



1<sup>st</sup> Annual  
**International Conference on Bioscience  
and Biotechnology – 2016**



12<sup>th</sup> – 14<sup>th</sup> January, 2016, Hotel Galadari, Colombo, Sri Lanka  
“Molecular Life Sciences for the Development in the 21<sup>st</sup> Century”

| <b>Conference Program</b>                             |            |  |
|---|------------|--|
| <b>Day 01: Tuesday, 12<sup>th</sup> January, 2016</b> |            |  |
| <b>Start</b>  | <b>End</b> | <b>Bougainvillea Ballroom</b>  |
| 08.00 a.m.  | 09.00 a.m. | <b>Conference Registration</b>   |
| 09.00 a.m.  | 09.15 a.m. | <b>Inauguration Session</b><br><b>National Anthem &amp; Oil lamp</b>   |
| 09.15 a.m.  | 09.25 a.m. | <b>Welcome address by the Program Chair</b><br><b>Mr. Isanka P. Gamage</b> (Director- The International Institute of Knowledge Management (TIKM), Sri Lanka)   |
| 09.25 a.m.  | 09.35 a.m. | <b>Speech by representative from hosting partner</b> (BioTech 2016)<br><b>Prof. Sampath Amaratunge</b> (Vice Chancellor, University of Sri Jayewardenepura, Sri Lanka)   |
| 09.35 a.m.  | 09.45 a.m. | <b>Speech by the Conference Chair</b> (BioTech 2016)<br><b>Emeritus Prof. Eric H Karunanayake</b> (Emeritus Professor of Biochemistry, Institute of Biochemistry, Molecular Biology and Biotechnology, University of Colombo, Sri Lanka) |
| 09.45 a.m.  | 10.00 a.m. | <b>Speech by the Chief Guest</b><br><b>Hon. Susil Premajyantha</b> (Minister of Science, Technology and Research)  |
| 10.00 a.m.  | 10.45 a.m. | <b>Conference Photograph &amp; Morning Refreshment</b>   |

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| 10.45 a.m. – 01.30 p.m. | 10.45 a.m. | 11.30 a.m.              | <b>Keynote forum.....</b><br><br><b>Prof. Atta-Ur-Rahman, FRS</b> (UNESCO Science Laureate/ Professor Emeritus, International Centre for Chemical & Biological Sciences, University of Karachi, Pakistan)<br><i>The Wondrous World of Innovation</i>  |
|                         | 11.30 a.m. | 12.10 p.m.              | <b>Emeritus Prof. Eric H Karunanayake</b> (Emeritus Professor of Biochemistry, Institute of Biochemistry, Molecular Biology and Biotechnology, University of Colombo, Sri Lanka)  |
|                         | 12.10 p.m. | 12.50 p.m.              | <b>Prof. K.M. Nalin de Silva</b> (Professor of Chemistry, University of Colombo and Science Team Leader, Sri Lanka Institute of Nanotechnology [SLINTEC], Sri Lanka)  |
|                         | 12.50 p.m. | 01.30 p.m.              | <b>Prof. Wei Zhang</b> (Director of Flinders Centre for Marine Bio products Development and Head of Molecular Bioprocess Engineering Laboratory, President of Australia, New Zealand Marine Biotechnology Society)  |
| 01.30 p.m.              | 02.30 p.m. | <b>Networking Lunch</b> |   |
| 02.30 p.m. – 03.50 p.m. | 02.30 p.m. | 02.50 p.m.              | <b>Bougainvillea Ballroom</b>   |
|                         |            |                         | <b>TECHNICAL SESSION 1 : BIODIVERSITY AND NATURAL PRODUCTS</b><br><br>Chaired by <b>Dr. Dinithi Peiris</b> (Department of Zoology, Faculty of Applied Sciences, University of Sri Jayewardenepura, Sri Lanka)   |
|                         |            |                         | <ul style="list-style-type: none"> <li>• <b>Mr. Sanjeevan Rajendran</b> (Department of Chemistry, Faculty of Science, University of Colombo, Sri Lanka)<br/> <i>Cyclotides Distribution and Bio-Activities of Geophila herbaceae</i></li> <li>• <b>Mr. R.S. Ratnayake</b> (Department of Food Science and Technology, Faculty of Applied Sciences, University of Sri Jayawardenepura)<br/> <i>Variation in Total Polyphenol Content, Antioxidant Potential, Theaflavin and Thearubigins Content of BOPF Grade Sri Lankan Black Teas (Camellia sinensis L.) of Different Climatic Elevations and BOPF Grade Commercially Available Black Teas in Sri Lanka.</i></li> <li>• <b>Dr. Animes Kumar Golder</b> (Department of Chemical Engineering Indian Institute of Technology Guwahati, India)<br/> <i>Nerium oleander Leaf Extract Mediated Synthesis of Nickel Nanoparticles and its Potential Application</i></li> </ul> |
| 02.50 p.m.              | 03.10 p.m. |                         |   |
| 03.10 p.m.              | 03.30 p.m. |                         |   |

