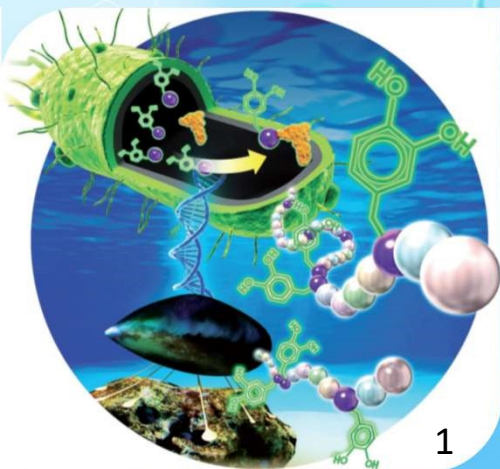


Speakers



CCIB Workshop on

Green Biomanufacturing of Bio-based Materials

Wednesday, August 31, 2022
@14:00, Beijing time
(UTC/GMT+8)

Materials are very important part of our everyday life. The understanding and development of materials have shaped human civilizations over the years. These have affected the way humans lived, ate, clothed, cured, commuted and more. With advancements in science, amid growing awareness amongst world communities and rising economic pressures, resources for material synthesis are shifting from non-renewable to renewable ones, such as biomass and carbon dioxide. Synthetic biology is the driving force behind this transformation.

Bio-based materials refer to a new class of materials manufactured by biological, chemical, physical and other means using renewable biomass or biological raw materials. Under the global demand of carbon peak and carbon-neutrality based development, the bio-based materials have become a critical research direction in promoting green and low-carbon development of the industry.

This workshop is being held from the platform of COMSATS Joint Center for Industrial Biotechnology (CCIB), which aims to promote dialogue among scientists and enterprises to explore potential cooperation opportunities, particularly joint R&D and industrial collaboration on bio-based materials.



VooV Meeting Link :
<https://voovmeeting.com>

ID: 448570368

Prof. SUN Jibin is the Deputy Director-General of Tianjin Institute of Industrial Biotechnology (TIB), Chinese Academy of Sciences (CAS); Secretary-General of Biomufacturing Industry (Talent) Alliance; as well as the founding Director of CCIB, which is an open, shared and innovative cooperation platform to promote the development of biotechnology and bioindustry in the Global South. Prof. Sun is among eminent figures in the area of industrial biotechnology in China with research focus on understanding and upgrading the industrial strains. He contributed substantially to the foundation of the National Center of Technology Innovation for Synthetic Biology, which is hosting CCIB and offers a unique platform for international cooperation. He has been actively participating in the activities of COMSATS Network and is the co-organizer of the 22nd Meeting of COMSATS Coordinating Council.



Prof. BAI Wenqin is the Coordinator of the CCIB Joint R&D Group on Biobased materials. She received her Ph.D. from Institute of Microbiology, CAS, and was a postdoctoral fellow at Washington University in St. Louis. Currently, she is a Principal Investigator at TIB, CAS. Dr. Bai's research focuses on microbial synthesis and application of natural polymer, such as protein, polysaccharides, polyamide, et al. She has filed 10 patents and published more than 20 academic papers in international journals such as *Nature Communications*, *Carbohydrate polymers*, *Metabolic Engineering*, et al.



For more information, please contact:

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Program

Prof. George CHEN Guo-Qiang is a Professor at Center of Synthetic and Systems Biology, Tsinghua University, China. He received his B.Sc and Ph.D. from South China University of Technology in 1985 and Graz University of Technology (Austria) in 1989, respectively. He conducted research in 1990-1994 as a postdoc at University of Nottingham in UK and University of Alberta in Canada. He has been conducting research on microbial materials, polyhydroxyalkanoates (PHA) metabolic engineering, synthetic biology and PHA biomaterial application since 1986. Professor Chen has more than 35 years of R&D experience on microbial physiology, microbial PHA production and applications, and has published over 400 international peer reviewed papers with over 60,000 citations (H-Index 100) as reported in Google Scholar. He has over 50 issued patents and 50 currently filed patents.



