

**South Asian Biotechnology Conference  
(SABC2018)**

**Theme:**

**Biotechnology: Role in Regional  
Development**

**Programme**

***March 28-March 30, 2018***

***Hilton Colombo Residences, Colombo, Sri Lanka***



## **Local Organizing Committee**

Professor Vijaya Kumar  
Dr. A M Mubarak  
Professor Nadira Karunaweera (Coordinator)  
Professor Sirimali Fernando  
Dr. SAV Moorthy  
Dr. Lasith Gunawardana

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## **Message from the President, National Academy of Science, Sri Lanka**

I am pleased indeed to welcome all participants to the fourth South Asian Biotechnology Conference (SABC 2018) organized by the National Academy of Sciences of Sri Lanka (NASSL), together with the International Centre for Genetic Engineering and Biotechnology (ICGEB) and the National Science Foundation (NSF). This conference builds on the successes of previous conferences held in Delhi, India (2015), Dhaka, Bangladesh (2016), and Kathmandu, Nepal (2017).

This year we have selected the theme *“Biotechnology: Role in Regional Development”* for the conference which will be enriched by the participation of several eminent resource persons from the South Asian region. The programme includes plenary lectures by eminent scientists from South Asia, parallel sessions on a range of biotechnology fields, a panel discussion on *“University, Institution-Industry Partnerships-The Way Forward”* and the launch of the Sri Lankan Chapter of Organization for Women in Science for the Developing World (OWSD). Keynote addresses will be delivered by two world renowned scientists Prof. Andrew B Holmes from Australia and Prof. Virander Singh Chauhan from India.

The Conference will provide a collaborative platform for all participating scientists for promoting scientific exchange and cooperation in the SAARC region especially focusing on the development of biotechnology based products, both for the market and for the public good in agriculture, health, environment and industry sectors and disseminating successful best practices. I do hope that this event will forge collaborative links between scientists and scientific institutions including links between researchers and industry in the SAARC region.

The SABC 2018 Conference is going to be very busy and productive with the participation of nearly 200 scientists from the Region and I sincerely thank all those who collectively helped NASSL, including the sponsors, in organizing this international event successfully. I wish our visitors from overseas, a very pleasant stay in Sri Lanka.



**Azeez M. Mubarak, Ph.D. (Cantab)**  
*President, National Academy of Sciences of Sri Lanka*



# CONFERENCE INAUGURATION PROGRAMME

*Wednesday, March 28, 2018*

**14.00 h – 16.15 h: Registration – Registration Desk at Ballroom Lobby**

## **Inauguration Ceremony Programme**

*Hilton Residences Union Ballroom*

- 16.45 Invitees to be seated**
- 17.00 Arrival of Chief Guest, Guest of Honour**
- 17.10 Traditional lighting of the Oil Lamp**
- 17.15 National Anthem**
- 17.20 Welcome Address - Dr Azeez M Mubarak**  
*President, National Academy of Sciences, Sri Lanka*
- 17.25 Address – Dr Lawrence Banks**  
*Scientific Coordinator, ICGEB, Trieste, Italy*
- 17.30 Address - Dr Ritu Gaur**  
*Associate Dean, Faculty of Life Sciences and Biotechnology, South Asia University*
- 17.35 Address - Guest of Honour - Hon'ble Susil Premajyantha**  
*Minister of Science, Technology and Research*
- 17.50 Address – Chief Guest – His Excellency Maithripala Sirisena**  
*President, Democratic Socialist Republic of Sri Lanka*
- 18.10 Keynote Presentation (K1) – Professor Andrew Holmes**  
*Professor, Bio21 Institute, Melbourne, Australia*  
*“A Journey to the market place using Chemistry as a vehicle to engage with Physics and Biology”*
- 18.50 Theme Lecture – Professor Sirimali Fernando**  
*Chairperson, National Science Foundation of Sri Lanka*  
*“Role of Biotechnology in South Asia”*
- 19.20 Vote of Thanks - Professor Nadira Karunaweera**  
*Secretary, National Academy of Sciences, Sri Lanka*
- 19.30 Cultural Event – Traditional Sri Lankan Dances**
- 20.00 Inaugural Dinner**





*Thursday, March 29, 2018*

**08.00 – 09.00: Registration of Participants – Registration Desk - Ballroom Lobby  
Union Ballroom – Ground Floor**

**Chair:** *Azeez M Mubarak, President, National Academy of Sciences, Sri Lanka*

**09.00 Keynote Presentation (K2) – Virandar S Chauhan**

*International Centre for Genetic Engineering and Biotechnology  
(ICGEB), New Delhi, India*

*“Challenges in Research: Basic versus Translational”*

**09.40 Presentation on ICGEB and its Activities – Lawrence Banks**

*Scientific Coordinator, International Centre for Genetic  
Engineering and Biotechnology (ICGEB), Trieste, Italy*