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|                         | 03.30 p.m. | 03.50 p.m.   | <ul style="list-style-type: none"> <li>• <b>Ms. Saima Kashif</b> (Dept. of Biomedical Engineering, NED University of Engineering and Technology, Pakistan)<br/><i>QSAR Study: Prediction of Natural Therapeutic Compounds for Meningitis</i></li> </ul>  |
| 02.30 p.m. – 03.50 p.m. | 02.30 p.m. | 02.50 p.m.   | <p style="text-align: center;"><b>Salon Jasmin</b></p> <p><b>TECHNICAL SESSION 2 : AGRICULTURE AND FOOD BIOTECHNOLOGY (I)</b></p> <p>Chaired by <b>Prof. Wei Zhang</b> (Director of Flinders Centre for Marine Bioproducts Development and Head of Molecular Bioprocess Engineering Laboratory / President of Australia, New Zealand Marine Biotechnology Society.)</p> <ul style="list-style-type: none"> <li>• <b>Mr. D.R.C Perera</b> (Faculty of Animal Science and Export Agriculture, Uva Wellassa University, Sri Lanka)<br/><i>Establishment of a Molecular Based Method for the Identification of Skipjack Tuna (<i>Katsuwonus pelamis</i>) in Large Scale Fish Processing Industry</i></li> <li>• <b>Ms. Hiranya de Silva</b> (Institute of Chemistry Ceylon, College of Chemical Sciences, Sri Lanka)<br/><i>Adequate Least Nutritional Supplementation of Coconut Water Could Lead Towards Development of a Substituent for Oral Rehydration Fluid Complying with WHO Standards.</i></li> <li>• <b>Mr. A.N. Buddhapriya</b> (Department of Botany, University of Sri Jayewardenepura, Sri Lanka)<br/><i>In Vitro Micropropagation of <i>Gyrinops walla</i> (Gaerth.) Using Leaf Disc Explants</i></li> <li>• <b>Prof. Atabayeva S.D</b> (Department of Biotechnology, Faculty of Biology and Biotechnology, Al-Farabi Kazakh National University, Kazakhstan)<br/><i>Effect of Cadmium on Mineral Elements Content in Rice (<i>Oryza sativa</i> L.) Grain</i></li> </ul> |
|                         | 02.50 p.m. | 03.10 p.m.   |  |
|                         | 03.10 p.m. | 03.30 p.m.   |  |
|                         | 03.30 p.m. | 03.50 p.m.   |  |
|                         | 03.50 p.m. | 04.15 p.m.   |  |
| 04.15 p.m.              | 04.45 p.m. | <p style="text-align: center;"><b>Bougainvillea Ballroom</b></p> <p><b>Plenary Lecture</b><br/><b>Prof. Nissanka De Silva</b> (Department of Zoology, University of Sri Jayewardenepura, Sri Lanka.)</p> |  |

