

Chief Patrons

Dr. P. Shyama Raju

Chancellor, REVA University

Shri. Umesh Raju

Pro Chancellor, REVA University

Patrons

Dr. M. Dhananjaya

Vice Chancellor, REVA University

Dr. N. Ramesh

Registrar, REVA University

Conveners

Dr. P. Visweswara Rao

Associate Dean, SoAS,
Director, International Relations and Research Collaborations,
REVA University

Prof. Shilpa B. R

Director (I/C), School of Applied Sciences, REVA University

Co-Conveners

Dr. Madhusudana Reddy M B

Head - Department of Chemistry, School of Applied Sciences,
REVA University

Dr. D.V. Sunita

Head - Department of Physics, School of Applied Sciences,
REVA University

Dr. Vishu Kumar

Head - Department of Mathematics, School of Applied
Sciences, REVA University

Dr. Ramachandra P

Professor, School of Applied Sciences, REVA University

National and International Advisory Committee

1. Prof. Jagadeesh Rajenahally
Group Leader "Synergy between Homogeneous and
Heterogeneous Catalysis", Leibniz Institute for Catalysis,
Rostock, Germany.

2. Dr. Pavan Kumar
Senior Scientist, Chemistry & IP, CSIR Institute.
3. Dr. Sanjeev P. Maradur
Associate Professor, Materials Science Division, PPISR,
Devenahalli, Chikkaballapur, Karnataka.
4. Dr. Arun Mohan Isloor
Professor, Professor & Head, Department of Chemistry,
National Institute of Technology-Karnataka, Surathkal
5. Dr. Bony De Kumar
Director of Operations, Yale Genome Analysis Center, Yale
University, Connecticut, USA.
6. Dr. Nellaiah Hariharan
Head, R & D and Training, Bangalore Biotech Labs. Pvt.
Ltd. (BioZEEN) Bengaluru, Karnataka, India
7. Prof. Dr. Sreeramanan Subramaniam
Professor, School of Biological Sciences & Centre for
Chemical Biology (CCB), Universiti Sains Malaysia (USM),
Penang, Malaysia
8. Prof. Kondaiah, Emiretus
Professor, Indian Institute of Sciences, (IISc), Bangalore
9. Dr. Kumar Kothapalli
Dell Medical School, The University of Texas at Austin,
USA
10. Dr. P. G. Siddeshwar
Senior Professor of Mathematics, CHRIST (Deemed to be
University) Bangalore.
11. Dr. B. Sooryanarayana
Professor, Dr. Ambedkar Institute of Technology,
Bangalore.
12. Dr. V. Lokesh
Registrar Evaluation, Bangalore City University,
Bangalore
13. Dr. Thirupathi Gudi
Professor, Department of Mathematics, Indian Institute of
Science, Bangalore
14. Prof. Chandrabhas Narayan
Director, RGCB; Dean, Research and Development,
JNCASR
15. Prof. Reji Philips
Professor Raman Research Institute, Bengaluru
16. Dr. Akshay Naik
Associate Professor CeNSE, Indian Institute of Science,
Bangalore
17. Dr. Girish Gowda
Division Head, Thin Films Division Laboratory for
Electro-Optics Systems (LEOS) ISRO, Dept. of Space, Govt.
of India.



REVA
UNIVERSITY

Bengaluru, India



3rd International Conference on Global Trends in Sustainable Technology and its Applications in Applied Sciences

30th & 31st October 2023

Organised by

School of Applied Sciences, REVA University
in collaboration with
Indian Association of Applied Microbiologists

Conference Venue

School of Applied Sciences, REVA University,
Rukmini Knowledge Park,
Kattigenahalli, Yelahanka, Bengaluru-560064
Phone: +91-80-46966966

Rukmini Educational
Charitable Trust

www.reva.edu.in

Guest of Honour

Nobel Laureate

His Excellency

Dr. Sir Richard J Roberts

New England Biolabs, MA, USA

Title of the Talk: The Path to the Nobel Prize



Sir Richard John Roberts FRS (Born 6 September, 1943) is a British Biochemist and Molecular Biologist. He was awarded the 1993 Nobel Prize in Physiology or Medicine with Phillip Allen Sharp for the discovery of "Introns in eukaryotic DNA and the mechanism of gene-splicing". Roberts received a Ph.D. in organic chemistry from the University of Sheffield, Eng., in 1968. After postdoctoral research at Harvard University, he took a post at Cold Spring Harbor Laboratory in New York in 1972. In 1992 he joined New England Biolabs, a biotechnology firm. He currently works at New England Biolabs.

