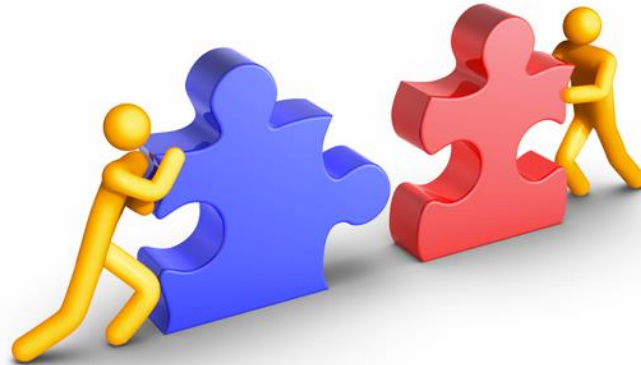




Industrial Technology Institute Sri Lanka



**Progress of the Activities done in Collaboration with
COMSATS Secretariat and member countries
(Sep 2023-Aug 2024)**



Ilmi G. N. Hewajulige, *PhD*
Director General / *Research Professor*



Industrial Technology Institute



[Successor to Ceylon Institute of Scientific & Industrial Research (CISIR)]

- Multidisciplinary R & D institute by its mandate
- Established in 1955 under the Parliament Act No. 15 of 1955 (CISIR Act) in order to support the Industrial Development in the country
- ITI Functions under the purview of the Ministry of Industries



