



***4<sup>th</sup> International Conference on “Global Trends in sustainable technology and its application in Applied Sciences” on 24<sup>th</sup> and 25<sup>th</sup> of October 2024***

**organized by**

**School of Applied Sciences in collaboration with**

**INTI International University, Malaysia**

**SAN BEDA UNIVERSITY, Philippines**

**PUKYONG NATIONAL UNIVERSITY, South Korea**

## 4<sup>th</sup> International Conference on Global Trends in Sustainable Technology and its Applications in Applied Sciences (ICGTSTAS-2024)

**Date:** October 24<sup>th</sup> & 25<sup>th</sup>, 2024 (Hybrid Mode)

**Organised by:** REVA University | **In collaboration with:** INTI International University Malaysia, SAN BEDA University, Philippines, Pukyong National University, South Korea

**Venue:** School of Applied Sciences, REVA University

### Keynote Speakers



**Dr. Lam Man Kee**

Chemical Engineering Department  
Universiti Teknologi PETRONAS



**Dr. Redanna Pallu**

Emeritus Professor  
University of Hyderabad



**Dr. Jayanthi Barasarathi**

Associate Professor  
Head of Life Sciences  
INTI International University,  
Malaysia



**Dr. Tharamani**

Professor & Head,  
Department of Chemistry  
IIT - Ropar, Panjab, India



**Dr. G. Magesh**

Professor  
Chemical Sciences  
Indian Institute of Science



**Dr. Dhandapani Perundurai**

Associate Professor and Scientist  
Institute for Stem Cell Biology and  
Regenerative Medicine, Bengaluru



**Dr. Subba Rao Gangi Setty**

Professor, Dep. of Microbiology & Cell Biology  
Indian Institute of Science  
Bangalore, Karnataka, India



**Dr. Harish Barshilia**

Chief Scientist and Head  
Surface Engineering Division  
CSIR-National



**Dr. P. D. Babu**

Center Director UGC-DAE, CSR  
Mumbai Centre, Maharashtra, India

### Plenary Speaker

### Conference Themes

- Physical Sciences:** Laser Science, Nanomaterials, Photovoltaics, Space Materials, Thin Films, Ceramics.
- Biological Sciences:** Microbial Technology, Stem Cell Biology, Drug Discovery, Biopharmaceuticals, any other life science & agricultural Science
- Chemical Sciences:** Green Chemistry, Batteries, Polymorphism, Crystallography, Catalytic Materials, Nanomaterials.

### Key Dates

- Abstract Submission Deadline:** October 15<sup>th</sup>, 2024
- Registration Deadline:** October 15<sup>th</sup>, 2024
- Conference Dates:** October 24<sup>th</sup> & 25<sup>th</sup>, 2024

### Registration Fees

- Faculty/Researchers:** ₹2000
- Industry Delegates:** ₹3000
- International Faculty:** \$150
- International Students:** \$100

### Recognitions & Awards

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

### Call for Abstracts

Submit abstracts (max. 250 words) within the conference themes. Selected abstracts will be published in the compendium. Awards for best presentations and posters.

### For further details, please contact

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**Prof. Prashantha**  
Ph: +91 9844158444 | prashantha.cn@reva.edu.in  
**Chemical Sciences**  
**Dr. Shivanna M.**  
Ph: +91 9964556195 | shivanna.m@reva.edu.in  
**Physical Sciences**  
**Dr. Ganesh Shridhar Hegde**  
Ph: +91 8277049441 | ganesh.hegde@reva.edu.in

### Conference Website link

<https://nakc001.github.io/ICGTSTAS-24/index.html>

### Registration & payment Link

[https://docs.google.com/forms/d/e/1FAIpQLSfTTRbGXoSDeZvBJ1jOtOa8VEgmFhISFVqe6JCHJOYARAPkPw/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSfTTRbGXoSDeZvBJ1jOtOa8VEgmFhISFVqe6JCHJOYARAPkPw/viewform?usp=sf_link)

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**Date:** October 24 & 25, 2024



Keynote Speaker & Chief Guest

**Dr. Lam Man Kee**

Professor,  
Chemical Engineering Department  
Universiti Teknologi PETRONAS, Malaysia

Plenary Speakers



**Dr. Pallu Reddanna**

Emeritus Professor University of Hyderabad,  
Hyderabad, Andhra Pradesh



**Dr. Jayanthi Barasarathi**

Associate Professor,  
INTI International University, Malaysia



**Dr. G. Mugesh**

Professor, Chemical Sciences  
Indian Institute of Science, Bangalore



**Dr. Dhandapany Perundurai**

Associate Professor & Scientist F,  
Institute for Stem Cell Biology &  
Regenerative Medicine, Bengaluru



