

THE PROGRAM OF THE INTERNATIONAL INDUSTRIAL BIOTECHNOLOGY CONFERENCE BIOCON 2023

December 18, 2023 (Monday)

Cultural center "Almet", 69a Lenin Street

8:30–10:00

Registration & **Morning coffee**

9:20–9:40

A technical run-through for the speakers of today's sections and the open mic

10:00–10:15

Opening

10:15–11:30

Panel discussion
"Trends and prospects of biotechnology development"

Moderator

Mikhail Kurushkin (Chair of BIOCON, dean of BioTech ITMO)

- Prof. Meisam Tabatabaei (Malaysia), Universiti Malaysia Terengganu
- Prof. Amin Mousavi Khaneghah (Poland), Institute of Agricultural and Food Biotechnology
- Prof. Mirza Hasanuzzaman (Bangladesh), Sher-e-Bangla Agricultural University
- Prof. Mukesh Kumar Awasthi (China), Northwest A&F University
- Prof. Muhammad Farooq (Oman), Sultan Qaboos University
- Special guest

11:30–11:45

Break

11:45–12:30

Plenary session "Crop responses and tolerance under environmental stress in the era of climate change"

Prof. Mirza Hasanuzzaman (Bangladesh), Sher-e-Bangla Agricultural University

12:30–14:30

Lunch. 3 streams

14:30–15:15

Plenary session "Food contamination, food safety, mycotoxins, potentially toxic elements, pesticides, allergens and food process engineering"

Prof. Amin Mousavi Khaneghah (Poland), Institute of Agricultural and Food Biotechnology

15:15–15:30

Break

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15:30–16:45

Biotechnology session, Topic: BIOMATERIALS

Moderator

Special guest

15:30–16:00

Irina Kurzina (Tomsk State University)
Polymer-based materials for targeted delivery

16:00–16:15

Anastasiia Sapach (Skolkovo Institute of Science and Technology)
Cell therapy and cell-assisted drug delivery

16:15–16:30

Adelya Khayrova (Federal State Institution «Federal Research Centre «Fundamentals of Biotechnology»)
Development of technology for obtaining biopolymers from black soldier fly while processing organic waste

16:30–16:45

Elena Popova (Research Institute of hygiene, occupational pathology and human ecology FMBA of Russia, ITMO University)
Prospects for the use of polymer drug delivery systems

16:45–17:00

Break

17:00–19:00

Biotech Open Mic

Evgenii Sogorin (Pushchino Scientific Center for Biological Research)
Ingredients: non-GMO, gluten-free, contains biologically active peptides.

Sofia Sirotenko (ITMO University, GPECH)
Polymer microcapsules for drug delivery

Alim Galimullin (Tatneft Charitable Foundation)
The development of bioclasses

Vasiliy Fofanov (ITMO University)
Bioavailability, biologically active additives, nutrition in extreme situations

Alexander Gordeev (Kazan Federal University)
Biosurfactants in agriculture, petroleum industry and material science

Julia Loban (ITMO University, GPECH)
One of the best wound coating for burn treatment

Vladislav Dybalev (Altai State University)
Biotechnological conversation of wood

Anastasia Kim (ITMO University)
The prospective of Bacillus Subtilis as a crucial culture in modern Urban Farming shown by an example of Natto.

Danila Kalinikin (AES Startup Factory)
Working with biotech startups from the inside: how to replicate the success of Silicon Valley

19:00–21:00

Welcome party & Networking

THE PROGRAM OF THE INTERNATIONAL INDUSTRIAL BIOTECHNOLOGY CONFERENCE BIOCON 2023

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Cultural center "Almet", 69a Lenin Street

9:00–10:00

Registration & **Morning coffee**

9:20–9:40

A technical run-through for the speakers of today's sections

10:00–10:45

Plenary session "Organic waste biorefinery models toward sustainable circular bioeconomy, focusing on biomass to biofuels & biochemicals, bioenergy, and industrially important enzyme cocktails"

Prof. Mukesh Kumar Awasthi (China), Northwest A&F University

10:45–11:00

Break

11:00–12:45

Biotechnology session, Topic: Agriculture & Environment

Moderator

Roman Kozyrev (Rustark)

11:00–11:15

Polina Kuryntseva (Kazan Federal University)
Developing biotechnological approaches to reduce the carbon footprint of wheat

11:15–11:30

Suleiman Abdurashytov (Research Institute of Agriculture of Crimea)
Analyze the development of arbuscular mycorrhiza in coriander roots and their effect on the symbiotic efficiency and productivity of plants

11:30–11:45

Subhrajit Barua (ITMO University)
Agriculture In Space – An Unexplored Niche In Biotech

11:45–12:00

David Gabrielyan (Timiryazev Institute of Plant Physiologie Russian Academy of Sciences)
Intensive cultivation of microalgae and cyanobacteria in closed flat-panel photobioreactors for production of valuable biomass

12:00–12:15

Alexander Simagin (RSAU MTAA n.a. K.A. Timiryazev)
Cell breeding of flax to increasing resistance to fungal disease

12:15–12:30

Liliya Biktasheva (Kazan Federal University)
Biotechnological methods for increasing oil production and bioremediation of oil-contaminated soils

12:30–12:45

Anna Gorbunova (Petroleum High School)
No-Till Impact on Soil Microbiome

12:45–14:40

Lunch. 3 streams

13:30–14:30

& Excursion to the Music Museum for 3rd stream

14:40–15:00

Break

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Cultural center "Almet", 69a Lenin Street