**10.00 Plenary Lecture (P1) – S H P Parakrama Karunaratne**

*University of Peradeniya, Peradeniya, Sri Lanka*

*“Biotechnological Applications in the control of Mosquito borne diseases”*

**10.30 TEA**

**11.00 Parallel Sessions 1**

**Session 1 A – Union Ballroom**

**Chair:** *Azeez M Mubarak*

**11.00 – 12.50 University, Institute-Industry Partnerships (UI-IP)**

*The Way Forward for Sri Lanka*

**Panelists – Ananda Jayawardane** (*Director-General, National Science Foundation*), **Vijaya Kumar** (*Chairman, National Institute of Fundamental Studies*), **Harin De Silva Wijeyeratne** (*Chief Executive Officer, Sri Lanka Institute of Nanotechnology*), **A.R.T. Sugathapala** (*Director, The Enterprise - Center for Innovation, Incubation and Entrepreneurship, University of Moratuwa*), **Ananda Hettiarachchi** (*Vice Chairman, Lankem PLC*), **Upul Ratnayake**, (*General Manager, Technical and R & D, DPL Group*), **Thusitha Nakandala** (*Deputy General Manager -Branch Banking, Sampath Bank PLC*)

**Session 1 B – Conference Hall 1 – Level 3**

**Chairs: George Dias/C Goonaratna**

**11.00 Invited Lecture (IL1) – Senthil K Venugopal**

*Faculty of Life Sciences and Biotechnology, South Asian  
University, New Delhi, India*

*“Augmenter of Liver Regeneration: A Key Regulator in Liver  
Regeneration”*

**11.20 Oral Presentation (OP1) – Fareez ud din Mufti**

*School of Life Sciences, CAS-TWAS Center for Excellence in  
Molecular Cell Science University of Science & Technology, Anhui,  
P.R.China*

*“Recruitment of RdRP can generate siRNA using machinery of erroneous  
transcript in Caenorhabditis elegans”*

**11.35 Oral Presentation (OP2) – G H R Eranga Karunaratne**

*Department of Microbiology, Faculty of Medicine, University of  
Colombo, Colombo, Sri Lanka*

*“A gold nano particle based lateral flow strip to detect isoniazid  
resistance”*

**11.50 Oral Presentation (OP3) – Altaf Imran**

*Quality Operational Laboratory, University of Veterinary and  
Animal Sciences, Lahore, Pakistan*

*“Optimization of different physio-chemical factors for the optimal  
cryopreservation of cell lines in vitro”*

**12.05 Oral Presentation (OP4) – A H M Nurun Nabi**

*Department of Biotechnology and Molecular Biology, University of  
Dhaka, Dhaka, Bangladesh*

*“Telomere Biology: Pursuing Genetics and Clinical Manifestations of Type  
2 Diabetes”*

**12.20 Oral Presentation (OP5) – Dushyant Dudhagara**

*Analytical and Environmental Science Division & CIF, CSIR-  
Central Salt & Marine Chemicals Research Institute, Bhavnagar,  
Gujarat, India*

*“Microcosm study based prototype development for bioremediation of PAH  
using Mycobacterium litorale”*

**12.35 Oral Presentation (OP6) – R S Dassanayake**

*Department of Chemistry, Faculty of Science, University of Colombo, Colombo, Sri Lanka*

*“Engineering a transgenic mosquito expressing blood meal induced siRNA to block dengue virus transmission in Aedes aegypti”*

**Session 1 C - Conference Hall 2 – Level 3**

**Chairs: R. Gaur/Laal Chandrasena**

**11.00 Invited Lecture (IL2) – Lawrence Banks**

*International Centre for Genetic Engineering and Biotechnology (ICGEB), Trieste, Italy*

*“Human Papillomaviruses: From Infectious Entry to Malignancy”*

**11.20 Oral Presentation (OP7) – Savita Yadav**

*Department of Biophysics, All India Institute of Medical Sciences, New Delhi, India*

*“Increased expression of PDAP-1-1 is linked with PDGF-B mediated glioma progression”*

**11.35 Oral Presentation (OP8) – P G T S Wickramatunga**

*Department of Chemistry, Faculty of Science, University of Colombo, Colombo, Sri Lanka*

*“Characterization of ARV1 (ARE2 required for viability) gene of bovine filarial parasite Setaria digitata”*

**11.50 Oral Presentation (OP9) – Gorkha Raj Giri**

*South Asian University, New Delhi-110021, India*

*“Role of type III PKS and modifying enzyme from Mycobacterium marinum in regeneration of biofilm”*

**12.05 Oral Presentation (OP10) – Rasheeda Bashir**

*Department of Biotechnology, Lahore College for Women University, Lahore, Pakistan*

*“Myocilin (MYOC) gene variants in Pakistani patients with recessive juvenile open angle glaucoma (JOAG)”*

**12.20 Oral Presentation (OP11) – R D Gupta**

*Faculty of Life Sciences and Biotechnology, South Asian University, New Delhi-110021, India*