"What causes genes to be split?"

He was knighted in the 2008 Birthday Honors. In 2016, Roberts and other Nobelists composed and signed a "Laureates Letter Supporting Precision Agriculture (GMOs)" addressed to the leaders of Greenpeace, the United Nations.

Keynote Speakers

Title of the Talk: Digital Transformation for Manufacturing Industry



Joonho LEE

POSCO Professor

Head, Professor, Department of Materials Science and Engineering
Head, Professor, Department of Battery-Smart Factory
Professor, Department of Smart City
Director, The Institute of High Technology Materials and Devices
Director, Center for Research and Education of Metallurgy (Sponsored by MOTIE)
Co-Director, KU-KIST N-TEAM (Sponsored by MSIT)
Korea University

Keynote Speakers

Title of the Talk: Synergy between basic and applied Sciences towards Sustainable Planet



Dr. Srivari Chandrasekhar

Chief Scientist and SERB J C Bose National Fellow
CSIR-Indian Institute of Chemical Technology
Hyderabad - 500007

Plenary Speakers

Title of the Talk: SARS-CoV-2 Hijacking or Transgressing? It is LncRNAs all the way in the host



Dr. Prashanth N Suravajhala

Associate Professor/Principal Scientist, Systems Genomics

Room # 301, Amrita School of Biotechnology
Amrita University, Amritapuri,
Kerala 690525, India.

Plenary Speakers

Title of the Talk: Thermoelectric Materials and its Applications



Dr. Ramesh Chandra Mallik

Associate Professor

Department of Physics,
Indian Institute of Science, Bangalore

Title of the Talk: Sustainable microbial technologies for restoration of ecosystem



Dr. G Velmurugan

Scientist

KMCH, Coimbatore

Plenary Speakers

Title of the Talk: Development of appropriate technology for India's need for next decade



Dr. Meenakshi Munshi

Director Research

SGT University, Gurgaon.
Former Adviser/Scientist G,
Head HRD & Societal Program Division,
Department of Biotechnology,
Government of India, Fulbright Fellow,
New Delhi, India



Dr. Pratap Vishnoi

Scientist

Jawaharlal Nehru Centre for Advanced Scientific Research,
Bangalore

About the 3rd International Conference

School of Applied Sciences, REVA University welcomes you to the 3rd International conference on Global Trends in Sustainable Technology and its Applications in Applied Sciences (GTSTAAS-2023) on 30th and 31st October 2023 at REVA University, Bangalore. The international conference has been specifically designed with the intention of delivering outstanding outcomes and challenges in the Physical, Chemical, Mathematical, Biological, Medical and Health Science sectors. It intends to bring collectively researchers, scientists, technicians, and scholars in all fields of the applied sciences, medical and healthcare sector, for the propagation of original research conclusions, new approaches and developmental practices that yield real results. The conference theme "Global Trends in Sustainable Technology and its Applications in Applied Sciences (GTSTAAS-2023)" is dedicated to bringing together a significant number of diverse scholarly events for presentation within the specified domains of conference. Participants will have an opportunity to interact with leading experts from their respective fields to bestow their research plans in different countries. With eminent International and National Speakers, the conference provides an exceptional value for students, academics, and industry experts and researchers. The conference aims to bring together leading scientists, researchers, and research scholars to exchange and share their experiences and research results on all aspects science. It also provides an interdisciplinary platform to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered, and solutions adopted in the fields of Life Science, Chemical & Physical sciences, and Medical Sciences.

Objectives of the 3rd International Conference

To provide an international forum to exchange information, share experiences and research results from various specialized and interdisciplinary fields in Applied and Medical sector. To bring academicians, leading researchers, scholars as well as innovative practitioners from industry, onto common platform to share research knowledge, skills, and insights into promoting research and innovations. To provide a platform for participants to establish professional networks in their respective fields and to enhance collaborative research.

