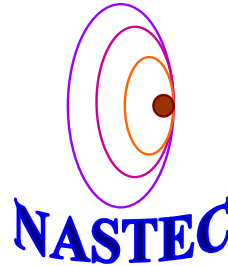




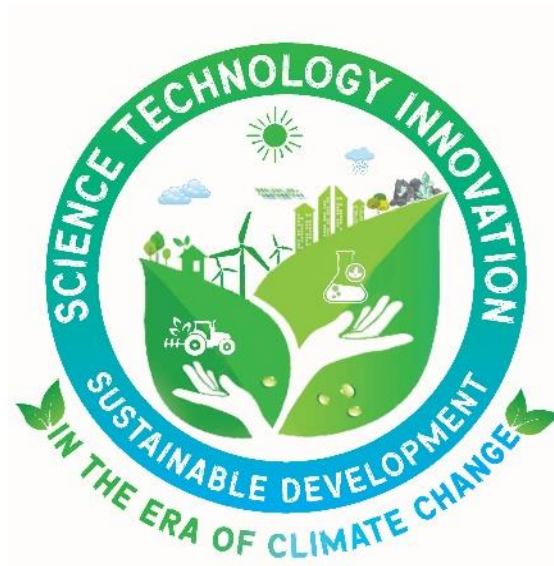
9th SRI LANKA BIENNIAL CONFERENCE ON
SCIENCE & TECHNOLOGY
2023 (BICOST IX)



NATIONAL SCIENCE AND TECHNOLOGY COMMISSION



9th SRI LANKA BIENNIAL CONFERENCE ON SCIENCE & TECHNOLOGY - 2023 (BICOST IX)



Programme Book

Date: 23rd- 24th March 2023

Venue: Waters Edge Hotel – Battaramulla



Ministry of Education | National Science and Technology

**Sivananthan
Laboratories**

Biennial Conference on Science and Technology

BICOST IX – 2023

The National Science and Technology Commission (NATSEC) is an apex body for advising the government on formulating science and technology policies, plans, and strategies. The NASTEC is governed by a 7-member commission appointed by H.E. the President of Sri Lanka for a 3-year term. Since December 2022, Professor Veranja Karunaratne, a prominent professor of chemistry, has held the position of 9th Chairperson of the Commission. The convening of the Biennial Conference on Science and Technology (BICOST) is one of the five core mandated activities of the NASTEC, as per Section 5(e) of the Science and Technology Development Act of 1994/11. The forum intends to provide a platform to discuss science and technology (S & T) in Sri Lanka in relation to the objectives set out in Section 2 of the Act, such as promoting S & T as an integral part of the effort to achieve rapid economic development to improve quality of life and alleviate poverty; fostering S & T activity in all its aspects; supporting the development of indigenous technology for rapid growth in the development of industry, agriculture, and other services; encouraging and strengthening cooperation between scientists in Sri Lanka and scientists abroad to provide global S & T knowledge; and identifying the priority areas in S & T that will be beneficial to Sri Lanka, to name a few. In line with this, the last conference was held in 2016, and the National Research and Development Framework implementation strategy 2016–2020 was the main by-product of it. Then the conference for 2018 was planned to be held under the theme of science, technology, innovation, and commercialization for sustainable development, but it was cancelled due to unforeseeable circumstances just prior to the two days of the event, with all the arrangements for the conference being in final order. Thereafter, the conference was compelled to be postponed from time to time due to a series of circumstances, most notably the COVID pandemic in the country, which lasted until mid-2021. The failure to convene the conference might have had a significant impact on supporting evidence-based decision-making processes during those difficult periods. This would be one of the reasons for the country's current economic hardships as a whole.

By considering the above, NASTEC has pledged to convene the event in 2023, which means that after 7 years of the commencement of the last program, under the patronage of the Hon. Minister of Education, Dr. Susil Premajayantha, with the theme "Science, Technology, and Innovation for Sustainable Development in the Era of Climate Change," over two days on March 23 and 24, 2023. The two-day conference consists of four parallel technical sessions on the thematic areas of: (01), Climate Change, Agriculture, and Food Security, chaired by Senior Professor Buddhi Marambe; (02), Nutraceuticals and Lead Medical Compounds from Endemic Bio Resources, chaired by Senior Professor Sirimali Fernando; (03), Renewable Energy, Green Hydrogen, and Energy Storages, chaired by Senior Professor Ajith De Alwis; and (04), Natural Resources and Minerals, chaired by Dr. R.D. Gunaratne. Furthermore, the conference will have a formal inauguration and a closing session, with His Excellency the President of Sri Lanka expected to be the chief guest and H.E. the United States



Ambassador for Sri Lanka, as well as H.E. the Indian High Commission for Sri Lanka, as special guests by invitation of the Hon. Minister, respectively. The event is also expected to be attended by the diplomats of 12 other countries, senior cabinet secretaries, and nearly 200 senior delegates from academia, science, technology, innovation, the private sector, the media, and other policy domains.

