



Call for Participation for the Second International Training Course on Industrial Synthetic Biotechnology



20th December 2021

Hosted by Tianjin Institute of Industrial Biotechnology (TIB), CAS

Background

Synthetic biology is widely regarded as a forward-looking and disruptive technology. The industrial application of synthetic biology is expected to provide new solutions to the major challenges on resources, health and environment faced by human beings.

COMSATS Joint Centre for Industrial Biotechnology (CCIB) is organizing the 2nd International Training Course on Industrial Synthetic Biotechnology (ITC-ISB) online in December 2021. This event will be hosted by the Tianjin Institute of Industrial Biotechnology (TIB), which is one of the leading institutes of Chinese Academy of Science (CAS), and a Centre of Excellence of COMSATS. Committed to promoting eco-friendly development in industrial sectors by innovative biotechnology, TIB specializes in the field of synthetic biology and green bio-manufacturing and is well equipped with state-of-the-art facilities. Previously in 2019, TIB also hosted the first edition of International Training Course on Industrial Synthetic Biotechnology (ITC-ISB), whereby 20 young S&T scholars from 10 countries were trained in synthetic biotechnology.

Objectives

- 1) This event will provide a platform to young scientists from member countries of COMSATS and the Belt and Road Initiative (BRI) to advance their knowledge and skills and to further develop them in the areas of industrial biotechnology and synthetic biology;
- 2) To contribute towards capacity building of researchers from various laboratories across the developing countries imparting cutting-edge theoretical and practical training on applications of high throughput technologies in biomedicine, food and agriculture, bioenergy, bio-based materials, bio-design, and systems biotechnology;
- 3) Create network of scientists and researchers for prospective interdisciplinary research leading to wider innovation drive to support broad-based economic sectors.

General Information:

- Number of trainees: ~50
- Duration of the training course: about 10 days starting from 20th December, 2021.
- Organizer: COMSATS Joint Center for Industrial Biotechnology (CCIB), Tianjin Institute of Industrial Biotechnology Chinese Academy of Sciences.
- Sponsors: Alliance of International Science Organizations (ANSO); Department of International Cooperation, Ministry of Science and Technology, People's Republic of China; Commission on Science and Technology for Sustainable Development in the South (COMSATS); and United Nations Educational, Scientific and Cultural Organization (UNESCO).
- Supporters: CAS-TWAS Center of Excellence for Biotechnology, China; Innovation Cooperation Center (Bangkok), Chinese Academy of Sciences (CAS).
- Online Platform: VooV Meeting (TBD)
- Language: English

Costs Covered

- No training fee

Key Dates

- Deadline for Application: December 13, 2021 (submit the above application documents to e-mail: ccib@tib.cas.cn)
- Notice of Acceptance: by December 16, 2021 over email



Call for Trainees for the

Second International Training Course on Industrial Synthetic Biotechnology

Contents

The training course will focus on the theory, practice and application of the Industrial Synthetic Biotechnology. The main contents include:

- Technical courses: senior experts and scholars from China and other countries will be invited to introduce the advances in frontier technologies in various areas, such as biomedicine, bio-agriculture, future food, bio-chemicals, bio-based materials, bioenergy, etc.
- Experimental courses: demonstration experiments of enabling technologies will be presented as a video, including High Throughput Genome Editing, Systems Biotechnology, Protein Structure Analysis, DNA Synthesis, Bio-design and Intelligent Fermentation Technology
- Discussions: the trainees would be arranged to have group discussions and encouraged to introduce the intent of cooperation
- Training Test: the trainees would be arranged to participate in the training test at the end of the course to obtain training certificate
- Questionnaires: Feedback of trainees would be gathered to improve the following trainings

Tentative Agenda

Tentatively from 20-30 December 2021 [Beijing time (GMT+8)]

Date	Time	Contents
Day 1	14:00-15:00	Attendance Taking
	15:00-15:30	Opening Ceremony
	15:30-17:00	Keynote Speech
	17:00-17:10	Video Presentation of the National Center of Technology Innovation for Synthetic Biology (NC SynBio)
	17:10-18:30	Online Visit to TIB
Day 2	14:00-18:30	Technical Courses Session 1: Frontier technology progress on biomedicine
Day 3	14:00-18:30	Technical Courses Session 2: Frontier technology progress on bio-agriculture
Day 4	14:00-18:30	Technical Courses Session 3: Frontier technology progress on future food
Day 5	14:00-18:30	Technical Courses Session 4: Frontier technology progress on bio-chemicals
Day 6	14:00-18:30	Technical Courses Session 5: Frontier technology progress on bio-based materials
Day 7	14:00-18:30	Technical Courses Session 6: Frontier technology progress on bioenergy
Day 8	14:00-18:30	Experimental Courses Session 1-3 (High Throughput Genome Editing, Systems Biotechnology, Protein Structure Analysis)
Day 9	14:00-18:30	Experimental Courses Session 4-6 (DNA Synthesis, Bio-design, Intelligent Fermentation Technology)
Day 10	14:00-18:30	Group Discussions
Day 11	14:00-16:30	Training Test
	16:30-17:00	Graduation Ceremony

Note: Each session contains three lectures, including presentation and Q&A

Eligibility Criteria:

- Enrollment region: Scientists from the Belt and Road Countries, especially those from ANSO members and member countries of COMSATS (females and candidate trainees from African countries, least developed countries (LDCs), small island developing states (SIDS) and middle-income countries are encouraged to apply).
- Education background: Self-motivated young scientists/engineers entitled with Ph.D. degree in principal from institutes or universities in industrial biotechnology, microbiology, molecular biology, synthetic biology, bioinformatics, metabolic engineering, bio-catalytic engineering, fermentation engineering, bioprocess engineering, etc.
- Age limit: 45 in principal (no more than 50 with senior title)
- Language requirements: proficient in English communication

Application Documents

- A cover letter, including self-introduction, reasons for applying for the course and expectations for the course (No more than 800 words in principal)
- Application form
- Recent 2 inch full-faced and bareheaded electronic photo (preferably 3.5 x 4.5 cm)
- E-copy of the passport and previous Chinese visa if available

Contact Information

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For Application Form, please refer to TIB's official website:

<http://english.tib.cas.cn/ns/ue/202110/W020211029608703718152.xlsx>