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| 04.50 p.m. – 06.10 p.m. | 04.50 p.m. | 05.10 p.m. | <p><b>Bougainvillea Ballroom</b></p> <p><b>TECHNICAL SESSION 3 : BIOPHARMACEUTICS &amp; MEDICAL BIOTECHNOLOGY (I)</b></p> <p>Chaired by <b>Emeritus Prof. Eric H Karunanayake</b> (Emeritus Professor of Biochemistry, Institute of Biochemistry, Molecular Biology and Biotechnology, University of Colombo, Sri Lanka)</p> <ul style="list-style-type: none"> <li>• <b>Dr. Ashish Wadhvani</b> (Department of Pharmaceutical Biotechnology, JSS College of Pharmacy, India.)<br/><i>In Vitro and in Vivo Efficacy of Fractions of Sida cordifolia L. Against Herpes Simplex Virus Type I Infection</i></li> <li>• <b>Ms. A. Kuganesan</b> (College of Chemical Sciences, Institute of Chemistry Ceylon, Sri Lanka.)<br/><i>In Vitro Antibacterial Study of Peel, Pulp and Seed Kernel Extracts of Mangifera indica Against Selected Bacterial Pathogenic Strains</i></li> <li>• <b>Dr. Roshan. P. Perera</b> (Institute of Biochemistry Molecular Biology and Biotechnology, University of Colombo, Sri Lanka)<br/><i>Analysis of the Occurrence of Cis-Regulatory Elements in the First Introns of Human Genes</i></li> <li>• <b>Ms. Hesika Varnakulasingham</b> (University of Wolverhampton [Facilitator - BCAS Campus, Sri Lanka])<br/><i>Investigation of Methyl Tetrahydro-Folate Reductase C677T Polymorphism in a Sample of Patients in a Hospital Based Diagnostic Setting in Sri Lanka.</i></li> </ul> |
|                         | 05.10 p.m. | 05.30 p.m. |  |
|                         | 05.30 p.m. | 05.50 p.m. |  |
|                         | 05.50 p.m. | 06.10 p.m. |  |
| 04.50 p.m. – 06.10 p.m. | 04.50 p.m. | 05.10 p.m. | <p><b>Salon Jasmin</b></p> <p><b>TECHNICAL SESSION 4 : AGRICULTURE AND BIOTECHNOLOGY</b></p> <p>Chaired by <b>Prof. K.M. Nalin de Silva</b> (Professor of Chemistry, University of Colombo and Science Team Leader, Sri Lanka Institute of Nanotechnology (SLINTEC), Sri Lanka.)</p> <ul style="list-style-type: none"> <li>• <b>Ms. Thirega Mahalingam</b> (Department of Botany, University of Kelaniya, Sri Lanka)<br/><i>Importance of Early Detection of Cabbage White Mold in Sri Lanka</i></li> <li>• <b>Ms. Nisansala Kulasooriya</b> (Faculty of Applied Sciences, University of Sri Jayewardenepura, Sri Lanka)<br/><i>Development of Ready-to-Serve (RTS) Fruit Drinks without Adding Preservatives</i></li> </ul>  |
|                         | 05.10 p.m. | 05.30 p.m. |  |

