rs. 500/-	Rs. 550/-
Scientific/ Academia/ Industrial	Rs. 750/-	Rs. 800/-

## TECHNICAL COMMITTEE - CENTRE FOR OCEAN RESEARCH

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- ‡Dr. A. Kathirvelpandian, Associate professor & Head, Dept of Fish Biotechnology, IFPGS, TNJFU

**Last date for Abstract Submission - 20<sup>th</sup> September 2019**

**Last Date for E Poster – 20<sup>th</sup> September 2019**

**Last Date for Registration – 20<sup>th</sup> September 2019**

**Symposium Dates - 25<sup>th</sup> & 26<sup>th</sup> September 2019**

How to Reach Sathyabama Institute of Science and Technology?

Sathyabama is located on the Rajiv Gandhi road (Old Mahabalipuram Road, IT highway) of Chennai city, which is 20 km away from the Inter-national airport, 30 km from Central Railway station and 17 km from Tambaram Railway station. Buses : 19B from Saidapet, 21H from Broadway



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**DIRECTOR (RESEARCH)**

**Convener**  
**Dr. D. INBAKANDAN**  
**Head, Scientist – E**  
**CENTRE FOR OCEAN RESEARCH**

**Co- Convener**  
**Dr. L. STANLEY ABRAHAM**  
**Scientist – E**  
**CENTRE FOR OCEAN RESEARCH**

**For further details contact Convener:**

**Dr. D INBAKANDAN, Head, Scientist – E / Associate Professor, Centre for Ocean Research, Sathyabama Institute of Science and Technology, Chennai - 600 119, Tamil Nadu, India.**  
**Official : inbakandan@sathyabama.ac.in**