Two other world-renowned Sri Lankan expatriate scientists, Physicist Senior Professor (Dr.) Siva Sivanathan, a White House Genius Award Winner from the Chicago Laboratories, USA, and Engineer Senior Professor (Dr.) Gehan Amaratunga, an energy expert from the University of Cambridge, are also invited to give the keynote speeches on the first and second days, respectively. The event will also serve as a springboard for encouraging Sri Lankan expatriate scientists' engagement in the country's advancement.

In order to advance them to the level of policy decisions and help the economy grow in terms of the contributions made by the science and technology sectors, it is anticipated that the scientific community will present H.E. the president of Sri Lanka with a number of policy recommendations in the four aforementioned thematic areas during the event's closing session.

As a post-BICOST activity for the cabinet submission, these policy recommendations are anticipated to pave the way for the creation of a set of medium-term Action plans (2024–2030). The NASTEC is expected to play a significant role in overseeing the implementation of these recommendations under the direction of the subject ministry of science and technology in consultation with the Department of National Planning.

National Science and Technology Commission



Hon. Ranil Wickramasinghe

His Excellency the President of the Democratic Socialist Republic of Sri Lanka

Message



The National Science and Technology Commission (NASTEC) as mandated to advise the Government on science, technology and innovation policies, plans, and strategies, has been efficiently discharging its decree. I look forward to the set of new policy recommendations to be revealed at the ninth BICOST Conference, and thank the Commission for undertaking this comprehensive task. Undoubtedly it would be a valuable contribution to the Government's policymaking, on economic viability, while remaining committed to the Sustainable Development Goals (SDGs).

Science, technology, and innovation (STI) play a central role in all national policies dealing with a country's development, especially in the context of the SDGs commitments and in coping with climate change, to which Sri Lanka is diligently dedicated. Since these interrelated commitments need an integrated approach, to effectively address the complexities across the three fundamental pillars of social, economic and environmental aspects, and also elevate the economy within this framework, I believe that scientific strategies could play a vital role in prioritizing the needs of our people and institutions in the years ahead.

Development processes at all levels must aim at reaching higher targets of output and quality on all fronts, giving priority to agriculture and farming, fisheries, manufacturing, and value-adding in exports, while protecting and enriching our environment. We need to pay more attention to science and technology, research, and the development of human resources for long-term requirements. Therefore, the work of NASTEC is of extreme relevance and will be supported as a matter of priority.

It is observed that this two-day Conference is intended to cover a broad range of subtopics, including natural resources and minerals; climate change agriculture and food security; Nutraceuticals and endemic bio resources; and renewable energy, green hydrogen, and energy storage. These topics are all important for achieving the identified goals, not just within the sector of STI, but also across other spheres. I am confident that the discussions and ideas that will be generated during this Conference would be fruitful.

I take this opportunity to thank the Hon. Minister of Education and the Commission for organizing the BICOST Conference, to examine the core issues of the country, and also the scientists, professionals, and administrators involved in the deliberations, for their insights, commitment, and hard work. My best wishes for the successful conclusion of the Conference.

Ranil Wickramasinghe

H.E the President of Democratic Socialist Republic of Sri Lanka

16.03.2023



Ministry of Education | National Science and Technology

Dr. (Hon). Susil Premajayantha

The Minister of Education



Message

The 9th Sri Lanka Biennial Conference on Science and Technology 2023 (BICOST IX) is a biennial gathering of all related stakeholders, initiated by the National Science and Technology Commission (NASTEC), with the intention to provide a forum for the discussion of science and technology in Sri Lanka.

The National Science and Technology Commission is mandated to convene this conference biennially. Due to the COVID 19 pandemic situation in the country for the last couple of years, the conference is now convening in 2023, nearly seven years after the last conference held in 2016.

The theme for the two-day conference is "Science, Technology, and Innovation for Sustainable Development in the Era of Climate Change." The scientists and professionals will discuss and debate on the directions of change and the ways in which innovative activities and projects could be implemented in the country. NASTEC being the apex body responsible for the formulation and overseeing the implementation of it, has a key role to play in energizing the S/T community to shoulder the task of directing S/T for national development.

The world is awakened to witness the emergence of the 4th industrial revolution on a global scale. Sri Lanka must have a well-thought-out program to face the challenges of the new world transformations. This is the time to re-focus on NASTEC policies, strategies and programs presented in its strategy documents in order to coordinate the efforts of S/T institutions in the country. I wish that the deliberations at this conference, this national issue of S/T policy and programs for development will be taken seriously.

While I thank the Chairman and the members of the Commission for tasking the pains of organizing the conference, and researcher and paper presenters for their efforts, I wish the Conference all success.

Dr. (Hon). Susil Premajayantha
The Minister of Education
23.03.2023



Mr. Nihal Ranasinghe
The Secretary to the Hon. Minister of Education

Message



At a time that the key scientific and professional communities gather to re-visit the status of science and technology achievements as relevant to our issues, I wish to gratefully acknowledge the work of the NASTEC commission members and the Chairman for their efforts to re-activate the S/T engine of Sri Lanka. Since the ratifying of the Paris Agreement, Sri Lanka has taken the lead in efforts to achieve sustainable development goals.