*“Anti-apoptotic role of mammalian PON2”*

**12.35 Oral Presentation (OP12) – Yuba Raj Pokharel**

*Faculty of Life Science and Biotechnology, South Asian University,  
New Delhi, India*

*“Characterization of Novel Tumor Suppressor Gene PQBP1 in Prostate  
Cancer cell line”*

**12.50 LUNCH/POSTER SESSION 1 – Union Ballroom**

**Poster Presentation (PP01) – D R Herath**

*Marine Biological Resources Division, National Aquatic Resources  
Research and Development Agency, Colombo 15, Sri Lanka*

*“Molecular and stock identification of the neritic tuna species, Euthynnus  
affinis, Auxis thazard and Auxis rochei caught from major fishery harbours  
of Sri Lanka”*

**Poster Presentation (PP02) – Mohd. Ashaq**

*Department of Botany, Govt. P.G. College for Women, Gandhi  
Nagar, Jammu, Jammu & Kashmir, India*

*“Studies on Turnip Ringspot Virus infecting turnip in Jammu”*

**Poster Presentation (PP03) – R L Dewasurendra**

*Department of Parasitology, Faculty of Medicine, University of  
Colombo, Colombo, Sri Lanka*

*“Genetic variants associated with maintenance of anti-malarial antibodies  
in individuals with history of malaria”*

**Poster Presentation (PP04) – Ali Sharafi**

*Zanjan Pharmaceutical Biotechnology Research Center, Zanjan  
University of Medical Sciences, Zanjan, Iran*

*“Evaluation of Apigenin in three varieties of Cosmos bipinnatus by a  
simple and sensitive HPLC method”*

**Poster Presentation (PP05) – Ali Sharafi**

*Zanjan Pharmaceutical Biotechnology Research Center, Zanjan  
University of Medical Sciences, Zanjan, Iran*

*“Comparative analysis of SSR, ISSR and PCR-RFLP molecular markers in  
Citrus germplasm collection”*

**Poster Presentation (PP06) – S. Selvaskanthan**

*Postgraduate Institute of Agriculture, University of Peradeniya,  
Peradeniya, Sri Lanka*

*“Callus Induction using Leaf Explants and Development of Thin Layer  
Chromatographic Fingerprint Profile for Secondary Metabolites of  
Gyrinops walla Gaertn”*

**Poster Presentation (PP07) – Dipu Bharali**

*Department of Medicine, Maulana Azad Medical College; New  
Delhi-02, India*

*“Association of Ang1, Ang2 and FGF Genetic Polymorphism and their  
expression analysis in Hepatocellular Carcinoma”*

**Poster Presentation (PP08) – H M L P B Herath**

*Department of Chemistry, University of Colombo, Colombo, Sri  
Lanka*

*“Contriving of a Zebra fish based heavy metal sensitive biosensor: a  
biotechnological approach to cross the hurdle of detecting bio-available  
heavy metals in polluted water reservoirs in Sri Lanka”*

**Poster Presentation (PP09) – L M M Liyanage**

*Postgraduate Institute of Science, University of Peradeniya,  
Peradeniya, Sri Lanka*

*“Application of microalgae for the removal of Pb (II) from waste  
water”*

**Poster Presentation (PP10) – Zeenat Khatoon**

*Centre for Interdisciplinary Research in Basic Sciences, Jamia  
Millia Islamia, New Delhi, India*

*“Highly sensitive electrochemical sensor for detection of lung cancer”*

**Poster Presentation (PP11) – Miranda Thomas**

*International Centre for Genetic Engineering and Biotechnology  
(ICGEB), Trieste, Italy*

*“Interactions of E6 oncoproteins from diverse human papillomavirus types  
with their PDZ domain-containing target proteins”*

**Poster Presentation (PP12) – K A P P Kuruppuarachchi**

*Department of Bio Process Technology, Faculty of Technology,  
Rajarata University of Sri Lanka, Mihintale, Sri Lanka*

*“Determination of the prevalence of bla genes isolated from UTI patients in  
Anuradhapura, Sri Lanka by specific primer PCR”*

**Poster Presentation (PP13) – J M P S Madamarandawala**

*National Institute of Fundamental Studies (NIFS), Hantana Road,  
Kandy, Sri Lanka*

*“A novel low cost approach for Tuberculosis diagnosis using Coconut water and Silicon solar cell cum biosensor”*

**Poster Presentation (PP14) – Saroja N Rao**

*Department of Biotechnology, Dayananda Sagar College of  
Engineering, Bengaluru-72, Karnataka, India*

*“A Pseudomonas plecoglossicida strain capable of promoting growth and controlling Rust fungal disease in Pisum sativum”*

**Poster Presentation (PP15) – Faiz M M T Marikar**

*Department of Biochemistry, Faculty of Medicine, General Sir  
John Kotelawela Defence University, Ratmalana, Sri Lanka*