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|  | 05.30 p.m.   | 05.50 p.m. | <ul style="list-style-type: none"> <li>• <b>Ms. D.B.R Swarnathilaka</b> (Plant tissue culture Research Station, Dept. of Export Agriculture, Walpita )<br/><i>In-Vitro Multiplication of Ginger (Zingiber officinale Rosc.) Cultivars -Local, Chinese and Rangun</i></li> <li>• <b>Dr. Farrukh Naeem</b> (Institute of Mol. Biology and Biotechnology, University of Lahore, Lahore , Pakistan)<br/><i>Integrated use of Biofertilizers and Biocoated Chemical Fertilizers in Pakistan</i></li> </ul>   |
|  | 05.50 p.m.   | 06.10 p.m. |   |
| 06.10 p.m. – 06.30 p.m.                                  | 06.10 p.m.   | 06.30 p.m. | <p style="text-align: center;"><b>Bougainvillea Ballroom</b></p> <p><b>TECHNICAL SESSION 5 : POSTER SESSION</b></p> <p>Chaired by <b>Prof. Wei Zhang</b> (Director of Flinders Centre for Marine Bioproducts Development and Head of Molecular Bioprocess Engineering Laboratory / President of Australia, New Zealand Marine Biotechnology Society.)</p> <ul style="list-style-type: none"> <li>• <b>Dr. R. N Attanayake</b> (Department of Botany, University of Kelaniya, Sri Lanka)<br/><i>A Comparison of Soil Fungal Communities of Dry Zone and Wet Zone Forests Using a Metagenomic Approach</i></li> <li>• <b>Prof. Dr. Merih Kivanç</b> (Department of Biology, University of Anadolu, Eskisehir, Turkey)<br/><i>Application of Response Surface Methodology for Exopolysaccharide Production from Enterococcus Faecium M 96.2</i></li> </ul> |
| 06.45 p.m. onwards                                       |              |            | <b>Conference Dinner &amp; Cultural Show @ Raja Bojun Restaurant - Hosted by TIKM</b>   |
| <b>Day 02 : Wednesday, 13<sup>th</sup> January, 2016</b> |              |            |   |
|  | <b>Start</b> | <b>End</b> |   |
| 09.00 a.m. – 10.00 a.m.                                  | 09.00 a.m.   | 09.20 a.m. | <p style="text-align: center;"><b>Bougainvillea Ballroom</b></p> <p><b>TECHNICAL SESSION 6 : BIOPHARMACEUTICS &amp; MEDICAL BIOTECHNOLOGY (II)</b></p> <p>Chaired by <b>Dr. Ashish Wadhvani</b> (Department of Pharmaceutical Biotechnology, JSS College of Pharmacy, India.)</p> <ul style="list-style-type: none"> <li>• <b>Ms. T.P. Keerthirathne</b> (National Institute of Fundamental Studies, Sri Lanaka)<br/><i>Real Time PCR Assay for the Differentiation of Mycobacterial Species in Bronchial Washings</i></li> </ul>   |

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|                         | 09.20 a.m. | 09.40 a.m. | <ul style="list-style-type: none"> <li>• <b>Mr. S. Sayanthooran</b> (National Institute of Fundamental Studies, Sri Lanka, Renal Care &amp; Research Centre, Sri Lanka )<br/><i>Analysis of Blood Transcriptome in Patients with Chronic Kidney Disease of Uncertain Aetiology</i></li> <li>• <b>Ms. K.A.N.P. Katuwavila</b> (Sri Lanka Institute of Nanotechnology Pvt (Ltd), Nanotechnology and Science Park, Sri Lanka)<br/><i>Controlled Release of Doxorubicin from Chitosan and Chitosan-Alginate Nanoparticles and in Vitro Cytotoxicity Studies on MCF-7 Cell Line</i></li> </ul>   |
|                         | 09.40 a.m. | 10.00 a.m. |   |
| 09.00 a.m. – 10.00 a.m. | 09.00 a.m. | 09.20 a.m. | <p style="text-align: center;"><b>Salon Jasmin</b></p> <p style="text-align: center;"><b>TECHNICAL SESSION 7 : AGRICULTURE AND FOOD BIOTECHNOLOGY (II)</b></p> <p>Chaired by <b>Dr. Dilantha Gunawardana</b> (Department of Botany, Faculty of Applied Sciences, University of Sri Jayewardenepura, Sri Lanka.)</p> <ul style="list-style-type: none"> <li>• <b>Ms. D.M.R.G. Dasanayake</b> (Department of Plant Sciences, University of Colombo, Sri Lanka)<br/><i>Anther Response in Indica Rice is Affected by the Growing Season and Inorganic Nitrogen in the Pre-Culture Medium</i></li> <li>• <b>Ms. Thilini. A. Perera</b> (Department of Plant Sciences, Faculty of Science, University of Colombo, Colombo 03, Sri Lanka)<br/><i>Fifty Percent Replacement of Nitrogen Fertilizer Recommendation for Rice by a Biofilm of a Diazotroph and a Rhizosphere Fungus</i></li> <li>• <b>Dr. M. K. Purkait</b> ( Department of Chemical Engineering, Indian Institute of Technology Guwahati, India)<br/><i>Separation of Catechins from Green Tea Leaves by Membranes Based Technology</i></li> </ul> |
|                         | 09.20 a.m. | 09.40 a.m. |   |
|                         | 09.40 a.m. | 10.00 a.m. |   |
|                         | 10.00 a.m. | 10.20 a.m. | <b>Morning Refreshments</b>   |

