



BioTech

4th International Conference on Bioscience and Biotechnology (BioTech-2019)

“Pursuing innovation in Bioscience and Biotechnology to Solve local and Global Grand Challenges”

21st – 22nd February 2019 | Kuala Lumpur | Malaysia

TECHNICAL PROGRAM

DAY 01 - THURSDAY, 21ST FEBRUARY, 2019

INAUGURATION SESSION	Thursday, 21 st February 2019 09.00 to 10.10 Penthouse	
	08.00 – 09.00	Conference Registration
	09.00 – 09.10	Welcome Address Mr. Oshadee Withanawasam (<i>CEO, Chairman and Co - Founder - The International Institute of Knowledge Management (TIKM), Sri Lanka</i>)
	09.10 – 09.20	Speech by the Conference Co - Chair Dr. James Budge (<i>University of Kent, United Kingdom</i>)
	09.20 – 09.30	Speech by the Conference Co - Chair Dr. Edward Ooi Chien Wei (<i>Monash University, Malaysia</i>)
	09.30 – 09.40	Speech by the Co - Hosting Partner Dr. Kashif Ahmed (<i>NED University, Pakistan</i>)
	09.40 – 09.50	Speech by the Co - Hosting Partner Professor Bolatkhan Zayadan (<i>Al-Farabi Kazakh National University, Kazakhstan</i>)
	09.50 – 10.00	Launch of Conference Trailer – BIOTECH 2020
	10.00 – 10.10	Conference Photograph
	10.10 – 10.30	Morning Refreshments



KEYNOTE FORUM	Thursday, 21st February 2019 10.30 to 12.00 Penthouse	
	10.30 – 11.15	"The Importance of Technological Advances for Antibiotic Discovery: Identification of Peptidoglycan O-Acetyltransferases as Potential New Antibiotic Targets in both Gram-Positive and Gram-Negative Bacteria" Dr. Anthony Clarke (<i>University of Guelph, Canada</i>)
	11.15 – 12.00	"Development of a New Method to Produce High Levels of Disulphide Bonded Biopharmaceuticals and Subunit Vaccines in <i>E. coli</i> " Prof. Colin Robinson (<i>University of Kent, United Kingdom</i>)
	12.00 – 13.00	Networking Lunch

TECHNICAL SESSION 01	BIOTECHNOLOGY AND ITS APPLICATION IN HEALTH CARE AREAS I	
	Thursday, 21 st February 2019 13.00 to 14.20 Penthouse	
	Chaired by: Dr. Anbu Arunkumar (<i>Karpagam Academy of Higher Education, India</i>)	
	13.00 – 13.20	A1 Matrix Metallo Proteinase Inhibitors – A Potential Drug Target against Rheumatoid Arthritis - An in Vivo and in Silico Approach S. Bhagavathy, Nazreen Najeeb, G. Priya, L. Anitha L, D. Shalini, (<i>Mohamed Sathak College of Arts and Science, India</i>)
	13.20 – 13.40	A2 Elucidation on the Role of Selenoproteins in Wound Healing Selvakumar Dharmaraj, Sneha Hariharan (<i>FASH, Karpagam Academy of Higher Education, India</i>)
	13.40 – 14.00	A3 Delineating the Effect of <i>Cissus quadrangularis</i> on the Production of Cytokines in Human Osteoblast like SaOS-2 Cells. Sridhar Muthusami ¹ , Ilangovan Ramachandran ² , Hariprasath Lakshmanan ¹ , Srinivasan Narasimhan ³ (<i>¹Karpagam Academy of Higher Education, India, ²University of Madras, India, ³Chettinad Academy of Higher Education and Research, India</i>)
14.00 – 14.20	A4 Gastroprotective Effects of Flavoalkaloid, 8-(2"-Pyrrolidinone-5"-YI)- Quercetin Isolated from <i>Senecio candicans</i> DC Hariprasath Lakshmanan (<i>Karpagam Academy of Higher Education, India</i>)	