*“Genetic taxonomy of Slender Lorises (Primates, Lorisidae: Loris) in Sri Lanka”*

**Poster Presentation (PP16) – E M U A Ekanayake**

*National Institute of Fundamental Studies (NIFS), Hantana Road,  
Kandy, Sri Lanka*

*“Rapid molecular technique for the detection of bacteria in lung cancer and bronchiectasis patients”*

**Plenary Session – Union Ballroom**

**Chair: Ranjith Mahindapala, President-Elect, NASSL**

**14.30 Plenary Lecture (P2) – Deepak Gaur**

*Laboratory of Malaria and Vaccine Research, School of  
Biotechnology, Jawaharlal Nehru University, New Delhi, India*

*“Elucidating the molecular basis of reticulocyte invasion by Plasmodium vivax”*

**Parallel Session 2**

**Session 2 A – Union Ballroom**

**Chairs: Azra Khanum/D N Magana-Arachchi**

**15.05 Invited Lecture (IL3) – R Gaur**

*Faculty of Life Sciences and Biotechnology, South Asian  
University, New Delhi, India*

*“Insights into the activity of HIV Maturation Inhibitors”*

**15.25 Oral Presentation (OP13) – C. Goonaratna**

*Ceylon Medical College Council, Colombo, Sri Lanka*

*“Swastha Thriphala® when used as an adjunct to atorvastatin, significantly enhances its lipid regulating effect: a prospective, double-blind, parallel allocation, randomised controlled trial”*

**15.40 Oral Presentation (OP14) – Sujatha Peela**

*Department of Biotechnology, Dr.B.R.Ambedkar University,  
Srikakulam, Andhra Pradesh, India*

*“Anticancer activity of cyclo-Leu-Pro-diketopiperazine from marine actinomycete against triple negative breast cancer cell line”*

**15.55 Oral Presentation (OP15) – W P E H Hemamali**

*Department of Zoology and Environmental Sciences, University of  
Colombo, Colombo, Sri Lanka*

*“Characterization of promoter interaction of GntR type transcriptional regulator PA 1526 of Pseudomonas aeruginosa in pursue of finding novel drug leads”*

**16.10 Oral Presentation (OP16) – Azhar Rasul**

*Department of Zoology, Faculty of Life Sciences, Government  
College University Faisalabad, 38000 Pakistan*

*“Identification and Characterization of Novel Malic Enzyme 2 (ME2),  
New Cancer Metabolic Target, Inhibitors”*

**16.25 Oral Presentation (OP17) – E R C S Wickramatillake**

*Link Natural Products (Pvt) Ltd., Pugoda, Sri Lanka*

*“The Ayurveda medicinal herbal product Link Samahan® reduces the  
incidence and severity of upper respiratory ailments in healthy people: a  
randomised control trial”*

**16.40 Oral Presentation (OP18) – M B C L Somarathne**

*Department of Chemistry, Faculty of Science, University of  
Colombo, Colombo, Sri Lanka*

*“Functional analysis of novel parasitic nematode-specific protein of  
Setaria digitata larvae in Culex quinquefasciatus by siRNA mediated  
RNA interference”*

**Session 2 B – Conference Hall 1 – Level 3**

**Chairs: Haseena Khan/Kingsley De Alwis**

**15.05 Invited Lecture (IL4) – Vittorio Venturi**

*International Centre for Genetic Engineering and Biotechnology  
(ICGEB), Trieste, Italy*

*“Role and importance of signaling in the plant microbiome”*

**15.25 Oral Presentation (OP19) – A Mustafiz**

*Faculty of Life Sciences and Biotechnology, South Asian  
University, New Delhi, India*

*“Zn<sup>2+</sup> dependent Glyoxalase I plays key role in stress tolerance”*

**15.40 Oral Presentation (OP20) – Ewon Kaliyadasa**

*Department of Export Agriculture, Faculty of Animal Science and  
Export Agriculture, Uva Wellassa University, Sri Lanka*

*“Plant Mediator subunits of MED16, MED2 and MED14 in transcriptional  
regulation and tolerance to abiotic stress in plants”*

**15.55 Oral Presentation (OP21) – M B Mohamed Sathik**

*Rubber Research Institute of India, Kottayam, India*

*“Developing Markers for Abiotic Stress tolerance in Hevea brasiliensis”*

**16.10 Oral Presentation (OP22) – Syed Uzma Jalil**

*“Amity Institute of Biotechnology, Amity University Uttar Pradesh,  
Lucknow Campus, Lucknow-226 028, India*

*“Physiological and biochemical characterization of GABA transaminase  
gene and its regulatory mechanism during leaf senescence in Arabidopsis  
thaliana”*

**16.25 Oral Presentation (OP23) – K Kumar**

*Department of Biological Sciences, Birla Institute of Technology &  
Science Pilani, K. K. Birla Goa Campus, Goa, India*

*“Development of DNA Barcodes for Delineating Representative Mangrove  
Species of West Coast India”*

