



United Nations
Educational, Scientific and
Cultural Organization



UNESCO Chair in Higher Technical Education,
Applied System Analysis and Informatics
National Technical University of Ukraine
"Igor Sikorsky Kyiv Polytechnic Institute"
Ukraine, Kyiv

UNITWIN/UNESCO CHAIRS PROGRAMME

PROGRESS REPORT 2018-2019

UNESCO CHAIR
**In Higher Technical Education, Applied
System Analysis and Informatics
at the National Technical University of Ukraine
"Igor Sikorsky Kyiv Polytechnic Institute"
and Institute for Applied System Analysis**



**Igor Sikorsky Kyiv Polytechnic Institute –
Kyiv – Ukraine
2019**

UNITWIN/UNESCO Chairs Programme Progress Report

Period of Activity: 1.06.2018 – 31.05.2019

Title of UNESCO Chair:

Higher Technical Education, System Analysis and Informatics

Institution/Country: National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”, Ukraine

Report established by: Prof. Dr. Mykhailo Zgurovsky

Function/Title: Chairholder of the UNESCO Chair in Higher Technical Education, System Analysis and Informatics at the National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute” and Institute for Applied System Analysis, Academician of the National Academy of Sciences of Ukraine

Summary

In the progress report of the UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at the National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute” and educational and scientific complex “Institute for Applied System Analysis” the main information about the results of its activity in 2018-2019 is represented.

The most significant measures in the sphere of academic activity connected with the organization and holding of information days, conferences, festivals at national and international level, realization of international projects in the field of education are illustrated. Thus, during the reporting period 1 information day, 2 international conferences, 1 national festival of innovation projects were carried out and 2 international projects implemented with the participation of the UNESCO Chair.

Interuniversity exchange within the subjects of the UNESCO Chair activity took place (4 visits).

The UNESCO Chair activity was widely illustrated in periodicals, scientific publications and at the UNESCO Chair site <http://www.unesco.kpi.ua>.

C O N T E N T S	
	Page
Summary	3
I. Address and Contact	4
II. Available Resources	5
1. Human Resources	5
2. Material Resources	5
III. Activities	6
1. Academic activities	6
Education/Seminars/Training/Research	6
2. Conferences/Forums/Festivals	7
3. Interuniversity Exchanges/Partnerships	10
4. Publications and multimedia materials	12
IV. Outcomes	14
V. Forthcoming Activities	16
VI. Development Prospects	17

I. Address and Contact

	Address of the Chairholder (or Coordinator). Other contact person
Name	Mykhailo Zgurovsky
Function/ Title	Rector
University/ Institution	National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute” (Igor Sikorsky Kyiv Polytechnic Institute)
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City	Kyiv
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E-mail	mzz@kpi.ua , sidorenko@kpi.ua
Web Site	http://www.unesco.kpi.ua

II. Available Resources

1. Human Resources

1. For the Administration of the UNESCO Chair

Coordinator	Prof. Sergiy Sidorenko
Executive Secretary	Olena Poptsova
Academic Secretary	Prof. Sergiy Shukayev
Partial time support Academic Secretary	Olena Kizub

2. For the teaching/training/research activities

The UNESCO Chair has sections:

- **HIGHER TECHNICAL EDUCATION,**
headed by **academician of the National Academy of Sciences of Ukraine, Professor Yuriy Yakymenko**, *First Vice Rector of the National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”*
- **APPLIED SYSTEM ANALYSIS,**
headed by **Professor Natalia Pankratova**, *Vice Director of the Institute for Applied System Analysis (IASA)*
- **INFORMATICS,**
headed by **Professor Sergiy Telenyk**, *Dean of the Faculty of Informatics and Computer Engineering Igor Sikorsky Kyiv Polytechnic Institute*
- **ORGANIZATIONAL BRANCH,**
headed by **Professor Sergiy Shukayev**, *Head of the International Projects Office of International Collaboration Department Igor Sikorsky Kyiv Polytechnic Institute*