| <b>Bougainvillea Ballroom</b> |            |            |   |
|-------------------------------|------------|------------|---|
| 10.20 a.m. – 12.00 p.m.       | 10.20 a.m. | 10.40 a.m. | <p><b>TECHNICAL SESSION 8 : BIOPHARMACEUTICS &amp; MEDICAL BIOTECHNOLOGY (III)</b></p> <p>Chaired by <b>Prof. Kamani Tennekoon</b> (Professor of Molecular Life Sciences, Institute of Biochemistry, Molecular Biology and Biotechnology, University of Colombo, Sri Lanka)</p> <ul style="list-style-type: none"> <li> <p><b>Ms. Beesetti PS Swarna Latha</b> (Molecular Oncology Lab, Department of Biotechnology, Indian Institute of Technology Madras, India)<br/> <i>To Identify the Human Ataxia Telangiectasia Mutated And Rad3 Related(ATR) Core Promoter Sequence Crucial for Transcriptional Regulation by P<sup>21</sup> Activated Kinase1 (Pak1) in Cancer Cells</i></p> </li> <li> <p><b>Mr. Jayadev Mavuluri</b> ( Biotechnology department, Indian Institute of Technology-Madras, India)<br/> <i>KIBRA: New Family Member of Ataxia Telangiectasia Mutated (ATM) Kinase</i></p> </li> <li> <p><b>Assoc. Prof. Chih-Wei Peng</b> (School of Biomedical Engineering, Taipei Medical University, Taiwan)<br/> <i>Motor Plasticity Induced by Intermittent Theta Burst Cortical Electrical Stimulation in Rats with Traumatic Brain Injury</i></p> </li> <li> <p><b>Prof. Mohammad Perwaiz Iqbal</b> (Department of Biological &amp; Biomedical Sciences, Aga Khan University, Pakistan)<br/> <i>Inverse Relationship of Statin Use with Vitamin D Deficiency in a Pakistani Population</i></p> </li> <li> <p><b>Dr. Saima Sadaf</b> (Institute of Biochemistry and Biotechnology, School of Biological Sciences, University of the Punjab, Pakistan )<br/> <i>Comparative Plasma Proteome Profiling Reveals Putative Biomarkers of Chronic Myeloid Leukemia</i></p> </li> </ul> |
|                               | 10.40 a.m. | 11.00 a.m. |   |
|                               | 11.00 a.m. | 11.20 a.m. |   |
|                               | 11.20 a.m. | 11.40 a.m. |   |
|                               | 11.40 a.m. | 12.00 p.m. |   |

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| 10.20 a.m. – 12.20 p.m. |            |                         | <b>Jasmin Room</b>   |
|                         | 10.20 a.m. | 10.40 a.m.              | <p><b>TECHNICAL SESSION 9 : BIO PROCESS AND BIOLOGICAL ENGINEERING</b></p> <p>Chaired by <b>Dr. G. A. S. Premakumara</b> (Director General/ Chief Executive Officer, Industrial Technology Institute, Sri Lanka)</p> <ul style="list-style-type: none"> <li>• <b>Dr. Pankaj Tiwari</b> (Department of Chemical Engineering, IIT Guwahati, Guwahati, India)<br/><i>Utilization of Rubber Seed for Biofuel and Value-Added Chemicals Synthesis</i></li> <li>• <b>Dr. Asieh Aramvash</b> (Department of Bioscience and Biotechnology, Malek-Ashtar University of Technology, Iran)<br/><i>The Efficient Recovery of Polyhydroxybutyrate Biopolymer by Non-Toxic Solvents</i></li> <li>• <b>Dr. T. Panneerselvam</b> (Department of Pharmaceutical Chemistry, Arulmighu Kalasalingam College of Pharmacy, Kalasalingam University Campus, Anand Nagar, India)<br/><i>Synthesis and Antidepressant Evaluation of Compounds Containing 4-(1H-benzo[d]imidazol-2-yl)-n-(substituted phenyl)-4-oxobutanamide</i></li> <li>• <b>Dr. G.D.D.K Gunasena</b> (Department of Microbiology, Faculty of Science, University of Kelaniya, Sri Lanka.)<br/><i>Primers Suitable to Screen for the Type III Secretion Systems in Bacteria</i></li> <li>• <b>Dr. Basharat Ali</b> (Department of Microbiology and Molecular Genetics, University of the Punjab, Pakistan.)<br/><i>Auxin Production and Biofertilization of Triticum aestivum L. By Halotolerant rhizobacteria</i></li> <li>• <b>Mr. M G Gireeshan</b> (BIHER, India.)<br/><i>Constant flow of electricity from jumbo urine</i></li> </ul> |
|                         | 10.40 a.m. | 11.00 a.m.              |  |
|                         | 11.00 a.m. | 11.20 a.m.              |  |
|                         | 11.20 a.m. | 11.40 a.m.              |  |
|                         | 11.40 a.m. | 12.00 p.m.              |  |
| 12.00 p.m.              | 12.20 p.m. |                         |  |
| 12.20 p.m.              | 01.40 p.m. | <b>Networking Lunch</b> |  |