**Dr. Subba Rao Gangi Setty**

Professor, Dept. of Microbiology & Cell Biology,  
Indian Institute of Science, Bangalore



**Dr. Harish C.**

Barshilla, Chief Scientist and Head  
Surface Engineering Division,  
CSIR - National Aerospace, India



**Dr. P. D. Babu**

Centre Director  
UGC-DAE CSIR, Mumbai Centre



**Dr. Tharamani C. N.**

Professor & Head, Chemistry  
IIT -Ropar

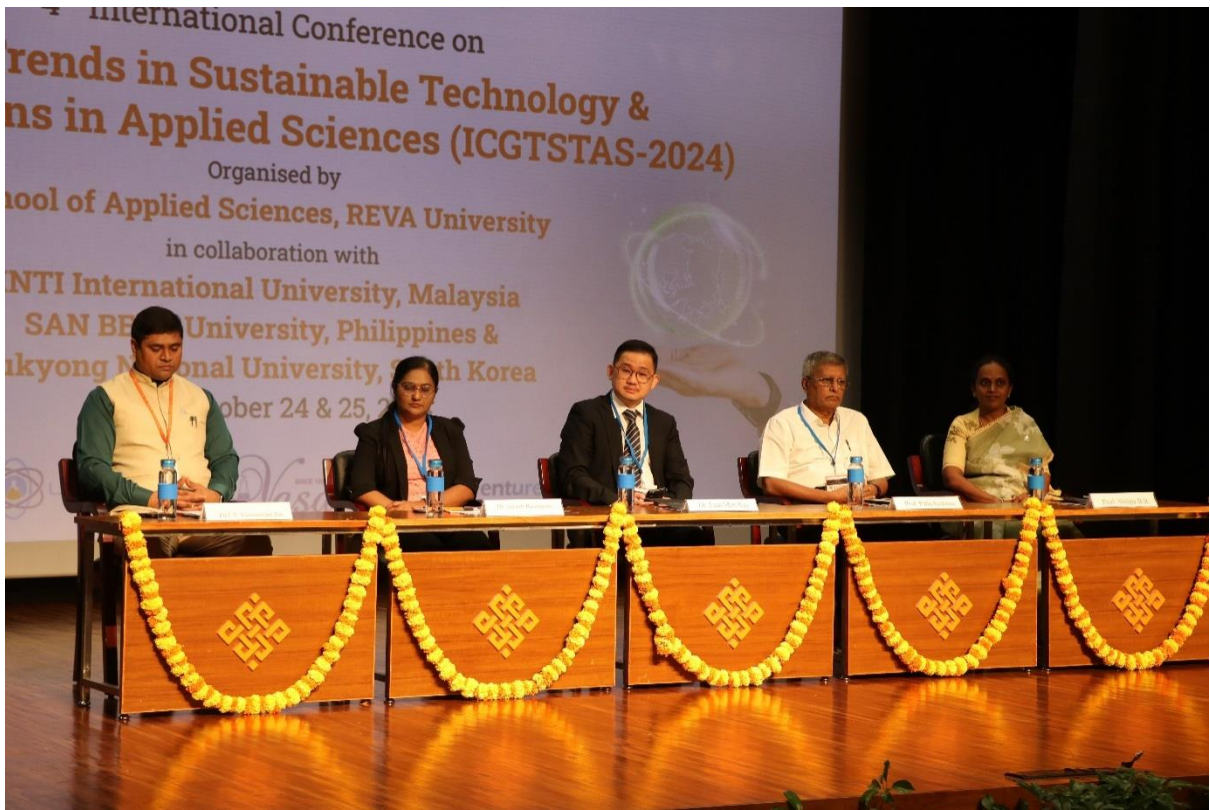


## Report:

### ***4<sup>th</sup> International Conference on “Global Trends in sustainable technology and its application in Applied Sciences” on 24<sup>th</sup> and 25<sup>th</sup> of October 2024.***

The 4<sup>th</sup> edition of International conference titled “Global Trends in sustainable technology and its application in Applied Sciences” was organized by School of Applied Sciences in collaboration with INTI International University, Malaysia, SAN BEDA UNIVERSITY, Philippines, PUKYONG NATIONAL UNIVERSITY, South Korea at REVA University on October 24<sup>th</sup>-25<sup>th</sup> 2024. The highlight of this event was the gracious presence of Excellency Dr. Lam Man Kee, Professor, Chemical Engineering Department, Universiti Teknologi PETRONAS as Chief Guest and Keynote Speaker of the inauguration event. Also, Prof. Pallu Redanna, Emeritus Professor, University of Hyderabad and Dr. Jayanti Barasarathi, Associate Professor, INTI University was Guests of Honour.





