NATIONAL TECHNICAL UNIVERSITY OF UKRAINE
"IGOR SIKORSKY KYIV POLYTECHNIC INSTITUTE"
FACULTY OF LINGUISTICS
POLYTECHNIC UNIVERSITY OF THE PHILIPPINES, THE PHILIPPINES
UNIVERSITY OF ECONOMICS IN BRATISLAVA, SLOVAKIA

XXIII INTERNATIONAL R&D ONLINE CONFERENCE FOR STUDENTS AND EMERGING RESEARCHERS

SCIENCE AND TECHNOLOGY OF THE XXI CENTURY

PROGRAM

December 15, 2022
Kyiv, UKRAINE

Dear Conference Participants!
Welcome to
XXIII International R&D Online Conference for Students and Emerging Researchers
"Science and Technology of the XXI Century"

CONFERENCE SCHEDULE
Thursday, December 15, 2022

ZOOM MEETING
https://us02web.zoom.us/j/85023799189?pwd=aVJTamppWG54UkdIOERlZWFPNkcxZz09
Meeting ID: 850 2379 9189
Passcode: 901105

$15^{00} – 15^{45}$ **PLENARY SESSION**

OPENING AND GREETING

Zoia Kornieva, *Doctor of Pedagogy, Professor, Dean of the Faculty of Linguistics, Igor Sikorsky Kyiv Polytechnic Institute*

SOCIAL ENGINEERING

Yuliana Lavrysh, *Doctor of Pedagogy, Professor, head of the Department of English for Engineering №2, Igor Sikorsky Kyiv Polytechnic Institute*

SOCIAL ENGINEERING. DEFINITION. HISTORY AND EXAMPLES

Maksym Nedozhdii, *student, Educational and Research Institute of Physics and Technology, Igor Sikorsky Kyiv Polytechnic Institute*

Bogdan Pizhuk, *student, Educational and Research Institute of Physics and Technology, Igor Sikorsky Kyiv Polytechnic Institute*

$15^{50} – 17^{30}$ **DISCUSSION SESSIONS**   Zoom meetings

$17^{30} – 18^{00}$ **CONFERENCE CLOSING**   Zoom meeting

TIME LIMIT FOR PRESENTERS

Discussion sessions   -   10 min.

CONFERENCE LANGUAGES
-   English, German, French, Polish, Spanish

I SECTION

ENGINEERING INNOVATIONS
CHEMISTRY AND CHEMICAL TECHNOLOGY
MODERN INFORMATION TECHNOLOGIES
INNOVATIONS IN SOCIAL STUDIES

$15^{50} – 17^{30}$

Section Moderators: **Svitlana Vadaska,** *senior lecturer, Department of English for Engineering №2, Igor Sikorsky Kyiv Polytechnic Institute*

Anna Nypadymka, *lecturer, Department of English for Engineering №2, Igor Sikorsky Kyiv Polytechnic Institute*

ZOOM MEETING

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Viktoria Tkachenko	Underground Tunnels as a Way to Reduce the Freight Transportation
Yaroslav Yaroshovets	Bionic Prostheses
Olga Shlikhter	Obtaining Organic Fertilizers from Algae to Reduce Gas Emissions
Kateryna Zelenska	Functionalization of C-H by Combining Photo- and Biocatalysis
Roman Kolesnyk	Violence in Social Networks
Dymitr Lukinskyi, Alexey Troschinskiy	Advantages and Disadvantages of Using Non-Relational Databases for Big-Data Analysis and Processing
Oleksii Maksymenko	Analyses of Basic Navigation Principles in Unmanned Aerial Vehicles
Yehor Seniuk	Algorithms. Binary Search Algorithm
Tamara Honcharuk, Yelyzaveta Bychenko	Translated Children's Books on the Ukrainian Book Market
Yulia Marenchuk	The Role of CAT Tools in the Translation Industry
Nina Tsubera	Film Classification from the Point of View of their Structural Features

II SECTION

MODERN INFORMATION TECHNOLOGIES

$15^{50} – 17^{30}$

Section Moderators: **Larysa Svyrydova,** *lecturer, Department of English for Engineering №2, Igor Sikorsky Kyiv Polytechnic Institute*

Yelyzaveta Kriukova, *Ph.D. in Pedagogics, Associate Professor, Department of English for Engineering №2, Igor Sikorsky Kyiv Polytechnic Institute*

ZOOM MEETING

https://us06web.zoom.us/j/84610679716?pwd=N1VQdGlNZllkd2VVRGtwRWRXTzVQZz09

Meeting ID: 846 1067 9716

Passcode: 651437

Yurii Baranov, Illya Kotyai	METAVERSE – the Next Generation of the Internet
Yana Bednarska	Using Digital Twin in Modern Control System
Olha Datsenko	Analysis of the Implementation of the Industrial Internet of Things (IIoT)
Serhii Hondoka	Technology of Assembly and Welding of the Housing of the Electric Generator
Vladyslav Makovskyi	Research of New Composite Multilayer Filter Materials Based on Polymeric Fabrics
Oleksii Malchevskyi, Volodymyr Sivetskyi	Research of the Influence of the Geometric Parameters of the Worm on the Productivity of the Worm Extruder. Worm Cutting Step with Variable Cutting Depth
Mykola Stretovych	Dynamics of Nanowires and Nanosurfaces under Stimulation
Hlib Shapovalov	Technology of Metal 3D Printing in Mechanical Engineering
Rostyslav Telychko	Data Science Technologies in Metrology
Danylo Zghurskyi	Global Trends in Use of Industrial Robots