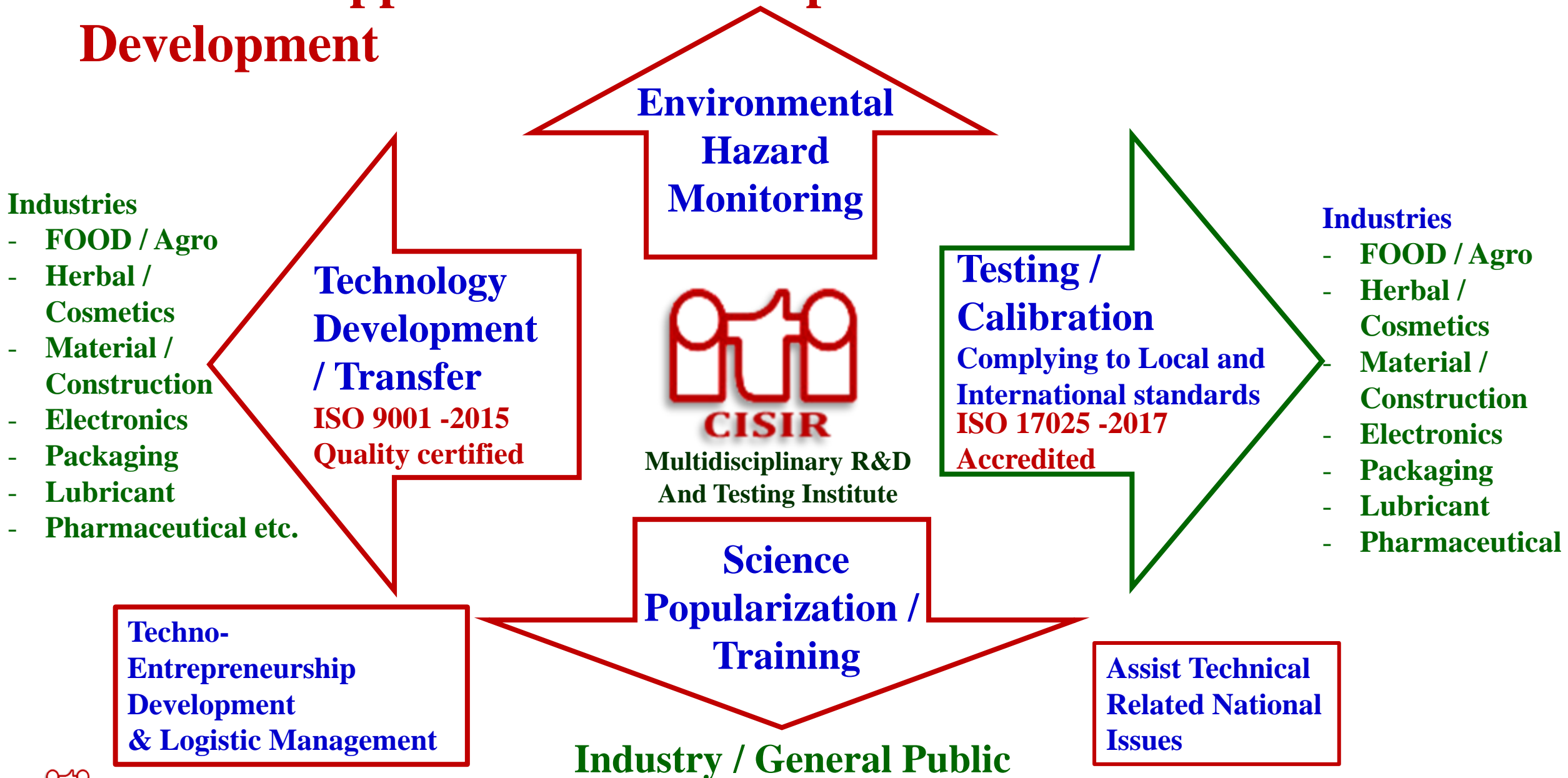
Vision

To be a centre of excellence in Scientific & Industrial Research for national development

Mission

To conduct innovative R&D and provide internationally competitive Technical services to accelerate industrial development for the benefit of the people of Sri Lanka

How ITI Support the Local / Export oriented Industrial Development



Two Major Technical Divisions

1. Technical Services Division – ISO 17025 – 2017 Accredited

- Chemical and Microbiology Laboratory (Food testing, Water and Waste water testing, Microplastic Testing, Fertilizer Testing)
- Residue Analysis Laboratory
- Materials Laboratory (Packaging testing lab, Lubricant testing Lab)
- Electrotechnology Laboratory
- Industrial Metrology Laboratory
- Pharmaceutical testing Laboratory

2. Research & Development Division – ISO 9000-2015

- Food Technology Section
- Herbal Technology Section
- Materials Technology Section
- Environmental Technology Section
- Biotechnology Section
- Techno Entrepreneurship Development,
Manufacturing and logistic Management Department (China –SL Biotechnology Laboratory)



Priority Areas for Research 2023-2024: Based on National Policy and SDGs

- **Value addition to local agricultural based commodities**
- **Bio pesticide development / bio coatings**
- **Value addition to local medicinal plants / aromatic plants / underutilized herbal based commodities / Pharmaceuticals & Nutraceuticals development**
- **Value addition to local minerals (graphite, silicon, clay), advance construction materials and coating development and other industrial promotion related technology development**

Priority Areas for Research 2023- 2024...

- **Application of nanotechnology and biotechnology for productivity enhancement**
- **Application of IOT, Artificial Intelligence (AI), Robotics, Augmented reality (AR), cloud computing, Block chain, 3D printing etc. for productivity improvement.**
- **Advance research and technologies to address**
 - environmental protection,**
 - climate change adaptation & mitigation related /**
 - marine & river conservation,**
 - waste management, water purification**
 - green energy**
 - **Health food**



Research & Development Outcomes;



Omega 3 DHA + rich designer egg



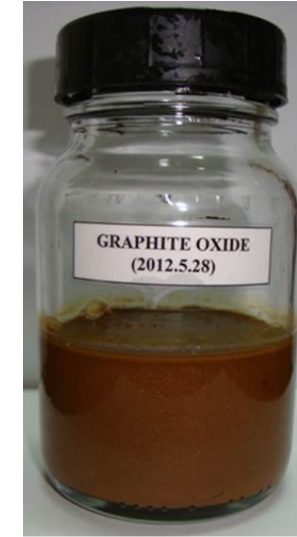
French fries made out of Local Potatoes



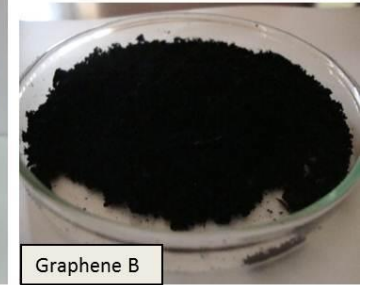
Cinnamon capsule



Antiaging & Skin whitening creams (herbal based)