About REVA University

REVA University is a State Private University established in Karnataka State under the Government of Karnataka Act No. 13 in the year 2012 in Bengaluru, the IT capital of India. The University is recognised by the University Grants Commission (UGC) and is approved by the AICTE (All India Council for Technical Education).

REVA University prides itself in contributing to every student's holistic development. The University currently offers 41 full-time Under Graduate Programmes, 32 full-time Post Graduate programmes, 18 PhD programmes, and certification and diploma programmes. The University offers programmes in Engineering, Architecture, Science and Technology, Commerce, Management Studies, Law, Arts & Humanities, and Performing Arts. Courses are offered in Certificate/Diploma and Post Graduate Diploma too. REVA University facilitates research leading to a Doctoral Degree in all disciplines. The programmes offered by REVA University are well-planned and designed based on methodical analysis and research with emphasis on knowledge assimilation, practical applications, hands-on training, global and industrial relevance, and their social significance.

Teachers and instructors with illustrious academic experience are the architects of the meticulously designed curriculum and program modules offered at REVA University. They come with industrial exposure and experience that often translates through their teaching, thus bridging the gap between the industry and academia.

REVA University has an updated, ever-evolving collection of books, journals, and digital content in the library with the latest IT infrastructure that ensures students have information at their disposal. The lush green campus, state-of-the-art laboratories, custom-designed classrooms to enable seamless learning, and world-class indoor and outdoor sports facilities make REVA University the most preferred university among students and MNCs that visit the campus for placements.

About School of Applied Sciences

The School of Applied Sciences is shouldered by well qualified, experienced, and highly committed faculty. The state-of-the-art infrastructure facility with digital classrooms, well equipped laboratories, conference rooms and the serene academic atmosphere at REVA University will enhance the transfer as well as creation of knowledge. The school has collaborated with reputed industries and research organization to provide skills

sets required for student community. The school aims to develop a learning community with critical thinking capacity to solve problems with innovative research ideas. School of Applied Sciences is actively involved in research and published many peer reviewed articles in National and International Journals related to domain of Biotechnology, Biochemistry, Chemistry, Physics and Mathematics. The School has also published many patents and received grants from various funding agencies like DST, DBT, VGST, ICMR etc.,

About the Indian Association of Applied Microbiologists

Indian Association of Applied Microbiologists is one of the representative voluntary organizations of Microbiologists of basic and applied aspects, which looks after the interest of many eminent microbiologists, students, and the wellbeing of the society. IAAM was formed in the year 2000 under Tamil Nadu Society's Registration Act 1975, under the leadership of Prof Dr. P. Rajendran. As an organization, it has continued to play an important role in its deliberations to help in R&D in the field of Microbiology. So far it has proudly hosted number of National Conferences in various parts of Tamil Nadu. Today it stands as a well-established Association which organizes periodic meetings, symposia, workshops, and special lectures by eminent scientist's world over.

Organising Secretary

Dr. Madhusudana Reddy M B

HoD - Department of Chemistry, School of Applied Sciences

Organising Committee

BioTechnology

Mr. Prashantha CN

Assistant Professor, Department of Biotechnology, SoAS

Dr. Senthilkumar R

Associate Professor, Department of Biotechnology, SoAS

Ms. Renuka Madhu

Associate Professor, Department of Biotechnology, SoAS

Chemistry

Dr. Nagaraju D.H

Professor, Department of Chemistry, REVA University

Dr. Shivakumara. S, Associate Professor,
Department of Chemistry, REVA University

Dr. Ashoka S, Associate Professor,
Department of Chemistry, REVA University

Dr. Srinivas M, Assistant Professor,
Department of Chemistry, REVA University

Dr. Komala P, Assistant Professor,
Department of Chemistry, REVA University

Mathematics

Dr. Hanumagowda B N

Professor, Department of Mathematics, School of Applied Sciences, REVA University

Dr. Madhusudan Zalki

Professor, Department of Mathematics, School of Applied Sciences, REVA University

Dr. Uday Kumar K. N

Professor, Department of Mathematics, School of Applied Sciences, REVA University

Dr. Raju B.T, Professor

Department of Mathematics, School of Applied Sciences, REVA University



Physics

Dr. Madesh Kumar

Professor, Department of Physics, School of Applied Sciences, REVA University

Dr. K. Munirathnam

Associate Professor, Department of Physics, School of Applied Sciences, REVA University