Under the guidance of the Hon. Minister of Education, the Ministry's vision is to coordinate and direct scientific and technological research, innovations and applied programs under the Ministry and facilitate their relationships with other governmental programs. NASTEC has already developed strategy and policy and the priorities for innovations have been identified. This is the time to take forward innovative activities in key priority areas such as energy, agriculture, and food, and the use of natural resources we have in abundance. Institutional effectiveness shall be measured in terms of the contributions they make in the priority areas.

I miss the opportunity to be with you at the conference due to my being away from the country at this time. I have requested my representative from the Ministry to convey my ideas at the Conference so that my absence will not be felt. I will read and study your presentations, ideas, and proposals for further action needed.

I thank the researchers, professionals, paper presenters, and organizers for their efforts. Science and technology is the heart of our economy, and therefore, it must be developed and protected by all means. I wish you success

Nihal Ranasinghe
Secretary
Ministry of Education
23.03.2023



Professor Veranja Karunaratne
Chairman, National Science and Technology Commission

Message



With the guidance of His Excellency the President Ranil Wickremasinghe, Sri Lanka is progressing towards a blue-green economy adhering to the Sustainable Development Goals. In line with this, and under the patronage of the Hon. Minister of Education (also the subject Minister of Science and Technology), Dr. Susil Premajayantha, we at the National Science and Technology Commission (NASTEC) have assembled scientists, technologists, policymakers, industrialists, administrators, and other related stakeholders in S&T for the 9th Sri Lanka Biennial Conference on Science and Technology 2023 (BICOST IX) under the theme of “Sustainable Development in the Era of Climate Change.”

This national forum will be an inspiration to the wide diversity of experts in Sri Lanka to share their viewpoints and brainstorm under four sub-themes: 1) Climate Change, Agriculture, and Food Safety; 2) Nutraceuticals and Lead Medicinal Compounds from Endemic Bio Resources; 3) Natural Resources and Minerals; and 4) Renewable Energy, Green Hydrogen, and Energy Storage. The outcome of BICOST – IX, the scientific research roadmap of the country for the next two years, will be a milestone in Sri Lanka’s journey toward national development that will help us achieve the status of an advanced nation.

As the Chairman of NASTEC, I warmly welcome individuals from all sectors and disciplines who will participate and contribute with their new ideas to this national event for the future of R & D in Sri Lanka.

Prof. Veranja Karunaratne
Chairman, National Science & Technology Commission
22.03.2023



Ministry of Education | National Science and Technology



Keynote Speaker:



Dr. Sivalingam Sivananthan **Director of Microphysics Laboratory and LAS Distinguished** **Professor Physics**

Prof. Sivalingam Sivananthan is a College of Liberal Arts and Sciences Distinguished Professor and Director of the Microphysics Laboratory (MPL) at the University of Illinois at Chicago (UIC). He is also the founder of the high-tech, Bell Labs-styled incubator, Sivananthan Laboratories, based in Bolingbrook, Illinois.

Born in Chavakacheri, Sri Lanka, Dr. Sivananthan is a world-renowned physicist as well as a successful entrepreneur in creating advanced military infrared night vision technology, which has also served as the platform for ground-breaking, next generation solar cells. EPIR's business started with a focus on developing infrared materials for the US military and on cutting-edge research for the defense industry in infrared imaging technology based on mercury cadmium telluride (MCT). The same technology that formed the basis for EPIR's breakthrough successes in infrared imaging technology now forms the foundation for EPIR's development of a revolutionary new photovoltaic cell.

Professor Siva Sivanathan graduated from the University of Peradeniya in 1980 with a BS degree in physics. After graduating Sivananthan lectured at Eastern University, Sri Lanka before joining the University of Illinois at Chicago in 1982 for post-graduate study. He obtained MSc (1985) and PhD (1988) degrees from the university.

In May 2013 Sivananthan was awarded the "Champion of Change" (Immigrant Entrepreneurs and Innovators category) by the White House. He was awarded the Vidya Nidhi title in the 2017 Sri Lankan national honours. In 2010 he was elected a Fellow of the American Physical Society for "seminal contributions to the growth technology of II-VI photovoltaic materials."

His mission in life has been always to give his very best—to his family and friends, his students, his research, his business, his country, and the world at large.



Keynote speaker:



Prof. Gehan Amarathunga **Professor of Engineering, Department of Electrical** **Engineering, University of Cambridge**

Gehan A. J. Amarathunga has held the 1966 Chair and Professorship in Engineering at the University of Cambridge since 1998. He is also Honorary Professor at Yunnan University and Peking University Graduate School, Shenzhen in China and was the Tan Chin Tuan Visiting Professor at Nanyang Technological University, Singapore. He held the position of Chief of Research and Innovation at the Sri Lanka Institute of Nanotechnology (SLINTEC) 2011-19; and past faculty and research positions at Liverpool, Southampton and Stanford Universities. He is a Fellow of the Royal Academy of Engineering UK, National Academy of Sciences of Sri Lanka, Royal Society of Arts UK and the Institution of Engineering and Technology (formerly the IEE). He has published over 750 archived academic papers and is an inventor on 58 granted patents. His research is in the broad area of materials, devices and technologies for electrical energy and power. It intersects electrical and electronic engineering with physics, chemistry, materials science and information systems. He is also a founder of six start-up companies which have successfully commercialized research from his group, in recognition of which he was awarded the Silver Medal of the Royal Academy of Engineering in 2007.