Graphite B



Graphene B

Graphene and Graphite Oxide



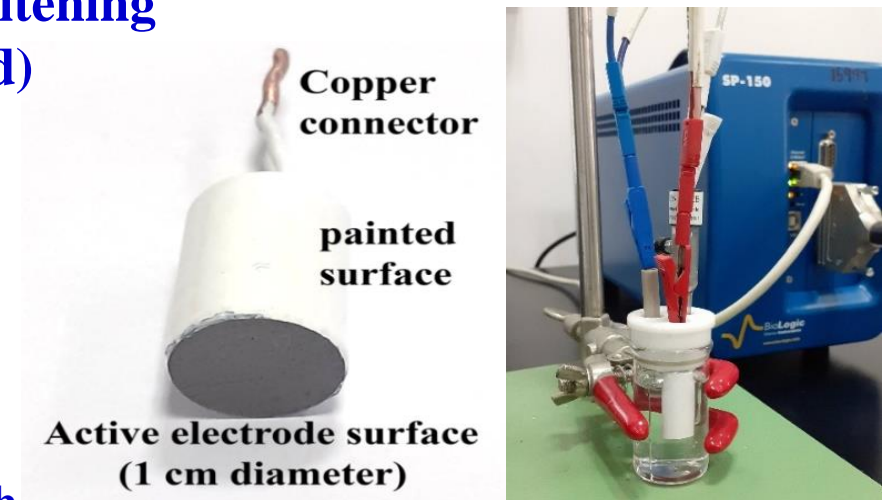
Sparkling alcoholic beverage



Bio wax formulation



Herbal Mouth Wash



ITI Contribution in Networking Sessions, Trainings, Webinars, Panel discussions etc. organized by COMSATS and Member countries

- **COMSATS Sponsorships for trainings, participation in meetings**
 - **Webinars; Green Bio manufacturing of future food – Webinar 6th July 2023, ICT workshop**
 - **Climate Technologies- Nov-Dec. 2023 in Dubai**
 - **Bet UK Jan. 2024**
- } ITI sent the list of related technologies
- **Shared the information for COMSATS website, Corporate video, ITI technology/ service catalogue**
 - **Participation in COMSATS virtual side event at 9th Annual Multi-Stakeholder Forum on Science, Technology and Innovation for SDG's - 10th May 2024**
 - **Renewal the IoC signed between ITI and COMSATS, University in 2023.**

ITI Contribution in Panel Discussion on , Catalyzing Change: Science, Technology and Innovation in the Global South (On line programme) 10th May 2024





Panelists

1. Prof. Zhaohui Lin, Director, CAS-TWAS Center of Excellence for Climate and Environment Sciences & International Centre for Climate and Environment Sciences (ICES), China
2. Prof. Eduardo Posada, Director, International Centre for Physics (CIP), Colombia
3. Prof. Chaoguang Tian, Deputy Director-General (International Cooperation), Tianjin Institute of Industrial Biotechnology (TIB), China
4. Prof. Ilimi G. N. Hewajulige, Additional Director General (Research and Development), Industrial Technology Institute (ITI), Sri Lanka, and
5. Ms. Jeongmin Kwon, Industrial Development Expert, United Nations Industrial Development Organization, (UNIDO), Austria

Programme
New York Time (GMT-4)

08:30 Introduction by the Moderator

08:35 Panelists' Centre/Institution's endeavors towards facilitating the achievements of SDGs, nationally and globally

09:00 How can South-South and Triangular Cooperation be effectively employed for achieving SDGs, particularly for socio-economic uplift of the global South?

09:10 What role does suitably qualified and skilled workforce play in bringing about a positive change in the society, particularly for providing tech-based solutions to various global challenges?

09:20 What role the emerging technologies, such as AI and machine learning, IoT, Big Data, data analytics, quantum computing, renewable energy technologies, etc., can play in the sustainable socio-economic development of the countries of the South?