**16.40 Oral Presentation (OP24) – Md. Abdul Karim**

*Laboratory of Microbiology, Department of Botany, University of  
Dhaka, Dhaka, Bangladesh*

*“Survival of Vibrio vulnificus in association with blue green alga  
Anabaena variabilis in laboratory microcosms”*



**Session 2 C– Conference Hall 2 – Level 3**

**Chairs: Nadira Karunaweera/Subhra Chakraborty**

**15.05 Invited Lecture (IL5) – Bhupal Govinda Shrestha**

*Department of Biotechnology, Kathmandu University, Dhulikhel,  
Nepal*

*“Merger of Biotechnology and Ayurveda, for molecular based evidence of anti-cancer activity of Nepalese Medicinal plants”*

**15.25 Oral Presentation (OP25) – Pankaj Bharali**

*Department of Biotechnology, Gauhati University, Guwahati,,  
Assam, India*

*“In-vitro Bioactivity Evaluation of Amentotaxus assamica Ferguson.-an endangered member of Taxaceae”*

**15.40 Oral Presentation (OP26) – Yanti**

*Food Technology Study Programme, Atma Jaya Catholic  
University of Indonesia, Jakarta 12930, Indonesia*

*“Antidiabetic Activity of Essential Oil Isolated from Zanthoxylum acanthopodium fruit”*

**15.55 – 16.30 Launch of the Sri Lankan Chapter of the Organization for Women in Science for the Developing World (OWSD)**

**Nadira Karunaweera**

*- Introduction to OWSD and Sri Lankan Chapter*

Message from **Cheryl Praeger**,

*- Chair, AASSA Committee on Women in Science and Engineering*

Views and Suggestions from the Audience

**16.30 Special Lecture: Savitri Gunatilleke**

*Faculty of Science, University of Peradeniya, Peradeniya, Sri  
Lanka*

*“Women in Science: Research Highlights on Sinharaja’s Tree Flora through Four Decades”*

**17.00 TEA**

**CLOSE OF DAY TWO PROCEEDINGS**

*Friday, March 30, 2018*

**08.00 – 09.00: Registration of Participants – Registration Desk at Ballroom Lobby**

**Union Ballroom**

**Chair: Vittorio Venturi, ICGEB**

**09.00 Plenary Lecture (P3) – Subhra Chakraborty**

*National Institute of Plant Genome Research, JNU Campus, Aruna Asaf Ali Marg, New Delhi, India*

*“System Level Understanding of Host-specific Immune Dynamics in Fungal Disease”*

**Session 3 A – Union Ballroom**

**Chairs: M B M Sathik/Kshanika Himburegama**

**09.35 Invited Lecture (IL6) – Chamari Hettiarachchi**

*Department of Chemistry, Faculty of Science, University of Colombo, Colombo, Sri Lanka*

*“HY5 interacting B-box protein, BBX 21 a member of a novel class of transcription factor that regulates plant growth and development”*

**09.55 Oral Presentation (OP27) – B P Abhayawickrama**

*Department of Biotechnology, Wayamba University of Sri Lanka, Sri Lanka*

*“Whole genome re-sequencing and variants discovery in two salinity related elite rice varieties in Sri Lanka”*

**10.10 Oral Presentation (OP28) – Intissar Zarrouk**

*Laboratory of Applied Biotechnology in Agriculture, National Agricultural Research Institute of Tunisia (INRAT), Tunis, Tunisia*

*“Efficacy of silicon in the induction of tomato resistance against Botrytis stem canker”*

**10.25 Oral Presentation (OP29) – D. Padukkage**

*Board of Study in Agriculture, Faculty of Graduate Studies, University of Ruhuna, Matara, Sri Lanka*

*“Potential use of plant growth-promoting rhizobacteria (PGPR) in rice cultivation”*

### **09.35 Parallel Sessions 3**

#### **Session 3 B – Conference Hall 1 – Level 3**

**Chairs: Anjana Singh/Vajira Dissanayake**

#### **09.35 Invited Lecture (IL7) – Azra Khanum**

*Pakistan Academy of Sciences, Islamabad, Pakistan*

*“Peptides: An Emerging Source of Drugs/Medicines”*

#### **09.55 Oral Presentation (OP30) – A Sharifi**

*Zanjan Pharmaceutical Biotechnology Research Center, Zanjan  
University of Medical Sciences, Zanjan, Iran*

*“Baicalein production using in vitro genetically transformed culture of  
Scutellaria bornmulleria”*

#### **10.10 Oral Presentation (OP31) – Danish Eqbal**

*International Centre for Genetic Engineering And  
Biotechnology (ICGEB), New Delhi, India*

*“Micro-particle mediated morphological alteration of Penicillium  
funiculosum NCIM 1228 for enhanced cellulase production”*

#### **10.25 Oral Presentation (OP32) – Ziaur Rahman**

*“Department of Biological Sciences, Korea Advanced Institute of  
Science and Technology (KAIST), Daejeon,, Korea*