PROGRAMME

Inauguration (Eagle Hall)

0945-1030	Registration and Refreshments
1030-1040	Lighting of oil lamp & National Anthem
1040-1050	Welcome Address & Introduction to BICOST IX by Prof. Veranja Karunaratne, Chairman, NASTEC
1050-1100	Address by Prof. Gunapala Nanayakkara Advisor to the Hon. Minister of Education
1100-1120	Address by H.E Gopal Baglay, High Commissioner of India to Sri Lanka
1120-1140	Address by Hon. (Dr.) Suren Raghavan, State Minister of the Higher Education
1140-1225	Keynote speech by Prof. Gehan Amaratunga, University of Cambridge, UK (Quantum Dots for Light Emission)
1225-1230	End of the programme of the morning session & Announcements

BICOST Technical Sessions – Day 01

1245-1330	Lunch
1330 -1530	Group Discussions of four technical sub committees (Parallel Sessions) <ul style="list-style-type: none"> Committee 01 – Prof. Buddhi Marambe – Chairman, Climate Change Agriculture and Food Security (Eagle Hall) Committee 02 – Prof. Sirimali Fernando, Chairperson, Nutraceuticals, and Lead Medicinal Compounds Derived from Endemic Bio Resources (Link Hall) Committee 03 – Dr. R.D. Guneratne, Chairman, Natural Resources and Minerals (Albatross Hall) Committee 04 – Prof. Ajith De Alwis, Chairman, Renewable Energy, Green Hydrogen and Energy Storages (Eagle Hall)
1530-1545	Tea Break
1545-1730	(Compilation of the Policy Recommendation Report)
1730	Announcements and End of Sessions Day 1

PROGRAMME

BICOST Technical Sessions – Day 02

0830-0900	Registration
0900-1030	Brainstorming Session / Action Plan <ul style="list-style-type: none"> Committee 01 – Prof. Buddhi Marambe – Chairman, Climate Change Agriculture and Food Security (Eagle Hall) Committee 02 – Prof. Sirimali Fernando, Chairperson, Nutraceuticals, and Lead Medicinal Compounds Derived from Sri Lankan Bio Resources (Olu Hall) Committee 03 – Dr. R.D. Guneratne, Chairman, Value Addition to the Natural Resources and Minerals of Sri Lanka (Manel Hall) Committee 04 – Prof. Ajith De Alwis, Chairman, Renewable Energy, Green Hydrogen and Energy Storages (Nelum Hall)
1030-1045	Tea Break
1045-1230	Minuting the Brainstorming Session Outcomes
1230-1330	Conference Lunch

Closing Ceremony (Eagle Hall)

1400-1430	Registration and arrival of guests
1430-1440	Lighting of oil lamp and National Anthem
1440-1450	Welcome speech and Introduction to BICOST IX by Prof. Veranja Karunaratne, Chairman, NASTEC
1450-1455	Curtain Raiser Video
1455-1530	Baurs keynote speech by Prof. S. Sivananthan, Sivananthan Laboratories, Chicago, USA (STEM Education as a Catalyst for Economic Development)
1530-1540	Address by H.E Julie J. Chung the Ambassador of the United States of America
1540-1600	Address by Hon. (Dr.) Susil Premajayantha, The Minister of Education
1600-1630	Summary of the Outcome of the BICOST IX by Chairmen of four Committees
1630-1645	Presentation of the session technical output documents to the Hon. Minister of Education
1630-1645	Address by H.E Ranil Wickramasinghe, The President of the Democratic Socialist Republic of Sri Lanka.
1645-1710	Awards Ceremony–Best Performed S & T institution for the period 2017-2021 Young Scientist Awards 2022 for Research & Technology
1710-1715	Vote of Thanks by Acting Director/CEO NASTEC
1715-1730	Refreshments