ZHONG Chao is currently a Principal Investigator at the Institute of Synthetic Biology (iSynBio) of Shenzhen Institute of Advanced Technology (SIAT), Chinese Academy of Sciences (CAS), and the Director for the newly established Center for Materials Synthetic Biology (CMSB). Dr. Zhong received his B.E. in MSE from Tianjin University and his Ph.D. from Cornell University, USA. He later worked as a postdoc and research associate at University of Washington, Seattle and MIT. Dr. Zhong's research lies in the interdisciplinary field of Materials Synthetic Biology. His group aims to leverage synthetic biology tools to develop new biomaterials, including living materials and protein materials. Dr. Zhong has published more than 60 academic papers in international journals, such as *Nat. Nano.*, *Nat. Chem. Biol.*, *Nat. Rev. Mater.* He is the recipient of several research awards, including the one awarded to Distinguished Young Scholars by National Science Foundation of China.



Farha Masood is Associates Professor (Tenured) at Biosciences Department at COMSATS University Islamabad (CUI), Pakistan. She was selected for her M.Phil leading to doctoral studies, under the Indigenous Ph.D. Fellowship Program by Higher Education Commission (HEC) of Pakistan. Her research work is focused on the Applied/Environmental Microbiology, Nanotechnology, Applied Polymer Chemistry and Wastewater Treatments. She has been awarded 6 national and international research projects, worth PKR 17.92 million. She has established Bionanotechnological Research laboratory at Biosciences Department of CUI. Dr. Masood has 22 peer-reviewed international publications with total impact factor of 110, 1040 citation and 16 h-index (on google scholar). She has filed five patents.



ZHU Xinna, is Associate Professor at TIB, CAS. She received her Bachelor's degree from Huazhong Agricultural University in 1998 and received her Ph.D. degree in biomedical engineering from Shanghai Jiao Tong University in 2010. During 2007 to 2008, she studied at Biology Department of University of Copenhagen, Denmark, which was joint doctoral program that was sponsored by Chinese National Foundation Committee. Her research primarily focuses on the application of synthetic biology technology to build efficient microbial cell factories for succinic acid, lactic acid, glycolic acid and so on. She has applied 15 patents, from which 11 have been granted. She published 25 SCI papers in *Metabolic Engineering* and other academic journals.



WANG Dan is Associate Professor at School of Chemistry and Chemical Engineering of Chongqing University, and has a Ph.D. from Institute of Process Engineering, CAS. She was a postdoctoral fellow at Rice University; visiting scholar of Massachusetts Institute of Technology; standing member of Biochemical Professional Committee of Chinese Society of Chemical Engineering; Secretary General of Chongqing Strategic Alliance for Technological Innovation of New Chemical Materials; and winner of Chongqing outstanding Youth Fund. She has been engaged in research on chemical process enhancement of biosynthetic chemicals and new materials for more than 10 years, and has published more than 90 SCI papers, with more than 1500 SCI citations and h-index 24. She has 21 authorized invention patents. She also participated in the preparation of five books published in Chinese and English languages.



14:00-14:05 **Introductory Remarks**
Prof. Jibin Sun
TIB Deputy Director-General & CCIB Founding Director

14:05-14:10 **Opening Remarks**
Hon. Ghulam Muhammad Memon
Executive Director COMSATS

14:10-14:40 **Keynote Speech: *Halomonas* spp. as Super Microbial Cell Factories and 'Next Generation Industrial Biotechnology'**
Prof. George CHEN Guo-Qiang
Tsinghua University, China

14:40-15:00 **Living Materials Programmed by Life**
Prof. ZHONG Chao
Shenzhen Institute of Advanced Technology (SIAT), Chinese Academy of Sciences (CAS), China

15:00-15:20 **Biosynthesis of Polyhydroxyalkanoates (PHA) and its Applications as Drug Carrier and Food Packaging Material**
Dr. Farha Masood
COMSATS University Islamabad (CUI), Pakistan.

15:20-15:40 **Monomaterials — Biosynthesis of Succinic Acid**
Dr. ZHU Xinna
Tianjin Institute of Industrial Biotechnology, CAS, China

15:40-16:00 **Biosynthesis of Organic Acids and Amines as Monomers for Polymer Materials**
Dr. WANG Dan
Chongqing University, China

16:00-16:25 **Panel Discussion/ Q&A**
(Moderated by Prof. BAI Wenqin, the Coordinator of CCIB Joint R&D Group on Biobased Materials)

16:25-16:30 **Closing Remarks**