3. For the information and documentation activities:

Academic Secretary Prof. Sergiy Shukayev

2. Material Resources

Sources: Host Institution, Governmental body

- **FOR THE ADMINISTRATIVE WORK:** Computers, fax machines, xerocopy machines, printer, and storage systems.
- **FOR THE TEACHING/TRAINING/RESEARCH ACTIVITIES:** Lecture rooms, video-edition, projector, Book edition, CD – edition, proceedings editions, e-learning.
- **FOR THE INFORMATION AND DOCUMENTATION ACTIVITIES:** Web-site, posters, brochures, Proceedings, Book editions.
- **FOR OTHER ACTIVITIES:** Conferencing

III. Activities

1. Academic Activities

Education/Seminars/Training/Research

Information Day “HORIZON 2020”

Date and place: December 18, 2018, National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”, Kyiv, Ukraine

Partnership: National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”, National Contact Point of the EU Horizon 2020 Programme in such fields as "Information and communication technologies" and "Climate and resource use efficiency including raw materials".

Participants: 21

- Undergraduate students
- Graduate students
- Academics
- Public administrators
- Employees from industry, or other private sector
- Teachers from primary education
- Teachers from secondary education
- Teachers from technical and vocational education
- Other groups

Geographical coverage for participants and partners:

- National
- Regional/Interregional/International

Regions	Countries
Asia/Pacific	
Eastern and Central Europe	Ukraine
Western Europe and North America	
Latin America	

Publications:

Title: Information Day at the Igor Sikorsky Kyiv Polytechnic Institute

Publishers:

<http://ncp.kpi.ua/%D1%96%D0%BD%D1%84%D0%BE%D1%80%D0%BC%D0%B0%D1%86%D1%96%D0%B9%D0%BD%D0%B8%D0%B9-%D0%B4%D0%B5%D0%BD%D1%8C-%D1%83-%D0%BA%D0%BF%D1%96-%D1%96%D0%BC-%D1%96%D0%B3%D0%BE%D1%80%D1%8F-%D1%81%D1%96%D0%BA%D0%BE/>

Year of Publication: December 19, 2018

Type of document/material:

- Book
- Periodical (Newspaper)
- Other – Proceedings of the Conference

Language(s): Ukrainian

Keywords: Horizon 2020 Work Programme 2018-2020; Information and Communication Technologies; Climate and Resource Use Efficiency Including Raw Materials; the field of “Actions of Maria Sklodowska-Curie”; an overview of partner search tools.

2. Conferences/Forums/Festivals

XIX International Scientific and Practical Conference “Renewable Energy and Energy Efficiency of the XXI Century”

Date and place: September 26-28, 2018, National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”, Kyiv, Ukraine

Partnership: National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”, Representative office of the Polish Academy of Sciences in Kyiv, National Academy of Sciences of Ukraine, Institute of Renewable Energy at National Academy of Sciences of Ukraine, Inter-Branch Scientific and Technical Center for Wind Power Engineering at NASU, Minor Academy of Sciences of Ukraine, UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at Igor Sikorsky Kyiv Polytechnic Institute and Institute for Applied System Analysis.

Participants: 220

- Undergraduate students
- Graduate students
- Academics
- Public administrators
- Employees from industry, or other private sector
- Teachers from primary education
- Teachers from secondary education
- Teachers from technical and vocational education
- Other groups

Regional Coverage

- National
- Regional/Interregional/International

Regions	Countries
Africa	
Asia/Pacific	Republic of China
Eastern and Central Europe	Ukraine, Poland, Germany
Western Europe and North America	
Latin America	

Publications:

Title: XIX International Conference “Renewable Power Generation and Energy Efficiency in XXI Century”

Publishers: Kyivsky Polytechnic, No. 27 (<https://kpi.ua/files/2018-kp27.pdf>).