Technical Committees

Climate Change and Agriculture and Food Security

Prof. Buddhi Marambe	-	Faculty of Agriculture, UOP
Dr. Geevika J. Ganegama Arachchi	-	Actg. Deputy Director General (R&D), NARA
Mr. P N R J Amunugoda	-	Director - Food Technology Section, ITI
Ms. Harshani Abayawardhana	-	Centre for Environmental Justice
Dr. Sumith Abeysiriwardena	-	Senior Research Consultant, CIC Agribusiness Pvt Ltd
Dr. GG. Bandula	-	Director/CEO, HARTI
Mrs. R.M.T. Chathurika	-	Technical Officer, Department of Agrarian Development
Mrs. Gothami Chandraratne	-	Director of Operations, Janathakshan
Dr. Suneth Disnaka	-	Deputy General Manager, NLDB
Dr. Pavani Dulanja Dissanayake	-	Senior Research Officer, Coconut Research Institute
Mrs. Madara Dissanayake	-	Senior Scientist, NBRO
Prof. Chamari Dissanayake	-	Professor, University of Sri Jayawardanapura
Ms.Chandani Dissanayake	-	Research Assistant, INSS
Mrs. Chandika V Ethugala	-	Additional Secretary - Land and Legal, Ministry of Irrigation
Dr. Shiromani Edirimanna	-	Additional Secretary (Agri Technology), Ministry of Agriculture
Dr. Nishadi Eriyagama	-	Regional Researcher – Engineer, IWMI
Ms. A.H.S. Fareeda	-	Director General (Planning), Ministry of Fisheries
Mr. Indika Gunawardhana	-	Executive Chairman, Browns Agrisolution
Ms. Vigin Gunawardena	-	Deputy Director, Department of National Planning
Prof. Ilmi Hewajulige	-	Additional Director General R&D, ITI
Mr. Mohan Heenatigala	-	Deputy Conservator of Forests, Forests Department
Mr. Chandana Hewawasam	-	Programme Manager, European Union
Dr. I.W.M.I.W.T.K. Illangakoon	-	Assistant Director of Agriculture (Research), HORDI
Mrs. Chamani Kumarasinghe	-	Assistant Director, Ministry of Environment
Mrs. K.L.G.A. Kariyawasam	-	Statistician, Department of Census and Statistics
Dr. Lasantha Kulathunga	-	Assistant Director of Agriculture – Research, FRDI
Mr. Mahesh Karunarathna	-	Assistant Director, NSF
Mr. Senarath Kiriwaththuduwege	-	Director, Hayleys Agriculture Holdings Limited



Dr. E.S. Munasinghe	-	Principal Research Officer, Rubber Research Institute
Mrs. J. P. Marasinghe Pesticides	-	Principal Agriculture Scientist (Toxicology), Office of the Registrar of
Mr. C.S.I. Pathirana	-	Assistant Director, NAQDA
Mr. B.W.I.C. Perera	-	Chief Coordinator, Centre for Defences Research & Development
Mrs. Dakshini Perera	-	Assistant Director, Climate Change Secretariat
Dr Chandra Padmini	-	Deputy Director Research Management, Sri Lanka Council for Agricultural Research Policy
Dr.K.M.H.G. Sarath Priyantha	-	Chief Livestock Economist, Dept. of Animal Production and Health
Mrs. K.K.S.D. Pradeepika	-	Deputy Director, Seed Certification Service
Dr. Ranjith Punyawardena	-	Principal Agro-climatologist (Retired)
Ms. Toyesha Padukkage	-	Research Assistant, Lakshman Kadirgamar Institute
Prof. Gamini Pushpakumara	-	Professor, Faculty of Agriculture, UOP
Dr. Chandrajith De Silva	-	Deputy Director (R & TT), Sugarcane Research Institute
Dr. H.M.P.A. Subasinghe Agriculture	-	Additional Director General (Research) Department of Export
Prof. Pradeepa Silva	-	Professor, UOP
Mrs. Rohini Singarayer	-	Agriculture Specialist, WFP
Dr. Samantha N.P.G.	-	Senior Researcher, HARTI
Dr. Buddhika Sudasinghe	-	Consultant Community Physician, Ministry of Health
Prof. J.K. Vidanarachchi	-	Professor, UOP
Mrs. Anusha Warnasooriya	-	Director, Department of Meteorology
Dr. Nilanthi Wijewardane	-	Principal Research Scientist, NIPM
Dr. M.A.Wijeratne	-	Head, Tea Research Institute
Mrs. Nadeeka Wickramasinghe-	-	Director (Water Resources Planning), Irrigation Department
Mr. Rohitha Wickramaratna	-	Director, Department of National Planning
Mrs. Tharangani Wickramasinghe	-	Additional Secretary, Ministry of Plantation
Dr. W.M.P.B. Weerasinghe	-	Principal Scientist, Veterinary Research Institute
Dr. W.M.W. Weerakoon	-	FAO
Mr. Rizvi Zaheed	-	Agripreneurs Association
Daniel Moon	-	Observer, US Ambassador Staff



Nutraceuticals and Lead Medicinal Compounds Derived from Sri Lankan Bio Resources