## DAY ONE

1. The registration of ICGTSTAS 2024 was started at 8:30 am. We received almost 150 participants and invited 9 dignitaries for the conference.



2. **Inauguration (9:15 am to 9:45 am):** Inauguration of ICGTSTAS 2024 was started at 9:15 am with a lighting of lamp by dignitaries Dr. Lam Man Kee, Dr. Pallu Reddanna, Dr. Jaylanthi Barasarathi, Dr. P V Rao and Prof. B R Shilpa at Chanakya Auditorium. The session was welcomed by Miss Renuka Madhu, overview was given by Organizing secretary Dr Sunitha D V.
3. The ICGTSTAS 2024 was organized by School of Applied sciences, REVA University in collaboration with INTI International University, Malaysia, SAN BEDA UNIVERSITY, Philippines and PUKYONG NATIONAL UNIVERSITY, South Korea. The 2 days event began with planting a sapling and stone unveiling at the Centre of Excellence. This was followed by a grand opening ceremony at Chanakya Auditorium on the morning of 24th October. It was presided by Dr. Pasupuleti Visweswara Rao, FAPAS, FMSA Associate Dean, SoAS, Director, International Relations and Research Collaborations, REVA University. The inauguration also saw the presence of Ms. Shilpa BR. Director (I/C), SOAS, REVA University.









4<sup>th</sup> International Conference on  
**Global Trends in Sustainable Technology & its Applications in Applied Sciences (IGTSTAS-2024)**

Organised by School of Applied Sciences, REVA University  
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 Pukyong National University, South Korea  
**Date:** October 24 & 25, 2024



**Keynote speaker**

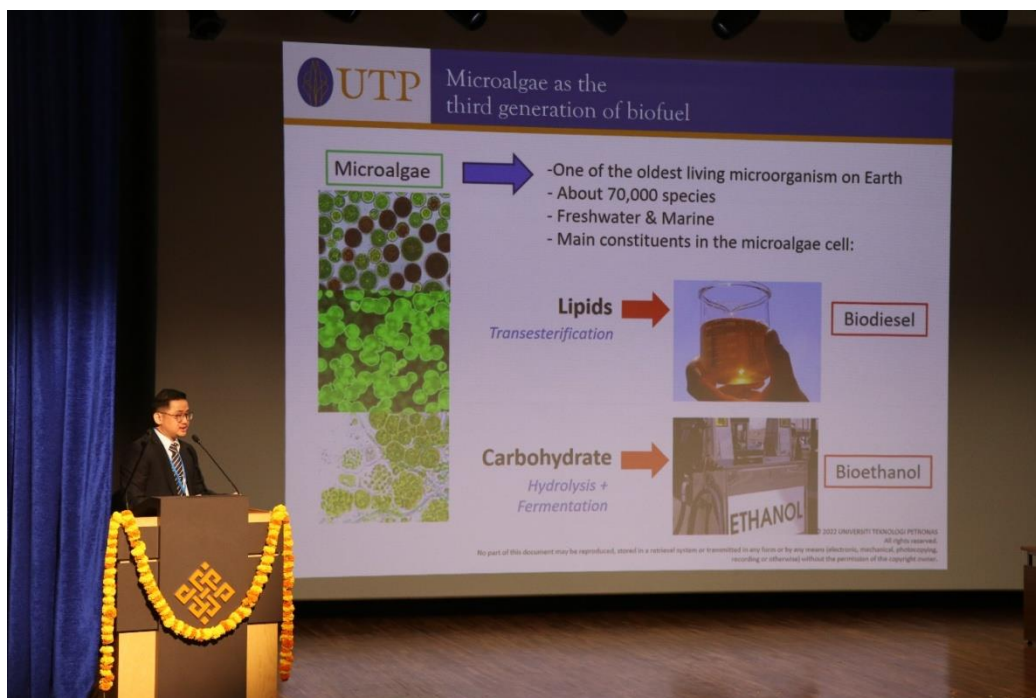
**Dr. Lam Man Kee**  
 Professor,  
 Chemical Engineering Department, Universiti Teknologi PETRONAS, Malaysia

**Titel:** The Potential and Challenges of  
 Microalgae Biofuel Production

**Date:** October 24, 2024 | **Time:** 09:45 AM to 10:45 AM  
**Venue:** Chanakya Auditorium, RBS Block, REVA University



4. Keynote was addressed by Dr. Lee Man Kee regarding the potential challenges of micro algae at Chanakya Auditorium. (9:45am to 10:45 am) Followed by tea break.