TECHNICAL SESSION 02	NATURAL PRODUCTS AND PLANT SCIENCES I		
	Thursday, 21 st February 2019 14.20 to 16.20 Penthouse		
	Chaired by: Dr. Thangjam Robert Singh (<i>Mizoram University, India</i>)		
	14.20 – 14.40	B1	Haplotype Analysis and Molecular Marker Development for Bacterial Leaf Blight Resistance Gene Xa13 D.M.L.N.K. Dissanayake ¹ , S.S. Udage ² , N.H.L.D.L.D. Nanayakkara ¹ , H.M.V.G. Herath ³ , D.V. Jayatilake ³ (¹ Post Graduate Institute of Agriculture, University of Peradeniya, Sri Lanka, ² 28, Emily Drive, Narre Warren VIC 3805, Australia, ³ University of Peradeniya, Sri Lanka)
	14.40 – 15.00	B2	Characterization of Bacterial Leaf Blight Resistance Genes Xa4 and Xa21 in Rice (<i>Oryza sativa</i> L.) Edirisingha IK ¹ , Nanayakkara NHLDL ¹ , Herath HMVG. ² , Perera SACN ² , Jayatilake DV ² (¹ Postgraduate Institute of Agriculture, Peradeniya, Sri Lanka, ² University of Peradeniya, Peradeniya, Sri Lanka)
	15.00 – 15.20	B3	Partitioning and Preliminary Purification of Bioactive Compounds from <i>Garcinia indica</i> using 1-Propanol-Magnesium Sulphate Aqueous Two-Phase System Basavaraj S. Nainegali, Regupathi Iyyaswami, Prasanna D. Belur (<i>National Institute of Technology Karnataka, India</i>)
	15.20 – 15.40	B4	Pharmacological Potential of the Methanolic Extract of <i>Hypericum hookerianum</i> from Palni Hills of the Western Ghats, India Mahendrakumar Mani, Shiny Punalur John, Perinbam Kantharaj (<i>Guru Nanak College, University of Madras, India</i>)
	15.40 – 16.00	B5	Genetic Variability and Performance of Advanced Mutants of French Bean (<i>Phaseolus vulgaris</i> L.) Vishnuvardhana, Basavaraj T., Anjanappa M., Fakrudin B., Devappa V., Ashwathanarayana N.R. (<i>College of Horticulture, India</i>)
16.00 – 16.20	B6	Nutritional Quality of Biofortified Wheat Flour as Influenced by Phytase Treatments Kumar V ^{1,2} Verma S ² , Saxena A ² , Verma M ² , Shaikh I ² , Sangwan P ² , Dhaliwal H S ² (¹ Agriculture University, India, ² Eternal University, India)	



	16.20 – 16.40	Evening Refreshments
--	---------------	----------------------

TECHNICAL SESSION 03	BIOTECHNOLOGY AND ITS APPLICATION IN HEALTH CARE AREAS II	
	Thursday, 21 st February 2019 16.20 – 16.40 Penthouse	
	Chaired by: Prof. Devappa V (<i>University of Horticultural Sciences Campus, India</i>)	
	16.40 – 17.00	A5 Genomic Damage Profiling of Polycystic Ovarian Syndrome Using Invasive and Non Invasive Biomarkers Nishu Sekar ¹ , Abilash V.G. ² , Selvakumar Dharmaraj ¹ (¹ FASH, Karpagam Academy of Higher Education, India, ² VIT University, India)
	17.00 – 17.20	A6 The Effect of <i>Foeniculum vulgare</i> on Polycystic Ovarian Syndrome in a Rat Model Poornima K., Pooja N. (<i>Karpagam Academy of Higher Education, India</i>)
17.20 – 17.40	A7 ACE I/D Gene Polymorphism as Marker of PCOS Development in South Indian Cohort Women Nishu Sekar ¹ , Abilash V.G. ² , Selvakumar Dharmaraj ¹ (¹ FASH, Karpagam Academy of Higher Education, India, ² VIT University, India)	

PUBLICATION WORKSHOP	Thursday, 21st February 2019 18.00 to 18.40 Sky Room	
	18.00 – 18.40	Dr. Erandathie (Erandi) Lokupitiya (<i>Senior Lecturer, Department of Zoology and Environment Sciences, University of Colombo, Sri Lanka</i>)