Prof. Sirimali Fernando	-	Secretary General, UNESCO
Dr. Thelma Abeysinghe	-	Senior Lecturer, The Open University of Sri Lanka
Prof. Tuley De Silva	-	Chancellor, Wayamba University of Sri Lanka
Mr. Buddhika Dharmasena	-	Research Assistant UOJ
Mrs. Harsha Ekanayake	-	Manager – Technical, State Pharmaceuticals Corporation
Dr. Dilusha Fernando	-	Senior Lecturer, Faculty of Medicine UOC
Dr. H. R. P. Fernando	-	Deputy Director (Food and Postharvest research) Department of Agriculture
Prof. Prasanna Galhena	-	Director, Institute of Biochemistry, Molecular Biology and Biotechnology UOC
Dr. Shanika Jayasekera	-	CEO, National Research Council (NRC)
Prof. Lalith Jayasinghe	-	Senior Research Professor National Institute of Fundamental Studies
Dr. Susanthi Jayasinghe	-	Senior Lecturer, Faculty of Science UOP
Prof. Bimali Jayawardena	-	Senior Professor, University of Kelaniya
Dr. Chamila C Kadigamuwa	-	Senior Lecturer, University of Kelaniya
Dr. Swarna kaluthotage	-	Director, Bandaranayake memorial ayurvedic research Institute
Mrs. Dammika Malsinghe	-	Additional Secretary, Ministry Of Wildlife and Forest Resource Conservation
Dr. Sujanthe Mauran	-	Laboratory Manager, Hettigoda Industries Pvt Ltd
Dr. Mahesha Nadugala	-	Senior Scientific Officer, National Science Foundation (NSF)
Prof. Priyani A Paranagama	-	Chair of Chemistry, University of Kelaniya
Ms. Divya Perera	-	CEO, Ancient Nutraceuticals
Prof. Pathirage Kamal Perera	-	Professor, Faculty of Indigenous Medicine,UOC
Mrs. P L A P Perera	-	Deputy Director, Sri Lanka Standards Institution (SLSI)
Prof. Sirimal Premakumara	-	Chairman, Industrial Technology Institute (ITI)
Mrs. Amali Ranasinghe	-	Chief Operating Officer, SLIBTEC
Mrs. Dilini Rathnayake	-	Assistant Director-Information and Examination, National Intellectual Property Office
Dr. Kalpa W. Samarakoon	-	Senior Lecturer, KDU-CARE, General Sir John Kotelawala Defense University
Prof. Radhika Samarasekera	-	Director General, Industrial Technology Institute (ITI)
Dr. Thanuja Sudasinghe	-	Postdoctoral Scientist, Sri Lanka Institute of Biotechnology (SLIBTEC)



Dr. Dinusha Nishani Udukala	-	Senior Lecturer, Institute of Chemistry Ceylon (Ichem)
Dr. Thilina Wanigasekera	-	Director/Organization Development, Ministry of Health
Dr. W.A.R.T. Wickramaarachchi	-	Additional Director, National Plant Quarantine Service
Dr. Chandima Wijesiriwardena	-	Research Fellow, Industrial Technology Institute (ITI)

Value Addition to the Natural Resources and Minerals of Sri Lanka

Dr. R.D. Guneratne	-	Consultant, National Science and Technology Commission
Mr. Wasantha Anuruddha	-	Principal Scientific Officer, NSF
Ms. Udesha Bopitiya	-	Director, LANMIC POLYMERS (Pvt) Ltd
Dr. Sadun Dalpadadu	-	Director, DAMSILA Minerals
Mr. Nalin De Silva	-	Director (Mineral Surveys) Geological Survey and Mines Bureau
Dr. Nuwan De Silva	-	Senior Research Scientist, Sri Lanka Institute of Nanotechnology
Mr. J. Dinojan	-	Mining & Processing Engineer, Lanka Mineral Sands Limited
Mr. L.R.D. Gokula	-	Asst. General Manager, Paranthan Chemicals Company Limited
Ms. V.A.C. Hansani	-	Technical Officer, Paranthan Chemicals Company Limited
Dr. Pathmakumara Jayasingha	-	Senior Lecturer, Department of Geography, UOC
Mr. Amila Jayasinghe	-	CEO, BOGALA GK Graphite
Prof. Daham Jayawardana	-	Professor, Head of the Department, Faculty of Science, UOJ
Dr. Iresha Kottegoda	-	Research Fellow, Industrial Technology Institute
Dr. A.M. Mubarak	-	Chief of Research & Innovation, SLINTEC
Mr. P. K. A. S. R. Nonis	-	Assistant Director (Scientific Affairs), NRC
Mr. Isharaka Perera	-	Managing Director, LCG Holdings
Dr. W.M.G.I. Priyadarshana	-	Senior Lecturer, Faculty of Technology, UOJ
Prof. R. M. G. Rajapakse	-	Senior Professor, University of Peradeniya
Mrs. P. M. S. Rajapakse	-	Assistant Director, Central Environmental Authority
Dr. Pradeep W. Samarasekera	-	Senior Lecturer, University of Kelaniya
Dr. Chanaka Sandaruwan	-	Senior Research Scientist, Sri Lanka Institute of Nanotechnology
Dr. Lahiru Wijenayaka	-	Senior Lecturer, The Open University of Sri Lanka
Dr. Hasintha Wijesekara	-	Senior Lecturer, Sabaragamuwa University
Ms. Dharani Wijesundara	-	Deputy Director (Mapping and Geo-information), Geological Survey