## Bougainvillea room

### TECHNICAL SESSION 10 : AGRICULTURE AND FOOD BIOTECHNOLOGY (III)

Chaired by **Prof. Atta-Ur-Rahman, FRS** (UNESCO Science Laureate/ Professor Emeritus, International Centre for Chemical & Biological Sciences, University of Karachi, Pakistan.)

- **Dr. Vaibhav V. Goud** (Department of Chemical Engineering, IIT Guwahati, Guwahati, India )  
*Production of Reducing Sugars from Sugarcane Bagasse by Subcritical Water Hydrolysis*
- **Prof. S.M. Sapuan** (Faculty of Engineering and Institute of Tropical Forestry and Forest Products (INTROP), Universiti Putra Malaysia, Serdang, Selangor, Malaysia )  
*Development of Biocomposites from Forest Products: Sugar Palm (Arenga pinnata merr.) Based Composites*
- **Dr. Chandan Das** (Department of Chemical Engineering, Indian Institute of Technology Guwahati, India)  
*Zingiber officinale roscoe: Some Promising Indigenous Varieties for Commercial Application*
- **Prof. R.A. Alybayeva** (Department of Biology and Biotechnology, Kazakh National University, Kazakhstan)  
*Screening of Spring Wheat Varieties Resistant to Soil Pollution with Heavy Metals to Create Ecologically Pure Production*
- **Dr. Abid Hussain** (University of Poonch, Rawalakot Azad Kashmir, Pakistan)  
*Molecular Characterization of Coagulase Genes of Staphylococcus aureus Isolated From Mastitic River Buffaloes*

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|-------------------------|------------|---|--|
| 01.40 p.m. – 03.20 p.m. | 01.40 p.m. | 02.00 p.m.  |  |
|                         | 02.00 p.m. | 02.20 p.m.  |  |
|                         | 02.20 p.m. | 02.40 p.m.  |  |
|                         | 02.40 p.m. | 03.00 p.m.  |  |
|                         | 03.00 p.m. | 03.20 p.m.  |  |
| 03.20 p.m.              | 03.45 p.m. | <b>Evening Refreshment</b>  |  |
| 03.45 p.m.              | 04.15 p.m. | <b>Speech by Exhibition partner</b><br><b>Cubic Computing Pvt. Ltd</b> (Bangalore, India)<br><b>Mr. Madhu Madhavan</b> (Founder & CEO – Qsutra) &<br><b>Mr. Bimal Kumar Kesh</b> (Sr. Statistician & Training Manager – Qsutra) |  |
| 04.15 p.m.              | 04.30 p.m. | <b>Conference Concluding Session</b>  |  |
| 04.30 p.m.              | 05.00 p.m. | <b>Awarding Ceremony</b>  |  |

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|---|------------|---|
| 05.00 p.m.  | 05.15 p.m. | <b>Vote of thanks by the Conference Publicity Chair:</b><br><br><b>Mr. Oshadee Withanawasam</b> (Chairman- The International Institute of Knowledge Management (TIKM), Sri Lanka) |
| <b>Day 03 : 14<sup>th</sup> January 2016- Post Conference Tour (Optional)</b> |            |   |

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