**DAY 02 - FRIDAY, 22ND FEBRUARY, 2019**

TECHNICAL SESSION 04	GENERAL BIOLOGICAL ENGINEERING I		
	Friday, 22 nd February 2019 09.00 to 10.00 Pahang Suite		
	Chaired by: Fakrudin B. (<i>College of Horticulture, UHS campus, India</i>)		
	09.00 – 09.20	C1	Bacterial Strains from Tanneries Effluents with Multiple Potentials: Chromium and Azo Dyes Reduction Activities Tahir Iqbal, Amina Khatoon, Saira Bashir, Muhammad Kaleem Sarwar, Asma Nosheen, Aqasad Rashda, Anum Zahra (<i>University of Gujrat, Pakistan</i>)
	09.20 – 09.40	C2	Utilization of <i>Aspergillus niger</i> and Duckweed for the Wastewater Treatment of Nullah Lai Mehwish Jamil, Maham Fazal (<i>Fatima Jinnah Women University, Pakistan</i>)
	09.40 – 10.00	C3	Diversity, Phylogeny and Biosynthesis of Au Nanoparticle of Culturable Endophytic Fungi Associated with <i>Zingiber cassumunar</i> Roxb. Robert Thangjam, Sophiya Devi Lamabam (<i>Mizoram University, India</i>)
10.00 – 10.20	Morning Refreshments		



TECHNICAL SESSION 05	BIOMEDICINE ENGINEERING I		
	Friday, 22 nd February 2019 09.00 – 10.00 Penthouse		
	Chaired by: Dr. Kashif Ahmed (<i>NED University, Pakistan</i>)		
	09.00 – 09.20	D1	The Effect of Phenolic Active Fraction of <i>Ficus deltoidea</i> Var. Kunstleri (King) Corner on Fatty Acid-Induced Insulin Resistance Cell Models Wan Nurul Adlin binti Wan Yusof, Abdul Razak bin Kasmuri, Muhammad Taher bin Bakhtiar, Norazian binti Mohammad (<i>International Islamic University Malaysia, Malaysia</i>)
	09.20 – 09.40	D2	DMD Gene Mutation Identification in Duchenne Muscular Dystrophy Patients of Quetta, Balochistan, Pakistan Rozeena Shaikh ¹ , Muhammad Zeeshan ¹ , Sanam Zeib Khan ¹ , Pari Gul ¹ , Paras Shehzad ² , Sajid Ali Shah ² , Nida Ajmal ¹ , Shakeela Daud ¹ , Abdul Wali ¹ and JamilAhmad ¹ (¹ <i>Balochistan University of Information Technology Engineering and Management Sciences (BUITEMS), Pakistan</i> , ² <i>Combined Military Hospital, Pakistan</i>)
09.40 – 10.00	D3	B-Amyrin Induces ROS Mediated Apoptosis through P38 MAPK and JNK Pathways and Facilitates Caspases Activation in HeLa Cells Anburaj Jeyaraj ¹ , Tamilselvi Elango ² , Swapna Subramanian ³ , Amuthavalli Kottaiswamy ⁴ , Selvakumar Dharmaraj ⁵ (¹ <i>Karpagam Academy of Higher Education, India</i> , ² <i>The First Affiliated Hospital, Anhui Medical University, Hefei, China</i> , ³ <i>Hindu Mission Hospital, India</i> , ⁴ <i>VRR Institute of Biomedical Science, India</i> , ⁵ <i>Karpagam Academy of Higher Education, India</i>)	
10.00 – 10.20	Morning Refreshments		



PLENARY SPEECH	Friday, 22nd February 2019 10.20 to 10.50 Penthouse	
	10.20 – 10.50	"Integration of Bioprocesses Using Aqueous Two-Phase System for Direct Recovery of Intracellular Proteins" Dr. Edward Ooi Chien Wei (<i>Monash University, Malaysia</i>)