Year of Publication: October 04, 2018

Type of document/material:

- Book
- Periodical (Newspaper)
- Others – Proceedings of the Conference

Language(s): Ukrainian, English (<https://kpi.ua/en/node/15818>)

Keywords: energy efficiency; integrated systems with REE; wind power; solar power; biomass energy; hydropower; geothermal energy; educational activity; hydrogen energy; environmental energy (heat pumps) and smart grids.

VII All-Ukrainian Festival of Innovation Projects “Sikorsky Challenge 2018”

Date and place: October 16-20, 2018, National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”, Kyiv, Ukraine

Partnership: National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”, Minor Academy of Sciences of Ukraine, Science Park “Kyivska Politechnica” in partnership with Ministry of Education and Science of Ukraine, Leonid Kuchma's President's Fund “Ukraine”, Progresstech-Ukraine Company, US Agency for International Development (USAID), International Investment Company Noosphere, Investment Company ILand Management, V.S. Myhalevych Venture Fund, Kalinin Invention Fund, Intel, etc.

Participants: 600

- Undergraduate students
- Graduate students
- Academics
- Public administrators
- Employees from industry, or other private sector
- Teachers from primary education
- Teachers from secondary education
- Teachers from technical and vocational education
- Other groups

Regional Coverage

- National**
- Regional/Interregional/International**

Regions	Countries
Africa	
Asia/Pacific	Republic of China
Eastern and Central Europe	Ukraine, EU
Western Europe and North America	USA
Latin America	

Publications:

Title: Festival “Sikorsky Challenge 2018”: winners of competitions

Publishers: Kyivsky Polytechnic, No. 30 (<https://kpi.ua/files/2018-kp30.pdf>).

Year of Publication: October 25, 2018

Type of document/material:

- Book
- Periodical (Newspaper)
- Others – Proceedings of the Conference

Language(s): Ukrainian, English (<https://kpi.ua/en/node/16108>)

Keywords: Innovation Ecosystem of Ukraine; Commercialization of Research Ideas and Innovation; All-Ukrainian start-up competition “Sikorsky Challenge 2018”, competition for schoolchildren “POLYTECO Ukraine 2018-2019”.

XX International Scientific and Practical Conference “Renewable Energy and Energy Efficiency of the XXI Century”

Date and place: May 15-16, 2019, National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”, Kyiv, Ukraine

Partnership: National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”, Warsaw University of Technology, Representative office of the Polish Academy of Sciences in Kyiv, Institute of Renewable Energy at National Academy of Sciences of Ukraine, Inter-Branch Scientific and Technical Center for Wind Power Engineering at NASU, Ukrainian Hydrogen Council, Minor Academy of Sciences of Ukraine, UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at Igor Sikorsky Kyiv Polytechnic Institute and Institute for Applied System Analysis.

Participants: 300

- Undergraduate students
- Graduate students
- Academics
- Public administrators
- Employees from industry, or other private sector
- Teachers from primary education
- Teachers from secondary education
- Teachers from technical and vocational education
- Other groups

Regional Coverage

- National
- Regional/Interregional/International

Regions	Countries
Africa	
Asia/Pacific	
Eastern and Central Europe	Ukraine, Poland
Northern Europe	Latvia
Latin America	

Publications:

Title: XX International Conference “Renewable Power Generation and Energy Efficiency in XXI Century”

Publishers: <https://kpi.ua/node/17519>

Year of Publication: May 15, 2019

Type of document/material:

- Book
- Periodical (Newspaper)
- Other – Proceedings of the Conference

Language(s): Ukrainian

Keywords: problems and perspectives of renewable energy and energy efficiency development; solar power; wind power; geothermal energy; hydrogen energy; bioenergy.

3. Interuniversity Exchanges/Partnership

Visit of Rector M.Z. Zgurovsky to Republic of Poland

Date and place: September 03, 2018, Republic of Poland

Purpose: participation in the conference “Our century: Science for Peace”, a presentation “The overall picture of the world economy and society”.