09:30 Open Discussion

09:40 Wrap-up and Concluding Remarks

Panel Discussion on
**Catalyzing Change:
Science, Technology and
Innovation in the Global South**

10th May 2024
08:30 – 09:45
New York Time (GMT-4)

As a Side-event at
9th Annual Multi-Stakeholder Forum on
Science, Technology and Innovation for
the Sustainable Development Goals

Moderator
Ambassador Dr. M. Nafees Zakaria
Executive Director COMSATS

Profiles of the Panelists



Prof. Zhaohui Lin
Prof. Zhaohui Lin is the Director of CAS-TWAS Center of Excellence for Climate and Environment Sciences, and International Center for Climate and Environment Sciences (ICES), China. He is actively involved in international collaborations and has been and significantly contributing to research and development activities. Prof. Lin has expertise in the fields of earth system modeling, disaster forecasting, and project leadership with oversight of numerous national research initiatives. With over 180 peer-reviewed publications, he has received prestigious awards including second Grade of National Natural Science Award (2005), the first Grade of the Award for Progress of Science and Technology by the Chinese Ministry of Education (2006), and the Outstanding Science and Technology Achievement Prize of the Chinese Academy of Sciences (2011).



Prof. Eduardo Posada
Prof. Eduardo Posada, a Physicist, and the Founding Director of International Centre for Physics (CIP), Colombia. He has been Associate Professor and Emeritus of the National University of Colombia, Emeritus Researcher of Colciencias, President of the Colombian Association for the Advancement of Science (ACAC), Member of the Colombian Academy of Exact, Physical and Natural Sciences, Co-founder and Member of the Board of Directors of Maloka (an interactive science Museum in Bogotá). He is recipient of numerous distinctions, including the Alejandro Angel Escobar Award, the Lideres de Colombia Award from Semana Magazine and the Exemplary Colombian Award. He was a member to the Mission of Science, Education and Development in 1994 and a Member of the International Mission of Wise Men for the Advancement of Science, Technology and Innovation (2019).



Prof. Ilimi G. N. Hewajulige
Prof. Ilimi Hewajulige is the Additional Director General (Research and Development) and Research Professor at the Industrial Technology Institute (ITI), Sri Lanka. Prof. Ilimi has nearly 30 years of research experience in post-harvest management of fruit and vegetables, food technology, food safety, and food supply chain management. She has been actively involved as a Principal Investigator/ Co-investigator in more than 45 nationally and internationally funded R&D projects. She has earned more than 100 scientific publications, two patents and many national and international awards. Prof. Ilimi has extensive experience in working with food related industries on technology development and technology transfer. Prof. Ilimi has served as a National Consultant on Fruit and Vegetable Postharvest Value Chains for the Food and Agriculture Organization (FAO) and currently serves in many foods related national advisory committees of Sri Lanka.



Ms. Jeongmin Kwon
Ms. Jeongmin Kwon is affiliated with United Nations Industrial Development Organization (UNIDO) as Industrial Policy Officer. She provides capacity development support and policy advisory services around industrial policies. Ms. Kwon provides assistance to Member States in leveraging science, technology and innovation for industrial development. Ms. Kwon is on secondment from the Ministry of Foreign Affairs of the Republic of Korea to UNIDO, where she has served for 12 years as a Foreign Service Officer. Her role at the Korean Ministry was to provide support for development of bilateral and multilateral cooperation.

Please join the Panel Discussion

ITI Symposium 2023

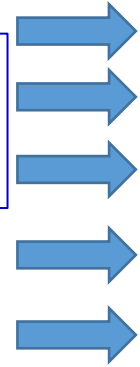
- ITI called abstracts for 1st International / 6th Biennial Symposium from COMSATS members.
- COMSATS Participation in 1st International / 6th Biennial Research Symposium 2023 of ITI – 7th November 2023, Colombo, Sri Lanka
- Prof. Lin – Keynote Speaker





Way Forward and Potential Collaborations:

• **Advanced Research Centers**



Pharmaceutical / Nutraceutical

Green Energy

Organic and Traditional Agro Technology

Health Food

Climate Change and Mitigation



- **Expansion / upgrading existing R&D and Technical services laboratories and Introduce new areas of testing**
- **Technology Commercialization via establishing technology Incubation, Spin offs and joint ventures**
- **Training of laboratory technicians and ISO related QMSs**
- **Higher Degree Platform – to offer research based Postgraduate Degrees**
- **Expand the International Collaborations via COMSATS and its member countries**



Contact Information

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THANK YOU!