*“Metabolic Engineering of Escherichia coli for the Production of  
Hydrocarbons Using Synthetic Biology”*

#### **Session 3 C – Conference Hall 2 – Level 3**

**Chairs: D Thangadorai/M Hettiarachchi**

#### **09.35 Invited Lecture (IL8) – Ferdousi Begum**

*Development of Biotechnology and Environmental Conservation  
Centre - DEBTEC, Mohammadpur, Dhaka, Bangladesh*

*“Quality Seed Potato Production through Biotechnology”*

#### **09.55 Oral Presentation (OP33) – A A U Perera**

*Institute of Biochemistry, Molecular Biology and Biotechnology,  
University of Colombo, Sri Lanka*

*“Screening of imported seed potato to detect and characterize  
Ralstonia solanacearum for quarantine purposes”*

**10.10 Oral Presentation (OP34) – R W P M Rajapaksha**

*Department of Biotechnology, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka*

*“Next Generation Sequencing for the Detection of Quarantine Important Microbial Pathogens in Imported Seed Potato ”*

**10.25 Oral Presentation (OP35) – Anjana Ghelani**

*Department of Life Sciences, Hemchandracharya North Gujarat University, Patan, India*

*“Screening of biotechnological valuable bacteria using metagenomics analysis of marine ecosystem of Indian west coastline ”*

**10.40 TEA**

**11.10 Plenary Session – Union Ballroom**

**Chair: Senthil K Venugopal, South Asian University**

**11.10 Plenary Lecture (P4) – Sarman Singh**

*All India Institute of Medical Sciences, New Delhi, India*

*“Biotechnology in the diagnosis and prevention of infectious diseases”*

**Parallel Session 4**

**Session 4 A – Union Ballroom**

**Chairs: Ferdousa Begum/C Hettiarachchi**

**11.45 Invited Lecture (IL9) – Mohan Chandra Kalita**

*Department of Biotechnology, Gauhati University, Guwahati, Assam, India*

*“Microalgae of Northeast India to Generate Sustainable Energy and other Novel Products: Integration of Biorefinery Approaches ”*

**12.05 Oral Presentation (OP36) – Anju Arora**

*Division of Microbiology, Indian Agricultural Research Institute, New Delhi, India*

*“Developing Saccharomyces cerevisiae strains with higher xylose utilization through protoplast fusion ”*

**12.20 Oral Presentation (OP37) – Aradhana Singh**

*University School of Environment Management, Guru Gobind Singh Indraprastha University, Dwarka, New Delhi, India*

*“Effect of inocula on the performance of Microbial fuel cell ”*

**12.35 Oral Presentation (OP38) – Gobinath Rajagopalan**

*Faculty of Life Sciences and Biotechnology, South Asian  
University, Akbar Bhawan, Chanakyapuri, New Delhi, India*

*“Direct fermentation of agricultural residues to produce butanol – a superior alternative fuel”*

**12.50 Oral Presentation (OP39) – Kashif M Shaikh**

*Omics of Algae Group, Integrative Biology, International  
Centre for Genetic Engineering and Biotechnology, New Delhi,  
India*

*“Genomics of Acyl-Lipid Metabolism in Marine Microalgae  
Parachlorella kessleri for Biofuel Production”*

**Session 4 B – Conference Hall 1 – Level 3**

**Chairs: Sameer Singh/Tharanga Thoradeniya**

**11.45 Invited Lecture (IL10) – Vijay Kumar Prajapati**

*Department of Biochemistry, School of Life Sciences, Central  
University of Rajasthan, Bandarsindri, Ajmer, Rajasthan India*

*“Exploring sand fly salivary proteins to design multi-epitope based subunit  
vaccine to fight against visceral leishmaniasis”*

**12.05 Oral Presentation (OP40) – T N Samaranayake**

*Department of Parasitology, Faculty of Medicine, University of  
Colombo, Sri Lanka*

*“Comparative study of L. donovani isolates causing cutaneous and visceral  
disease in an endemic focus”*

**12.20 Oral Presentation (OP41) – N H Silva**

*Faculty of Medicine, University of Colombo, Sri Lanka*

*“Study of differentially expressed genes of Leishmania parasites  
isolated from SSG responsive and poor-responsive cutaneous lesions:  
Ongoing study”*

**12.35 Oral Presentation (OP42) – P Saudagar**

*National Institute of Technology Warangal, Telangana, India*

*“Identification of novel inhibitor of MAPK from Leishmania donovani.  
Comparative biochemical and in-silico analysis”*

**12.50 Oral Presentation (OP43) – N H Manamperi**

*Department of Parasitology, Faculty of Medicine, University of Kelaniya, Ragama, Sri Lanka*