TECHNICAL SESSION 06	GENERAL BIOLOGICAL ENGINEERING II	
	Friday, 22 nd February 2019 10.50 to 12.50 Pahang Suite	
	Chaired by: Dr. Vinod Kumar (<i>Agriculture University, India</i>)	
	10.50 – 11.10	C4 Osteological Characterization of the Genus Puntius (Teleostei: Cyprinidae) Recorded from Six River Systems of Southern Western Ghats, India Anbu Aravazhi Arunkumar (<i>Karpagam Academy of Higher Education, India</i>)
	11.10 – 11.30	C5 Surface Modification of Bacterial Plastics, Poly (3-Hydroxybutyrate-co-4-Hydroxybutyrate) Scaffolds for Biomedical Applications Vigneswari S. ¹ Amirul A.A. ² (¹ <i>Universiti Malaysia Terengganu, Malaysia</i> , ² <i>University Science Malaysia, Malaysia</i>)
	11.30 – 11.50	C6 Degradation of Triclosan from Domestic Wastewater by Biosurfactant Produced from <i>Bacillus licheniformis</i> Jayalatha N.A., C.P. Devatha (<i>National Institute of Technology Karnataka, India</i>)
11.50 – 12.10	C7 Effect of Green Synthesized Copper Nanoparticles in Comparison with Copper Salt on the Dyeability of Cotton Fabric Towards Sulphur Dye Kashif Ahmed, Muhammad Amir Qureshi, Shumaila Meraj (<i>NED University of Engineering and Technology, Pakistan</i>)	



	12.10 – 12.30	C8	Synthesis and Nematicidal Activity of Derivatives of Oleanolic Acid Anjum Ayub, Kashif Ahmed, Ahmed Abdullah, Mahnoor Nafees (<i>NED University of Engineering & Technology, Pakistan</i>)
	12.50 – 13.50		Networking Lunch

POSTER SESSION	Friday, 22nd February 2019 10.50 to 11.50 Penthouse		
	Chaired by: Dr. Edward Ooi Chien Wei (<i>Monash University, Malaysia</i>)		
	P1	Health Risk of Infectious Diseases Associated with Marine Products - Microbiological Quality and Foodborne Pathogens in Processed Seafood Products B.S. Ko ¹ , H.W. Kim ¹ , J.W. Hur ¹ , H.R. Yu ¹ , Y. Yoon ² , M.S. Rhee ¹ (<i>¹Korea University, Department of Biotechnology, College of Life Sciences & Biotechnology, South Korea, ²Sookmyung Women’s University, South Korea</i>)	
	P2	Biological Metabolism of Bacillus Strains in Reconstituted Infant Formula: Unrecognized Source of Nitrite as a Health Risk S.W. Park, T.J. Cho, M.S. Rhee (<i>Korea University, Department of Biotechnology, College of Life Sciences & Biotechnology, South Korea</i>)	
	P3	Synergistic Bactericidal Effects of Benzoyl Derivatives in Combination with Capric Acid against <i>Staphylococcus aureus</i> H.W. Kim, M. S. Rhee (<i>Korea University, Department of Biotechnology, College of Life Sciences & Biotechnology, South Korea</i>)	
P4	Labchip Based Multiplex Diagnosis System for the Rapid Detection of <i>Staphylococcus aureus</i> , <i>Escherichia coli</i> , <i>Pseudomonas aeruginosa</i> , and <i>Candida albicans</i> in Cosmetic Products J.W. Hur ¹ , T.J. Cho ¹ , S.W. Kim ² , M.S. Rhee ¹ (<i>¹Korea University, Department of Biotechnology, College of Life Sciences & Biotechnology, South Korea, ² MiCo BioMed Co., Ltd., South Korea</i>)		