Mr. K.G.R. Wimalasooriya	-	and Mines Bureau Additional Secretary (Public Enterprises & Restructuring)
Mr. Nishantha Dissanayake	-	Senior Deputy Director, Board of Investment
Joevinie Machado	-	Observer, US Ambassador Staff

Renewable Energy, Energy Storage and Green Hydrogen

Prof. Ajith De Alwis	-	Chief Innovation officer, National Innovation Agency
Prof. Lidula Widanagama Arachchige	-	Professor, Department of Electrical Engineering, UOM
Prof. Atputharajah Arulampalam	-	Professor, Department of Electrical and Electronic Engineering, University of Jaffna
Prof. Rahula Attalage	-	Vice Chancellor, Sri Lanka Institute of Information Technology
Mrs. Thidasi Dahanayaka	-	Senior Innovation Officer, National Innovation Agency
Mr. Veditha De Silva	-	Senior lecturer, Department of Mechanical & Manufacturing Engineering, University of Ruhuna
Prof. Lakshman Dissanayake	-	Research Professor, Institute of Fundamental Studies
Dr. Duleeka Gunarathne	-	Senior lecturer, Department of Chemical and Process Engineering, UOM
Dr. Jagath Gunathilake	-	Senior Lecturer, Department of Geology, University of Peradeniya
Mr. Manju Gunawardana	-	Director, Sri Lanka Institute of Nanotechnology
Prof. Prasanna Gunawardane	-	Professor, Department of Mechanical Engineering, UOP
Dr. Luminda Gunawardhana	-	Senior lecturer, Department of Civil Engineering, UOM
Dr. Nanda Gunawardhana	-	Director, Sri Lanka Technological Campus
Prof. Udayanga Hemapala Moratuwa	-	Professor, Department of Electrical Engineering, University of
Dr Nanditha Hettiarachchi	-	Senior lecturer, Department of Mechanical & Manufacturing Engineering, University of Ruhuna,
Mr. Chamila Jayasekera	-	Director (R & D), Sri Lanka Sustainable Energy Authority
Mr. Parakrama Jayasinghe Sulakshana Jayawardana	- -	Council Member, Federation of Renewable Energy DevelopersDr. Additional Secretary, Presidential Secretariat
Dr. Ahilan Kanagasundaram	-	Lecturer, Department of Electrical and Electronic Engineering, University of Jaffna
Prof. Chaminda Karunasena	-	Professor, Department of Mechanical & Manufacturing Engineering, University of Ruhuna
Dr. Upanith Liyanaarachchi	-	Senior lecturer, Department of Nano Science Technology, Wayamba University
Dr. Tissa Liyanage	-	CEO, Master Hellie's Engineering Consultants (Pvt.)
Mr. Tissa Liyanage	-	Deputy General Manager, Paranthan Chemicals co. Ltd



Prof. Kithsiri Liyanage	-	Professor, Department of Electrical & Electronic Engineering, UOP
Dr. Ravindu Lokuliyana	-	Lecturer, Department of Mechanical Engineering, OUSL
Dr. Chandrakantha Mahendranathan	-	Senior lecturer, Department of Botany, Eastern University
Prof. Mahinsasa Narayana	-	Professor, Department of Chemical and Process Engineering, UOM
Mr. Nimal Perera	-	President, SCP Forum Sri Lanka
Dr. W. D. Prasad	-	Senior lecturer, Department of Electrical Engineering, UOM
Dr. Manoj Ranaweera	-	Senior lecturer, Department of Mechanical Engineering, UOM
Prof. Lalith Rajapakse	-	Professor, Department of Civil Engineering, University of Moratuwa
Prof. P. G. Rathnasiri	-	Professor, Department of Chemical and Process Engineering, UOM
Prof. P. Ravirajan	-	Senior professor, Department of Physics, University of Jaffna
Prof. Asanka Rodrigo	-	Professor, Department of Electrical Engineering, UOM
Prof. Lilantha Samaranayake	-	Professor, Department of Electrical and Electronic Engineering, UOP
Dr. Jayathu Samarawickrama	-	Director General, National Engineering Research & Development Center
Prof. Athula Senarathne	-	Senior professor, Department of Geology, University of Peradeniya
Mr. Ranjith Sepala	-	Chairman, Sri Lanka Sustainable Energy Authority
Prof. Deepal Subasinghe	-	Assoc. Research Professor, NISF
Dr. Thushara Subasinghe	-	Senior lecturer, Department of Chemical and Process Engineering, UOM
Dr. Lihil Subasinghe	-	Senior lecturer, Department of Mechanical Engineering, UOM
Dr. Thusitha Sugathapala	-	Senior lecturer, Department of Mechanical Engineering, UOM
Prof. Dhayalan Velauthapillai	-	Professor, Western Norway University of Applied Science
Mr. Keerthi Wickramaratne	-	Chairman, SAKURA Graphite Pvt.Ltd
Prof. Anura Wijayapala	-	Professor, Department of Electrical Engineering, UOM
Dr. Athula Wijayasinghe	-	Project Leader, National Institute of Fundamental Studies
Prof. Sanjeewa Witharana	-	Professor, Department of Mechanical Engineering, UOM