*“In situ immune response to cutaneous leishmaniasis in Sri Lanka”*

**Session 4 C – Conference Hall 2 – Level 3**

**Chairs: Lawrence Banks/Vijaya Kumar**

**11.45 Invited Lecture (IL11) – George Jayantha Dias**

*Department of Anatomy, University of Otago, New Zealand*

*“Translational research from an Australasian perspective”*

**12.05 Oral Presentation (OP44) – Vajira H W Dissanayake**

*Department of Anatomy and the Human Genetics Unit, Faculty of Medicine, University of Colombo, Sri Lanka*

*“Translating the understand of the diversity of genetic variants involved in drug response and metabolism in the population into clinical implementation of pharmacogenomics in Sri Lanka”*

**12.20 Oral Presentation (OP45) – Alpana Sharma**

*Department of Biochemistry, All India Institute of Medical Sciences, New Delhi, India*

*“Genome editing of CD44 splice variants in Urothelial carcinoma of bladder: A promising therapeutic approach”*

**12.35 Oral Presentation (OP46) – D N Magana-Arachchi**

*National Institute of Fundamental Studies, Kandy*

*“A process and a potential diagnostic kit for Drug-resistant Mycobacterium tuberculosis complex bacteria”*

**12.50 Oral Presentation (OP47) – P Abdul Azeem**

*Department of Physics, National Institute of Technology Warangal, Warangal, India*

*“In vitro evaluation of soda lime borosilicate bioactive glass-ceramics for bone tissue engineering applications”*

**12.50 LUNCH/POSTER SESSION 2 – Union Ballroom**

**Poster Presentation (PP17) – B S Choudri**

*Center for Environmental Studies and Research, Sultan Qaboos University, Oman*

*“Coastal Ecosystem Management: Use of local knowledge for planning”*

**Poster Presentation (PP18) – Rana Pawan Singh**

*Department of Zoology and Biotechnology, HNB Garhwal University, Srinagar Garhwal, Uttarakhand, India-246174*

*“Effect of changing altitude on Total Phenolic, Total Flavonoid and Total Terpenoid content in different extracts of Coleus forskohlii collected from Garhwal Himalaya”*

**Poster Presentation (PP19) – S. Rasakulendran**

*Department of Zoology, Faculty of Science, University of Colombo, Colombo, Sri Lanka*

*“Natural ligands of transcriptional regulator Rv3095: A potential drug target for tuberculosis”*

**Poster Presentation (PP20) – J Sangeetha**

*Department of Environmental Science, School of Earth Science Systems, Central University of Kerala, Kasaragod, Kerala, India*

*“Effect of Genetically Modified Cotton on Soil Properties and Bacterial Diversity using ELISA, DGGE and FAME Analysis”*

**Poster Presentation (PP21) – Sushante Sapte**

*Department of Microbiology, Govt. College of Arts, Science and Commerce, Khandola, Marcela –Goa, India*

*“Isolation and stress tolerance studies of Rhizobium spp., an important biotool in nitrogen fixation”*

**Poster Presentation (PP22) – M S Shahid**

*Department of Crop Sciences, College of Agricultural and Marine Sciences, Sultan Qaboos University, Al-Khod 123, Oman*

*“Oman is a sink for exotic begomoviruses and satellites”*

**Poster Presentation (PP23) – Md. Shariful Islam**

*Department of Biotechnology and Genetic Engineering, Mawlana Bhashani Science and Technology University, Tangail, Bangladesh*

*“Knowledge and Awareness of Early Detection Methods, Symptoms and Risk Factors towards Breast and Cervical Cancer among the Female Students of Bangladesh: A population based study”*

**Poster Presentation (PP24) – M B C L Somarathne**

*Department of Chemistry, Faculty of Science, University of Colombo, Colombo, Sri Lanka*

*“Development of siRNA mediated RNA interference and functional analysis of novel parasitic nematode-specific protein of Setaria digitata”*

**Poster Presentation (PP25) – Sushma Pandey**

*Tribhuvan University, Central Department of Botany, Kathmandu, Nepal*

*“Establishment of in vitro cultures of two valuable medicinal plants Tinospora cordifolia (Willd.) Hook. f. & Thoms and Vallerenia jatamansii Jones for the production of secondary metabolites”*

**Poster Presentation (PP26) – Swet Nisha**

*Defence Research Laboratory, Tezpur, Sonitpur, Assam, India*

*“PP2 Enhancement of capsaicin accumulation in suspension culture of Capsicum assamicum”*

**Poster Presentation (PP27) – P G T S Wickramatunga**

*Department of Chemistry, Faculty of Science, University of Colombo, Colombo, Sri Lanka*

*“Homology modeling and sphingolipid binding site prediction of the ARVI protein of bovine filarial parasite Setaria digitata”*

**Poster Presentation (PP28) – Dilecta D’Costa**

*Department of Microbiology, Govt. College of Arts, Science and Commerce, Khandola, Marcela, Goa, India*

*“Bioprospecting for ethanol producing yeasts utilising flower waste as a substrate”*