P5	<p>Prevalence and Key Genes Governing Gastroenteritis-Related Pathogenicity of <i>Aeromonas hydrophila</i> Isolated from Marine Fish in South Korea</p> <p>S.M. Park¹, H.W. Kim¹, G.H. Seo¹, S.W. Park¹, J.E. Bae¹, J.H. Hwang², S.H. Kim², M.S. Rhee¹ (¹Korea University, Department of Biotechnology, College of Life Sciences & Biotechnology, South Korea, ²National Institute of Food and Drug Safety Evaluation, South Korea)</p>
P6	<p>Identification and Genetic Characterization of Pathogenic <i>Vibrio</i> Spp. (<i>Vibrio parahaemolyticus</i>, <i>Vibrio vulnificus</i>, <i>Vibrio cholerae</i>) from Raw Ready-to-Eat Seafood</p> <p>H.R. Yu¹, H.W. Kim¹, J.W. Hur¹, B.S. Ko¹, Y. Yoon², M.S. Rhee¹ (¹Korea University, Department of Biotechnology, College of Life Sciences & Biotechnology, South Korea, ²Sookmyung Women’s University, South Korea)</p>
P7	<p>Pathogenic <i>Arcobacter</i> Spp. with Toxin Genes from Shellfish in South Korea - Determination of Putative Virulence by the Characterization of Genotypes</p> <p>G.H. Seo¹, H.W. Kim¹, S.M. Park¹, S.W. Park¹, J.E. Bae¹, J.H. Hwang², S.H. Kim², M.S. Rhee¹ (¹Korea University, Department of Biotechnology, College of Life Sciences & Biotechnology, South Korea, ²National Institute of Food and Drug Safety Evaluation, Food Microbiology Division, South Korea)</p>
P8	<p>Cultivation of Cyanobacteria in Domestic Wastewater for Biodiesel Production</p> <p>Bolatkhan K. Zayadan, Aizhan A. Usserbayeva, Kenzhegul Bolatkhan, Aizhan M. Bayzhigitova, Bekzhan D. Kossalbaev. (<i>Al-Farabi Kazakh National University, Kazakhstan</i>)</p>
P9	<p>Physiological and Genomic Insights into the Nitrite-producing <i>Geobacillus stearothermophilus</i> in the Processing Lines of Powdered Infant Formula</p> <p>T.J. Cho, M.S. Rhee (<i>Korea University, Department of Biotechnology, College of Life Sciences & Biotechnology, South Korea</i>)</p>

TECHNICAL SESSION 07	BIOMEDICINE ENGINEERING II
	Friday, 22 nd February 2019 11.50 – 12.50 Penthouse
	Chaired by: Dr. Kashif Ahmed (<i>NED University, Pakistan</i>)



	11.50 – 12.10	D4	Susceptibility of Raw-Bluetm ISG Cell Cultures to <i>Chequa iflavirus</i> and Athtab Bunya-like Virus Isolated from Redclaw Crayfish (<i>Cherax quadricarinatus</i>) Syahidah, D. ^{1,2} Elliman, J. ² Owens, L. ² (¹ Pathology Laboratory, IMRAFE Indonesia, ² CPHMVS, JCU Australia)
	12.10 – 12.30	D5	Invasion of <i>Aristobia Reticulator</i> (Voet) (Coleoptera: Cerambycidae) on Litchi Plantations in India M. M. Kumawat ¹ , K. M. Singh ² , L. Wangchu ² , A.K. Pandey ² (¹ Agriculture University, Rajasthan, India, ² Central Agricultural University, Arunachal Pradesh, India)
	12.30 – 12.50	D6	Morpho-Molecular Approach towards Identification of <i>Curvularia</i> Species Dama Ram ¹ Devi T Prameela ² , Kamil Deeba ² , Sekhar V. Chandra ² and Rajpoot L. S ² (¹ Agriculture University, Rajasthan, India, ² Indian Agriculture Research Institute, New Delhi, India)
	12.50 – 13.50		Networking lunch



TECHNICAL SESSION 08	NATURAL PRODUCTS AND PLANT SCIENCES II		
	Friday, 22 nd February 2019 13.50 to 15.30 Penthouse		
	Chaired by: Dr. Selvakumar Dharmaraj (<i>FASH, Karpagam Academy of Higher Education, India</i>)		
	13.50 – 14.10	B7	Physical Properties of Ultrasonically Treated Carrot Juice Marko Škegro, Ema Jambrović, Damir Ježek, Sven Karlović, Filip Dujmić, Marko Marelja, Mladen Brnčić and Tomislav Bosiljkov (<i>University of Zagreb, Croatia</i>)
	14.10 – 14.30	B8	Influence of Nutrients on Growth and Yield of Yard Long Bean (<i>Vigna Anguiculata Subsp. Sesquipedalis L.</i>) Anjanappa M., Anil Kumar S., Manjunatha Gowda D.C. (<i>College of Horticulture, UHS Campus, India</i>)
	14.30 – 14.50	B9	Bio-Intensive Management of Late Blight of Potato caused by <i>Phytophthora infestans</i> (Mont.) Devappa V., Mahaveer N. Shebannavar., Anjaneya Reddy B., Ramachandra R.K., Prasad kumar (<i>College of Horticulture, UHS Campus, India</i>)
	14.50 – 15.10	B10	Effect of Plant Growth Regulators on Growth, Flowering, Quality and Corm Multiplication of Gladiolus (<i>Gladiolus Hybridus L.</i>) Munikrshnappa P.M., Ashwini, A., Kulkarni B. S., Kumar R., and Taj A. (<i>College of Horticulture, UHS Campus, India</i>)
15.10 – 15.30	B11	Expression Analysis of MicroRNA and their Cognate Genes in Response to Abiotic Stresses in <i>Arabidopsis thaliana</i> Fakrudin, B., Chaithra, H.V., Mahale B., Ghosh, S. (<i>College of Horticulture, UHS campus, India</i>)	