Dr. Jaydev Pattar

Associate Professor, Department of Physics, School of Applied Sciences, REVA University

Dr. P. Anjuneyulu

Associate Professor, Department of Physics, School of Applied Sciences, REVA University

Conference Topics

Biotechnology

Microbial Technology

Regenerative medicine and Stem

Cell Biology

Agricultural Biotechnology

Genetics and Molecular Biology

Toxicology & Animal studies

Immunology

Developmental biology

Genomics and Proteomics

Biomedicine

Infectious Diseases

Nano-biotechnology

Cancer Biology and therapy

Environmental bioremediation

Antimicrobial peptides and therapies

Vaccine development

Computational Biology and Bioinformatics

Molecular pharmacology

Nanotechnology & Drug development

Biochemistry

Environmental sustainability

Production of value-added products

Pharmacology

Clinical Research

Antibiotic resistance

Food and Nutrition

Chemistry

Green Chemistry

Total Synthesis

Polymorphism

Batteries

Environment

Self-Assembly

Electro kinetics

Reverse Osmosis

Medicinal Chemistry

Crystallography

Catalytic Materials for Energy

Sensors

Nanomaterials

Polymer Chemical biology

Organic Electronics

Nano Filtration & Ultra Filtration membrane

Supra Molecules & Computational Chemistry

Mathematics

Fluid Dynamics

Operation Research

Algebra

Complex Analysis

Graph Theory

Geometry

Differential Equations

Number Theory

Physics

Laser Science and Technologies

Nano and Bio Photonics

Luminescence-Materials and Applications

Carbon-based materials

Radiation effect on materials

Ceramics

Dielectrics and Ferroelectric Materials

Thin Films and Related Technologies

Photovoltaic Materials and Cells

Materials for space applications

Conference Mode

Global Trends in Sustainable Technology and its Applications in Applied Sciences (GTSTAAS-2023) - Conference will be held at REVA University. The authors of accepted papers will have a choice to present their papers on site at REVA University. All accepted papers will be included in the conference proceedings. The same will be shared with all registered participants within a month after the conference through digital mode.

About Indian Association of Applied Microbiologists (IAAM)

Indian Association of Applied Microbiologists is one of the representative voluntary organizations of Microbiologists of basic and applied aspects, which looks after the interest of many eminent microbiologists, students and well being of the society. IAAM was formed in the year 2000 under Tamil Nadu Society's Registration Act 1975, under the leadership of Prof Dr. P. Rajendran. As an Organization, it has continued to play an important role in its deliberations to help in R & D in the field of Microbiology. So far it has proudly hosted Seventeen National Conferences in various parts of Tamil Nadu. Today it stands as a well established Association which organizes periodic meetings, symposia, workshops and special lectures by eminent scientist's world over.

IAAM Life Membership – Fellow of Indian Association of Applied Microbiologists (FIAAM)

To be a IAAM/FIAAM Member minimum 10 year of Service in academic level is essential. After the approval, kindly send a DD for Rs.5000 drawn in favour of the Treasurer, IAAM and send CV to Dr. S. Anbalagan, Head, Department of microbiology, MCAS Rasipuram.

Awards offered by IAAM

The purpose of the Awards is to recognize and promote quality contributions to academic research and writing among scholars and students who present papers or posters at the GTSTAAS-2023 conference. The awards are given to the three most outstanding researchers/students under below categories.

1. Lifetime Achievement Award
2. Anand Rao Memorial Award
3. Dr. Wilson Aruni Scholarship Award
4. Outstanding Teacher Award
5. "Lifecell" award for be student researcher.
6. Dr.Narasingam Arunagirinathan Award for "Best Research Scholar"
7. Prof. Dr. P. Rajendran's " Young Scientist Award"
8. Dr. Wilson Aruni Award for " Best Research Mentor and Teacher Award"
9. Dr. P. Rajendran Memorial Award for Best Outgoing Student.