**Poster Presentation (PP29) – Yanti**

*Food Technology Study Program, Faculty of Biotechnology, Atma Jaya Catholic University of Indonesia, Jakarta 12930, Indonesia*

*“Anthocyanin Fraction of Clitoria ternatea modulates the Expression of Glucose Transporter 4-related Genes in Diabetic Mice”*

**Poster Presentation (PP30) – M B Hosen**

*Department of Biochemistry and Molecular Biology, University of Dhaka, Dhaka, Bangladesh*

*“Study of Vitamins (A, D and E) and Minerals (Ca, Mg, Fe and Zn) in Cancer Patients in Bangladesh”*

**Poster Presentation (PP31) – M Kajan**

*Department of Psychiatry, Faculty of Medicine, University of Colombo, Colombo, Sri Lanka*

*“SNP-Genotyping Assay Designer: For Cost Effective and Time Efficient SNP genotyping Assays”*



**Poster Presentation (PP32) – B Umayal**

*Department of Obstetrics and Gynecology, Faculty of Medicine,  
University of Colombo, Colombo, Sri Lanka*

*“High Resolution Melting Analysis – Simple and Cost effective method  
for Rapid Genotyping”*

**Plenary session – Union Ballroom**

**Chair: Locana Gunaratna, NASSL**

**14.30 Plenary Lecture (P5) – Haseena Khan**

*Department of Biochemistry and Molecular Biology, University of  
Dhaka, Dhaka, Bangladesh*

*“Jute Endophytes: Exploring the Hidden Treasures”*

**Parallel Session 5**

**Session 5 A – Union Ballroom**

**Chairs: M C Kalita/Asoka Pathiratne**

**15.05 Oral Presentation (OP48) – M Hettiarachchi**

*Department of Zoology and Environmental Management,  
University of Kelaniya, Kelaniya*

*“Sustainable shrimp (Penaeus monodon) culture in the north western  
province, Sri Lanka through local biotechnological inputs”*

**15.20 Oral Presentation (OP49) – D. Thangadurai**

*Department of Botany, Karnatak University, Dharwad,  
Karnataka, India*

*“Production, Characterization and Antioxidant Potential of Wine from  
an Edible Wild Fruit, Flacourtia montana”*

**15.35 Oral Presentation (OP50) – Hussain Ali**

*Agricultural Research Institute, Peshawar, Pakistan*

*“The Effect of Stress on Cellular Aging in Honey Bees and its Mitigation”*

### **Session 5 B – Conference Hall 1 – Level 3**

**Chairs: Kundan Kumar/R S Dassanayake**

**15.05 Oral Presentation (OP51) – Pravin Dudhagara**

*Department of Biosciences, Veer Narmad South Gujarat University, Surat, India*

*“Concomitantly enhance bacterial growth, laccase production and textile dye decolorization by R-based optimization of process components and dye detoxification evaluation on human cell lines”*

**15.20 Oral Presentation (OP52) – Gayani Y Liyanage**

*Centre for Water Quality and Algae Research, Department of Zoology, Faculty of Applied Sciences, University of Sri Jayewardenepura, Sri Lanka*

*“Screening and Quantification of the bla<sub>TEM</sub> and tet M Resistance genes in environmental samples in Sri Lanka”*

**15.35 Oral Presentation (OP53) – J D M Senevirathna**

*Department of Animal Science, Faculty of Animal Science and Export Agriculture, Uva Wellassa University, Badulla, Sri Lanka*

*“DNA Barcoding of Freshwater Fish Species in isolated Minor Reservoirs of Badulla District in Sri Lanka”*

### **Session 5 C– Conference Hall 2 – Level 3**

**Chairs: V K Prajapati /Lasith Gunawardane**

**15.05 Oral Presentation (OP54) – A Benerji Babu**

*Department of Mathematics, National Institute of Technology Warangal, Warangal, India*

*“Bio-mathematical modeling of fleeting heat transfer in a human eye”*

**15.20 Oral Presentation (OP55) – M Sudharshani K Rabindrakumar**

*Department of Biochemistry and Molecular Biology, Faculty of Medicine, University of Colombo, Colombo, Sri Lanka*

*“Impact of folic acid supplementation during pregnancy on the folate status of urban Sri Lankan mothers and their offspring”*

**15.35 Oral Presentation (OP56) – D Srinivasacharya**

*Department of Mathematics, National Institute of Technology  
Warangal,*

*Warangal, Telengana, India*

*“Modelling of Blood Flow through a Stenosed Bifurcated Artery in the  
presence of Heat Source and Magnetic field”*

**15.55 Closing Ceremony**

**16.30 Colombo City Bus Tour**

## **Acknowledgements**

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His Excellency Maitripala Sirisena, President of the Socialist Democratic Republic of Sri Lanka for participating as Chief Guest

Hon'ble Susil Premajayantha, Minister of Science Technology and Research for participating as Guest of Honour

Our Keynote Speakers, Plenary Lecturers, Invited Lecturers and others making Oral and Poster presentations

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