National Science and Technology Commission – Commission and Staff

Commission Members

Prof. Veranja Karunaratne	-	Chairperson, Vice Chancellor SLINTEC Academy Nano Technology & Science Park
Prof. D. Siril A. Wijesundara	-	Commission Member, Research Professor, NIFS
Dr. D.M. Suratissa	-	Commission Member, Sri Lanka Institute of Local Governance
Dr. K. G. I. Amarasinghe	-	Commission Member
Dr. Nirmali de Silva	-	Commission Member
Ms. Deepa Liyanage	-	Commission Member, Additional Secretary Ministry of Education
Mr. Thushara Vajira Perera	-	Commission Member
Mrs. A. P. L. D. D. Niluka Fernando	-	Treasury Representative

Acting Director /CEO

Mr. Janaka Geekiyanage	-	SLAS Grad I Officer and Director – Development Ministry of Technology
------------------------	---	--

Senior Scientist

Mr. Seyed Shahmy	-	Chartered Biostatistician and Ph.D. Candidate –UOM
------------------	---	--

Deputy Director /Finance and Administration

Mrs. Kumari Peiris	-	Management Professional
--------------------	---	-------------------------

Scientists

Ms. M. D. Thilini	-	Microbiologist
Mrs. Rasitha Perera	-	Nutritionist

Research Assistants

Ms. Kavindi Kaluarachchi
Ms. Bhavanthi Silva
Ms. Charithma Senali
Ms. Denisha Piyumali
Mr. Rifdy Ahamad

Aids

Mr. Dhanapala



Platinum Sponsor:



Ministry of Education | National Science and Technology

Gold Sponsor:



As a Swiss organization with a 125-year-old heritage of trust, reliability, quality and innovation, A. Baur & Co. is committed to improving Sri Lankan lives. We bring the world to our island, with top-notch products and services from the best brands on the planet. By adhering to the highest quality and ethical standards, we hope to make life better for all Sri Lankans.



www.baur's.com



Fertilizer & Seeds



Plant Protection



Animal Health



Pharmaceuticals



Surgical & Diagnostics



Nutraceuticals
Cosmeceuticals
(Herbal/Ayurvedic)



Consumer Products



Hotel Management
Education



Textile Machinery



Air Services

Other Sponsors:



With Best Compliments

Industrial Technology Institute

Driving The Nation Through Technology



Industrial Technology Institute
363, Bauddhaloka Mawatha, Colombo 07.
Email: mbd@iti.lk, Web: www.iti.lk

For More Information

Tel: 0112379800 Ex: 104

Email: clo@iti.lk

Research & Development Complex

No. 503 A, Helbarawa Gardens,
Thalahena, Malambe.

With the best compliments from

Techno Instruments (Pvt) Ltd

THE BEST OF THE BEST IN
LIFE SCIENCE &
CHEMICAL ANALYSIS PRODUCTS



Agilent Technologies

Authorized Distributor



**Agilent Pesticide Analyzer
Agilent Drug Analyzer**

ELGA VEOLIA

Authorized Distributor



Agilent Heavy Metal Analyzer



**Elga Deionized Water
Purification System**



No.19A, Temple Road, Kalubowila, Dehiwala-10350, Sri Lanka

Tel: +94-11-2765557, +94-11-2765556

Fax: 94-11-2765559

Email: sales@technoinstruments.com

Web: www.technoinstruments.com



IIHS

MULTIVERSITY



CINEC

CAMPUS

Beyond A Graduate



Ministry of Education | National Science and Technology

With Complements From CIC Agri Businesses (Pvt) Ltd



CIC has
invested over
Rs. 200 Million
for producing
local hybrid seed

Sri Lanka annually
imports over
USD 20 Million
worth of seed



CIC

Agri
Businesses

Your trusted partner in providing technology solutions in Agri sector

Emerchemie NB
helping add life to years



**"Steering humanity
towards health & happiness...."**

Emerchemie NB (Ceylon) Limited

60, Maligawatte Road, Colombo 10, Sri Lanka.

Tel: 2694864/5, 2675005/6 Fax: 2671877

www.emerchemie.lk

"National in Fibre, International in flavour"



QUALITY
HEALTHCARE

TRUSTED
EXCELLENCE

GLOBAL
STANDARDS



Research & Development



Obsessed with Quality



Ethical Manufacturer



Professional Marketing



Socially Responsible

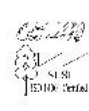
66

years of proven trust and excellence

As a fully Sri Lankan owned company with 66 years of legacy, Astron is fully committed to provide quality, safe and efficacious health care solutions to improve the Sri Lankans quality of life. By adhering to global standards and ethical practices, we are on a mission to uplift the standard of health in our motherland, since 1956.

We are dedicated and focused to build a healthy nation.

PHARMACEUTICALS | NUTRITION | HERBALS | ANIMAL HEALTH



ASTRON LIMITED



Baraka

Healthy Life, Daily

www.barakanaturals.com



Ministry of Education | National Science and Technology



Ministry of Education | National Science and Technology