5. The 1<sup>st</sup> plenary session was addressed by Dr. Pallu Reddanna on the topic of innovation and entrepreneurship ecosystem at educational institutions at Chanakya Auditorium. (11:15am to 12:15 pm)



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Pukyong National University, South Korea

**Date:** October 24 & 25, 2024

Plenary Speaker

**Dr. Pallu Reddanna**

Emeritus Professor University of Hyderabad,  
Hyderabad, Andhra Pradesh

**Titel:** Innovation and entrepreneurship ecosystem at  
educational institutions: University of Hyderabad as a case study

**Date:** October 24, 2024 | **Time:** 11:15 AM to 12:15 PM

**Venue:** Chanakya Auditorium, RBS Block, REVA University



6. The LabIndia Instruments, Labechem A to Z, Raman Innolabs, Venture Scientific, Vasa Scientific and KamalJeeth Instruments were the respected sponsors for the event. LabIndia instruments have given presentation on their products at Chanakaya Auditorium.(12:15 pm to 12:25 pm)
7. The 2<sup>nd</sup> plenary session was addressed by Dr.Jaylanthi Barasarathi on the topic of degradation of HDPE and LDPE. Later the session was followed by lunch



break.(12:25 pm to 2:00 pm)



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**Date:** October 24 & 25, 2024

Plenary Speaker  
**Dr. Jayanthi Barasarathi**  
Associate Professor,  
INTI International University, Malaysia

**Titel:** Degradation of HDPE & LDPE plastic using indigenous bacteria from mangrove sediment: A sustainable approach  
**Date:** October 24, 2024 | **Time:** 12:15 PM to 01:15 PM  
**Venue:** Chanakya auditorium, RBS Block, REVA University



- The 3<sup>rd</sup> plenary session was addressed by the Dr. Mugesh in an online mode under the topic of Halogen bonding in cell membrane transport at Chanakya Auditorium. (2:00 pm to 3:00 pm)







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**Date:** October 24 & 25, 2024