For eligibility and details of Award, visit the conference website: www.msuaam2023.com, Send your CV for Awards to the IAAM Secretary email:n_arunagiri@yahoo.co.in and cc to IAAM Prsident:drwilsonaruni@hotmail.com

Call for Research Abstract

Research abstracts, broadly within the scope of the conference thematic areas, written in English language (250 words), are solicited with declaration of originality. Abstracts may be submitted electronically during the registration. Abstracts will be published in the conference compendium. The abstract proposal should explain the topic of your presentation, and describe why the material, research, practice, outcomes of the research. Abstract proposals will be evaluated through a blind peer review and best selected abstracts will be considered for conference compendium.

Abstract submission deadline	30th Sep, 2023
Confirmation of Selected Abstracts	15th Oct, 2023

Call for Oral presentations

Oral presentations are given at the venue of the event. The presenter is physically present to deliver a verbal presentation to the audience. Most of the presenters choose to supplement their speech with a series of slides.

1. Oral presentations are conducted only in offline mode.
2. he presenters should be available at venue to deliver oral presentation

Call for Poster Presentations

Any poster presentation that is broadly within the scope of the conference thematic areas are considered. Poster sessions are an informal format for presenting research data or highlighting innovative practices. In the research category, you are encouraged to present any current research. Research is a broad category and can include many types of methodologies, such as experimental research, applied research, program evaluations, or literature reviews addressing research questions. In the practice category, you are encouraged to highlight any innovative practice or intervention.

1. Oral presentations are conducted only in offline mode.
2. The presenters should be available at venue to deliver Poster presentation

Those interested in presenting must submit a

- (a) 8-10-word title,
- (b) 25-50-word abstract of their presentation
- (c) one to two-page summary of the presentation, and
- (d) 2-5 keywords describing your poster.

Participants should include the category of poster, primary presenter's name, address, phone number, e-mail, Affiliation/ place of employment, and name of additional presenters in the poster.

Poster Size: 90cm Width X 120cm Height

Poster submission deadline: 30th September 2023

Confirmation of Selected Posters: 15th October 2023

Presentation preparation checklist

- Each speaker will be given 15 minutes for oral presentation using Microsoft Power Point (including Q & A session).
- Submit the final copy of the presentation by the deadline given to you by the organizers.
- Be on-site and available at least 30 minutes before your presentation.
- Have a copy of your presentation on a USB device.
- Ensure your presentation is compatible with a Windows operating system. Should your presentation require any specific technical set-up (e.g., Different operating system), contact the organizers with your needs and make sure you get a confirmation that the needs can be accommodated.
- Label the presentation on your device with your name, presentation day, and time.
- Please note that technical issues may arise on-site before, during, or after your presentation. While the organizing committee goes above and beyond to make sure this doesn't happen, in the event that it does, the organizing committee cannot be held responsible.

Recognitions and Awards

The purpose of the Awards is to recognize and promote quality contributions to academic research and writing among scholars and students who present papers or posters at the GTSTAAS-2023 conference. The awards are given to the three most outstanding researchers/students under below categories.

- » **Best Student Paper Presentation Award**
- » **Best Researcher Paper Presentation Award**
- » **Best Student Poster Presentation Award**
- » **Best Researcher Poster Presentation Award**

Registration Details

- Last date for registrations: 15th October, 2023
- Conference is conducted via offline and online mode
- Online link will be shared to the registered participants during the day of conference.
- Oral Presenter/ Poster presenter should register as a delegate/student.
- If you want to participate without any presentation, you can register as an attendee.
- The registration fee is based on your citizenship, not nationality.
- Certificate of participation will be provided to the participants on the final day of conference at registration desk.
- E-certificates will be provided to the online participants.
- **Participants Interested in Oral and Poster Presentations have to come and present in person at conference venue.**
- Please go through the details of the fees mentioned below before you register. The fees is comprehensive for providing you with the best returns from the conference.

Registered participants can join the WhatsApp group through the below link

<https://chat.whatsapp.com/EntazhSvK1S1n5uTd7l3Ks>

Registration Fees

Participants from	Registration fees
Teaching/ Research Professional	Rs. 2000/-
Research Scholars/JRFs/RA Student/ PG / UG Students	Rs. 1000/-
Industry Participants	Rs. 5000/-
Foreign Faculty	\$ 150/-
Abroad Student Participation	\$ 100/-

*International participants please use USD as currency for payments towards GTSTAAS-2023.