15:00–16:15

Biotechnology session, Topic: Viruses & Vaccines

Moderator

Yuriy Vasilev (R-Pharm)

15:00–15:15

Yury Vasilev (R-Pharm)

15:15–15:30

Dmitriy Polyanskiy (FSBI "NICEM named after. N. F. Gamaleya")
Development and scaling technologies for producing heavy chain antibodies for therapy and emergency prevention of Covid-19 disease

15:30–15:45

Special Guest

15:45–16:00

Dmitrii Vinogradov (Biolabmix & Biosan)
Genome editing, mRNA, PCR

16:00–16:15

Aleksei Miroljubov (Zoological Institut of RAS)
Tricks of the puppet masters: rhizocephalan influence on the host's nervous system

16:15–16:30

Break

16:30–18:30

Biotechnology session, Topic: Genomics & Structural biology

Moderator

Stanislav Koshechkin (Nobias Technologies)

16:30–17:00

Oleg Gusev (Juntendo University)
Comparative genomics, functional transcriptomics and biomimetics

17:00–17:30

Ivan Kulakovskiy (Institute of Protein Research RAS)
Bioinformatics for gene regulatory variants: from omics data to genetic determinants of human disorders

17:30–17:45

Eugene Korotkov (Federal State Institution «Federal Research Centre «Fundamentals of Biotechnology»)
Search for dispersed repeats in bacterial genomes

17:45–18:00

Valentina Rudenko (Federal State Institution «Federal Research Centre «Fundamentals of Biotechnology»)
Tandem repeats in plant genomes

18:00–18:15

Ilya Kolyadenko (Institute of Protein Research, ITMO's Advanced Engineering School)
structure based engineering of industrial relevant Two-Domain Laccase from *Streptomyces griseoflavus* Ac-993

18:15–18:30

Alexander Gavrilenko (Lomonosov Moscow State University)
Application of protein language model to predict the protein's melting temperature and protein design

18:30–20:30

Free time

20:30–21:30

Documentary film showing in conjunction with the Nauka TV channel

"Living with bacteria", the film is dedicated to the work of biotechnological scientists. Young researchers are discovering new types of microorganisms, creating environmentally friendly fuels and using bacteria to find ways to combat environmental pollution.

The film was shot with the support of the Russian Geographical Society and the Ministry of Culture of Russia

THE PROGRAM OF THE INTERNATIONAL INDUSTRIAL BIOTECHNOLOGY CONFERENCE BIOCON 2023

December 20, 2023 (Wednesday)

1. 216 Sovetskaya Street, Campus of Petroleum High School
2. Cultural center "Almet", 69a Lenin Street

9:00–11:00

Tour of the Laboratory and Research Complex and the campus of the Petroleum High School

216 Sovetskaya Street, Campus of Petroleum High School

11:00–12:00

Registration & Morning coffee

11:20–11:40

A technical run-through for the speakers of today's sections

12:00–13:45

Biotechnology session, Topic: Food Biotechnology

Moderator

Olesya Volokh, Health & Nutrition (ex Danone Russia)

12:00–12:15

Ludmila Alieva (North-Caucasus Federal University)
Sustainable technology of milk processing: I did it my way

12:15–12:30

Ksenia Rukhlyada (ITMO University)
Obtaining natural biologically active additives

12:30–12:45

Evgeniya Levik (Health & Nutrition)
Functional features of strains mixtures in lyophilized and deep-frozen forms

12:45–13:00

Maria Gritsenko (ITMO University)
Chemistry & biosensing

13:00–13:15

Anna Nikiforova (East Siberia State University of Technology and Management)
The use of bacterial cultures for fish fermentation

13:15–13:30

Chantal Tracey
Intelligent and active food packaging for ensuring food quality and food safety

13:30–13:45

Sergei Shilov (Institute for Biological Instrumentation of the Russian Academy of Sciences)
Soy Protein Hydrolysate Improves the Endurance of Rats

13:45–14:00

Wang Hongwei (Biogrowing)
Advances in Starter Culture Development

13:45–15:40

Lunch. 3 streams

& Excursion to the Music Museum for all those who didn't have time

15:40–16:00

Break

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December 20, 2023 (Wednesday)

Cultural center "Almet", 69a Lenin Street

16:00–17:30

Biotechnology session, Topic: Gene Therapy

Moderator

Special Guest

16:00–16:30

Kirill Lepik (Pavlov First St.Petersburg State Medical University)
Hematopoietic cells-based gene and cell therapy

16:30–16:45

Artemiy Kurishev (Engelgardt's Institute of Molecular Biology)
CRISPR Cas9 genome editing approach for understanding the functional role of candidate transcription factors in the pathogenesis of schizophrenia.

16:45–17:00

Evgeny Lemeshko & Veronika Elkina (ITMO University)
Development of DNA nano constructs for RNA recognition and molecular computation

17:00–17:30

Emil Bulatov (Kazan Federal University)
CAR-T cell therapy - a living drug against cancer!

16:30–17:45

Break

17:45–18:45

Plenary session "The nexus of biorefineries, food security, sustainability, climate change, and health"

Prof. Meisam Tabatabaei (Malaysia), Universiti Malaysia Terengganu

18:45–19:30

Closing

19:30–21:30

Closing party & Activities