

<u>The purpose of the Festival</u> is to unite young students from Ukraine and partner countries by pursuing scientific innovations, to involve young people in the creative process and search for innovative and useful ideas in response to the real problems that have emerged as a result of hostilities in Ukraine.

<u>The mission</u> is to restore the world around you through your socially useful idea.

Main language of the Festival: English.

Program of the Festival:

- 1. creation of a project/product within the offered sections
- 2. informative online meetings with experts in the abovementioned subjects of the Festival (company representatives, professors and researchers from the universities of Ukraine and partner countries), exchange of opinions and ideas.

Sections of the Festival:

Section 1: Environmental Engineering (design, construction, practical use, for example: creation of a modern "Smart House"; sensors and Internet of Things (IoT) networks for environmental monitoring)

Section 2: Environmental restoration (ecology, renewable energy, transport/road system, etc., for example: recultivation of soils damaged by military actions; water purification; temporary, energy-efficient, cheap housing; intensification of agriculture)

Section 3. Protection and security (cybersecurity, IT apps, engineering materials, aviation, rocket and space technology, for example: solving the problem of searching for people and animals under the rubble; vehicle and cargo monitoring system for anti-theft protection)

Section 4. Socio-economic recovery (technologies, environmental management, for example: effortless energy saving; new business opportunities for economic recovery of Ukraine)

Section 5. Socio-psychological recovery (applications, audio- and video ideas, visual therapy, for example: development of interior lighting or certain devices that affect the circadian rhythm, mood, emotional state and sleep; creation of

psychological stabilization methods for the emotional state of children with PTSD, art therapy)

Participants:

Students from Igor Sikorsky Kyiv Polytechnic Institute and universities of the partner countries supporting Ukraine of any year of study may participate under the guidance of supervisors (or PhD students from partner non-Ukrainian universities and Igor Sikorsky Kyiv Polytechnic Institute).

Event calendar:

01.10.-23.10.2022 - registration of participants.

24.10.2022 - the first joint online meeting with the participants of the Festival.

26.10, **02.11**, **09.11**, **16.11**, **23.11**, **30.11** - online meetings with the experts (company representatives, professors and researchers from Ukraine and partner countries)

14.10. - 09.12.2022 - project implementation according to the chosen topic.

09.12. till 18:00 Kyiv time - uploading projects to Google-drive.

12.12.-15.12.2022 - processing of projects by the experts and determination of the best project in each section.

16.12.2022 – closing ceremony of the Festival, announcement of winners.

Terms and conditions of participation:

1. Type of participation - team participation (up to 3 people + 1 student from Igor Sikorsky Kyiv Polytechnic Institute (Buddy) + leader(s)-Advisors (s)).

The team should include:

- **Contributors** (students from partner non-Ukrainian universities + Ukrainian students studying at universities abroad, who are invited to participate in the project as they will contribute to establishing a dialogue between students, creating a bridge of innovative interaction between young people from different partner countries).
 - Their role is to be responsible for a project implementation / product creation within the sections.
- **Buddies** (participating students from Igor Sikorsky Kyiv Polytechnic Institute). Their role is to carry out a project/create a product in cooperation with students from foreign partner countries and give feedback on the relevance and integration of proposed solutions to the realities of the restoration/reconstruction/revival of Ukraine.
- **Advisors** (PhD students from Ukrainian or partner non-Ukrainian universities who jointly act as advisors and contributors).
 - Their role is to help process an idea, opt for a competent implementation of the future project, i.e. analysis and evaluation of the proposed ways to implement the project in conformity with the internal state vision and condition. They can help choose the ways to implement a product/project.

- 2. The main task of the participation is to create an innovative project aimed at restoration and rebuilding of Ukraine after the war.
- 3. Algorithm of a team's actions:
 - fill in the <u>registration form</u> (you can find it in both the letter and on the web-site);
 - choose a section;
 - choose an Advisor (from among PhD students);
 - form an idea of your project;
 - analyse the problem;
 - find a solution;
 - prepare presentation and description of your project;
 - upload your project to the Google-drive.
- 4. Key points for the project presentation:
 - Problem and solution (What do we solve? What is the vision and mission?)
 - Existing solutions (What do we offer? Description of the idea/project)
 - Functionality (How does it work? Project roadmap or project execution plan. What is the project/idea implementation plan?)
 - Originality (Why is it better than the existing ones? Expected results. What is the effect of the project implementation?)
 - Business model (How to sell it? Project price. What is the project implementation budget?)
- 5. Projects will be evaluated in two stages: in open access by everyone interested and by expert panel judges.

Projects' submission:

For a project to be fully evaluated, participants have to submit a completed document "Application form" and their project's video presentation to the panel judges by uploading it to the Google Forms for the projects' submission.

- Application form is detailed information about a project on the basis of which the judges will evaluate results of the participants' work:
 - participants complete the template prepared by the organisers;
 - it is forbidden to change, add or delete items from the template;
 - participants submit information which do not directly violate their copyrights.

Application form will not be posted in open access; it will only be for the panel judges' use.

➤ Video presentation is brief information about a project, on the basis of which both the panel judges and everyone interested will be able to evaluate the project:

- up to 8 minutes long;
- video presentation can be done in the form of the project demonstration/recorded commenting of a PowerPoint presentation/oral presentation by the project participants;
- video presentation shall include points from the projects' evaluation criteria;
- participants are allowed to use any software to make a video;
- completed video has to be uploaded to YouTube, link to the video has to be provided in the Google Forms.
- 6. Evaluation will be carried on a three-point scale. The winner will be determined by judges by the sum of all points for their project:
 - 0 does not meet evaluation criteria
 - 1 the topic is not fully covered
 - 2 the topic is fully covered but flaws are present
 - 3 the topic is fully covered; it reflects the problem under research

No	Criteria and characteristics of projects evaluation	Rating score (maximum number of points is 3)
1	OVERALL SUMMARY OF INVENTION/PROJECT	
2	KEY INNOVATIVE FEATURES AND CHARACTERISTICS	
3	EFFECT AND CONTRIBUTION	
4	COMMERCIALIZATION AND FUTURE POTENTIALS	
5	TEAM'S POTENTIAL LEVEL	

- 7. Winner of the Festival will have the opportunity to improve and finalise their project and present them at the XII International Festival of Innovation Projects "Sikorsky Challenge 2023".
- 8. Additional opportunities of application of the project/product:
 - to present a project as a term/final work in the academic process of participating universities;
 - to present the project and relevant materials at conferences of different categories etc.;
 - to co-write academic papers and obtain patents;

- to participate in double degree programs etc.

Responsibilities of the partner universities:

- 1. To inform students of the respective universities (including Ukrainian students studying in universities abroad) about the Festival and its terms and conditions.
- 2. Promote and facilitate the participation of the students in the Festival.
- 3. To consider the possibility for the students to present their created projects as term/final projects for courses they have in the respective academic semester.
- 4. Invite PhD students of universities to participate as advisors.
- 5. To offer professors-and-researchers to participate in the evaluation of projects and provide their professional expertise within the Festival's sections (if they wish).

Main information resource of the Festival: technoart.kpi.ua

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