Important Dates

Registration Open	1 st August, 2023
Last Date for registration	15 th October, 2023
Abstract/ Oral Presentation/ Poster Submission Last date	30 th September, 2023
Confirmation of selected abstracts/Oral/Poster date	15 th October, 2023
Conference Date	30 th & 31 st October, 2023

Email your abstract to:

Biotechnology
Prof. Prashantha C N
9844158444/ prashantha.cn@reva.edu.in

Chemistry
Dr. Nagaraju DH
9900634435/ nagaraju.dh@reva.edu.in

Mathematics
Dr. Udaya Kumar K N
9980923283/ udayakumarkn@reva.edu.in

Physics
Dr. Ashith V K
8861039255/ ashith.vk@reva.edu.in

Payment link

<https://payment.reva.edu.in/>

Registration Form



Note: To confirm your registrations kindly share us the screenshot of payment to conference.soas@reva.edu.in

Online Fees Payment

Internet banking / NEFT details:

Name: REVA UNIVERSITY
Bank and Branch: THE KARNATAKA BANK LTD, REVA University Branch
Account No.: 6662500101008701
IFSC CODE: KARB0000666
SWIFT CODE: KARBINBBNG
(Pay using PayPal, Gpay, PhonePe, Paytm)

Note: Kindly mention the online transaction reference number in the registration form

Accommodation

Accommodation facility at REVA Hostel on chargeable basis is available for participants.

Contact

Chemistry - Dr. Shivakumara S
9972599779
s.shivakumara@reva.edu.in

Physics - Dr. P. Anjaneyulu
9989036960
p.njaneyulu@reva.edu.in

Mathematics - Dr. Udaya Kumara K N
9980923283
udayakumarkn@reva.edu.in

Biotechnology - Dr. Senthilkumar R
9566860390
senthilkumar.r@reva.edu.in

Note

The organizing committee is not responsible for any financial transaction the participants. The payment towards your accommodation and travel should be borne by the participants. All expenditure pertaining to the accompanying person should also be borne by the participant.

For further details, please contact

Biotechnology - Prof. Prashantha
9844158444/ prashantha.cn@reva.edu.in

Chemistry - Dr. Nagaraju DH
9900634435/ nagaraju.dh@reva.edu.in

Mathematics - Dr. Udaya Kumar K N
9980923283/ udayakumarkn@reva.edu.in

Physics - Dr. Ashith V K
8861039255/ ashith.vk@reva.edu.in

IAAM Office Bearers

Dr. W A Santhosh Kumar
President

Dr. N. Arunagirinathan
Secretary

Dr. Lata Sriram
Joint Secretary

Dr. S. Anbalagan
Treasurer

IAAM Executive Members

Dr. Usha Anand Rao
Editor in-charge, IJAM

Dr. R Balagurunathan
Prof., & Head. Dept. of
Microbiology, Periyar University, Salem.

Dr. K. Sundar
Dean-SBCE, Kalasalingam University, Krishnankoil.

Dr. A Michael
Emirates Professor and Former Head,
Dept. of Microbiology
PSG College of Arts and Science, Coimbatore.

Dr. R. Rajan
Asst. Prof., Dept. of Microbiology, Mohamed Sathak's College,
Chennai.

Dr. A. K. Kathiresan
Associate Prof. Dept. of Microbiology, Vel's University,
Chennai.

Dr. K. Kavitha
Associate Prof., Dept of Microbiology, Madras Christian
College, Chennai.

Dr. P. Sumithira

Research Coordinator & Head, Dept. Of Microbiology, St. Anne's
Arts and Science College, Madavaram, Chennai.

Dr. S. S. Sudha

Prof., & Head, Dept. of Microbiology, Dr. NGP Arts & Science
College, Coimbatore.

Dr. Kanthesh B.M.

Associate Prof. & Coordinator, Division of Molecular Biology,
School of Life Science, JSS AHER, (Deemed to be University)
Mysuru.

Dr. S. Kalidass

Associate Prof. & Head. Dept of Animal Science, MSU.

Dr. M .Reenaa

Asst. Prof., Dept. of Microbiology, Ethiraj College for Women,
Chennai.

Dr Pasupuleti Visweswara Rao

Associate Dean, Faculty of Science and Technology, REVA
University, India.

Follow us on



Ph: +91- 90211 90211, +91 80 4696 6966
E-mail: admissions@reva.edu.in