BioTech

4th International Conference on Bioscience and Biotechnology (BioTech-2019)

“Pursuing innovation in Bioscience and Biotechnology to Solve local and Global Grand Challenges”

21st – 22nd February 2019 | Kuala Lumpur | Malaysia

ONLINE VIDEO PRESENTATION	Friday, 22nd February 2019 15.30 to 15.50 Penthouse		
	Chaired by: Dr. James Budge (<i>University of Kent, United Kingdom</i>)		
	15.30 – 15.50	V1	Structural Characterization of NPAS4-ARNT Dimerization through Computational Simulation Fahim A, Rehman A, Paracha RZ, Virk N, Bhatti MF (<i>National University of Sciences & Technology, Pakistan</i>)
	15.50 – 16.10		Evening Refreshments

CONFERENCE CLOSURE	Friday, 22nd February 2019 16.30 to 17.00 Penthouse	
	16.30 – 16.50	Conference Concluding and Awarding Ceremony
	16.50 – 17.00	Vote of Thanks Mr. Isanka P. Gamage (<i>Co-Founder, and Managing Director - The International Institute of Knowledge Management (TIKM), Sri Lanka</i>)



4th International Conference on Bioscience and Biotechnology (BioTech-2019)

“Pursuing innovation in Bioscience and Biotechnology to Solve local and Global Grand Challenges”

21st – 22nd February 2019 | Kuala Lumpur | Malaysia

Conference Co - Chair

.....
Dr. James Budge
(University of Kent, United Kingdom)

Conference Co - Chair

.....
Dr. Edward Ooi Chien Wei
(Monash University, Malaysia)

Keynote Speaker

.....
Dr. Anthony Clarke
(University of Guelph, Canada)

Keynote Speaker

.....
Prof. Colin Robinson
(University of Kent, United Kingdom)

Plenary Speaker

.....
Dr. Edward Ooi Chien Wei
(Monash University, Malaysia)

Conference Convener

.....
Mr. Isanka P. Gamage
(The International Institute of Knowledge Management, Sri Lanka)

Conference Secretary

.....
Mr. R.M. Keerthi Chandana
(The International Institute of Knowledge Management, Sri Lanka)



BioTech

4th International Conference on Bioscience and Biotechnology (BioTech-2019)

“Pursuing innovation in Bioscience and Biotechnology to Solve local and Global Grand Challenges”

21st – 22nd February 2019 | Kuala Lumpur | Malaysia

Evaluation Panel

- Dr. Anthony Clarke (University of Guelph, Canada)
- Dr. James Budge (University of Kent, United Kingdom)
- Prof. Colin Robinson (University of Kent, United Kingdom)
- Dr. Edward Ooi Chien Wei (Monash University, Malaysia)



4th International Conference on Bioscience and Biotechnology (BioTech-2019)

“Pursuing innovation in Bioscience and Biotechnology to Solve local and Global Grand Challenges”

21st – 22nd February 2019 | Kuala Lumpur | Malaysia

Organizer



Co - Hosting Partners



Academic Partner



Tour Partner



Event Partner





4th International Conference on Bioscience and Biotechnology (BioTech-2019)

“Pursuing innovation in Bioscience and Biotechnology to Solve local and Global
Grand Challenges”

21st – 22nd February 2019 | Kuala Lumpur | Malaysia