**Plenary Speaker**

**Dr. G. Mugesh**  
Professor, Chemical Sciences  
Indian Institute of Science, Bangalore

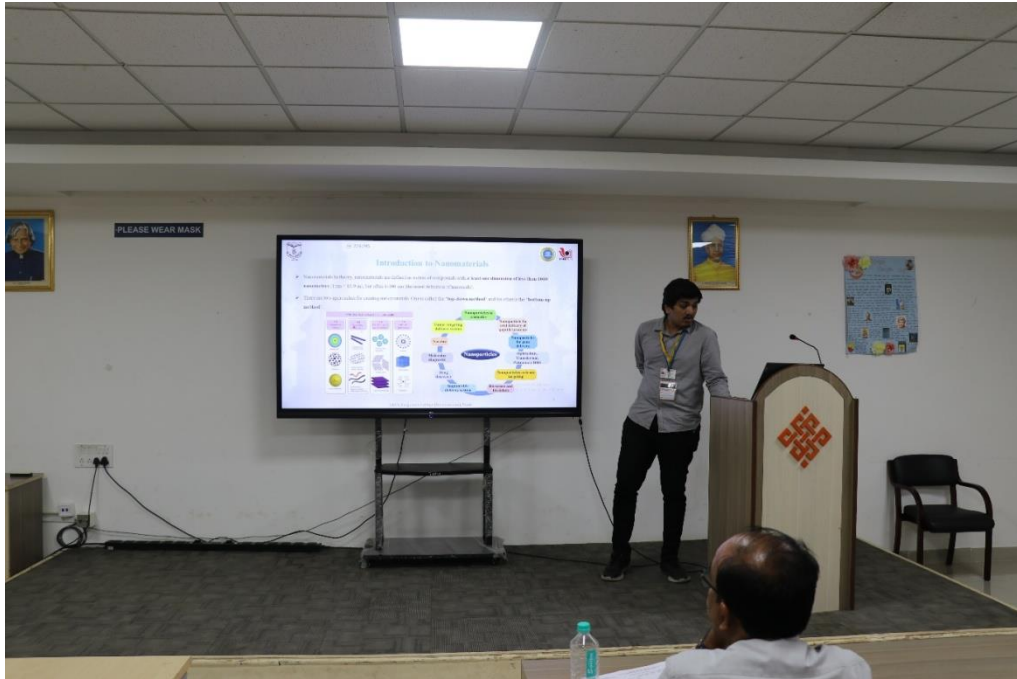


**Title:** Halogen Bonding in Cell Membrane Transport

**Date:** October 24, 2024 | **Time:** 02:00 PM to 03:00 PM  
**Venue:** Chanakya auditorium, RBS Block, REVA University

9. Later the technical sessions such as oral, poster were done at respective departments and Rangasthala, REVA University (3:00 pm to 4:30 pm) followed by high tea.





## DAY TWO

10. The parallel plenary talks of biological sciences and Physical and chemical sciences were organized where Dr.Dhandapany was a resource person for the topic on Discovery of new syndrome by integrating human molecular genetics at Junjappa hall. This talk was followed by Dr. Subba Rao Gangi Setty on the title of ER stress linking mitochondrial fission and turnover. (9:00 am to 10:00 am)



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**Date:** October 24 & 25, 2024

**Plenary Speaker**  
**Dr. Subba Rao Gangi Setty**  
 Professor, Dept. of Microbiology & Cell Biology,  
 Indian Institute of Science, Bangalore

**Titel:** ER stress linking mitochondrial fission and turnover

**Date:** October 25, 2024 | **Time:** 10:00 AM to 11:00 AM  
**Venue:** Junjappa Seminar Hall, Science Block, Science Block, REVA University







11. The Physics and chemistry plenary talk was organized in Dr. APJ Abdul Kalam hall where Dr. Harish Scientist NAL has given information on search of Facile and sustainable novel renewable energy materials. (10:00 am to 11:00 am) followed by tea break.

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**Date:** October 24 & 25, 2024

**Plenary Speaker**

**Dr. Harish C. Barshilia**  
Chief Scientist and Head, Surface Engineering Division,  
CSIR - National Aerospace Laboratory, India

**Titel:** In search of facile and sustainable novel renewable energy materials for solar energy harvesting

**Date:** October 25, 2024 | **Time:** 09:00 AM to 10:00 AM

**Venue:** APJ Abdul Kalam Hall, Science Block, REVA University

12. The remaining poster and oral presentation of the participants were conducted and followed by one more plenary talk by Dr. P D Babu on the topic of probing materials with mega science facilities in UGC DAE CSIR. The session was followed by lunch

(11:20 am to 12:45 pm) followed by lunch break.



The poster features logos for NAAC Grade A+, INTI International University, and REVA University. The title is "4th International Conference on Global Trends in Sustainable Technology & its Applications in Applied Sciences (ICGTSTAS-2024)". It is organized by the School of Applied Sciences at REVA University, in collaboration with INTI International University, Malaysia, SAN BEDA University, Philippines, and Pukyong National University, South Korea. The dates are October 24 & 25, 2024. A portrait of Dr. P. D. Babu is shown on the left. He is identified as the Plenary Speaker, Centre Director, and UGC-DAE CSIR, Mumbai Centre. His title is "Probing materials with Mega Science Facilities". The event details are: Date: October 25, 2024 | Time: 10:00 AM to 11:00 AM | Venue: APJ Abdul Kalam Hall, Science Block, REVA University. An illustration of a hand holding a glowing globe is on the right.

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**Date:** October 24 & 25, 2024

**Plenary Speaker**  
**Dr. P. D. Babu**  
Centre Director  
UGC-DAE CSIR, Mumbai Centre

**Title:** Probing materials with Mega Science Facilities

**Date:** October 25, 2024 | **Time:** 10:00 AM to 11:00 AM  
**Venue:** APJ Abdul Kalam Hall, Science Block, REVA University



13. The final plenary talk was addressed by Dr.Taramani C N on the title of designing greener energy conversion system for a sustainable future at Chanakaya Auditorium. (2:00 pm to 3:00 pm)





14. The ICGSTAS 2024 was concluded as a successful conference event with the Valedictory session in the presence of chief guest Dr. P D Babu and Dr.Taramani with an announcement of best poster and best oral presentation prizes for the winners at Chanakaya Auditorium. (3:00 pm to 4:00 pm)