Visit of H.E. Mr. Shigeki Sumi, Ambassador Extraordinary and Plenipotentiary of Japan to Ukraine

Date and place: September 07, 2018, Igor Sikorsky Kyiv Polytechnic Institute

Purpose: participation in the Day of Japan in the Igor Sikorsky Kyiv Polytechnic Institute.

Visit of Rector M.Z. Zgurovsky to Republic of China

Date and place: September 28 – October 01, 2018, Republic of China

Purpose: participation in the awarding ceremony of the “Award of Friendship” high prize for 2018.

Visit of Expert of the UNESCO Chair A.V. Piatova to Republic of Romania

Date and place: November 01-02, 2018, Republic of Romania

Purpose: participation in the UNESCO Chairs Meeting “Challenges of Interdisciplinary Entrepreneurial Universities and Education in Europe within SDG-4”.

Visit of H.E. Mr. Lee Yang-Goo, Ambassador Extraordinary and Plenipotentiary of the Republic of Korea to Ukraine

Date and place: February 14, 2019, Igor Sikorsky Kyiv Polytechnic Institute

Purpose: awarding the rector of the Igor Sikorsky Kyiv Polytechnic Institute from the Embassy of the Republic of Korea to Ukraine “Award for a significant contribution to the development of relations between the Republic of Korea and Ukraine and the establishment of solid foundations for further cooperation”.

Visit of Mr. Ron Marchant, Expert of the World Intellectual Property Organization (WIPO) (Great Britain)

Date and place: May 5, 2019, Igor Sikorsky Kyiv Polytechnic Institute

Purpose: speech before staff and professors of the university

Visit of H.E. Mr. Takashi Kurai, Ambassador Extraordinary and Plenipotentiary of Japan to Ukraine

Date and place: March 20, 2019, Igor Sikorsky Kyiv Polytechnic Institute

Purpose: meeting with the leadership of the university, discussion of issues of the state and prospects of cooperation between the Igor Sikorsky Kyiv Polytechnic Institute and the embassy, as well as Japanese universities, companies and institutions of science and culture.

Visit of Mr. Erik Reinert, Well-known Economist (Kingdom of Norway)

Date and place: April 04, 2019, Igor Sikorsky Kyiv Polytechnic Institute

Purpose: lecture to students and staff of Igor Sikorsky Kyiv Polytechnic Institute and other institutions of higher education in Kyiv and state authorities on the topic: “Economic successes and failures. Lessons for Ukraine”.

Visit of Mr. Tomasz Łodygowski, Rector Professor of the Poznan University of Technology (Republic of Poland)

Date and place: April 15, 2019, Igor Sikorsky Kyiv Polytechnic Institute

Purpose: participation in the round table conference entitled “Igor Sikorsky Kyiv Polytechnic Institute – Poznan University of Technology: New Horizons of Cooperation”; solemn meeting of the Council Igor Sikorsky Kyiv Polytechnic Institute on the occasion of awarding the diploma of "Honorary Doctor of Igor Sikorsky Kyiv Polytechnic Institute" to Rector Professor of the Poznan University of Technology Mr. Tomasz Łodygowski; presentation of master's degree diplomas in Mechanical Engineering to the first graduates of the Institute of Mechanical Engineering at Igor Sikorsky Kyiv Polytechnic Institute, and Poznan University of Technology.

Visit of Academic Secretary of the UNESCO Chair S.M. Shukayev to Republic of Poland

Date and place: May 19-26, 2019, Republic of Poland

Purpose: participation in the Erasmus+ International Credit Mobility; participation in the work of the Examination Commission on the Defense of Master's Theses within the framework of the Double Master's Degree Program between the Igor Sikorsky KPI and Poznan University of Technology; participation in the solemn celebration of the 100th anniversary of the Poznan University of Technology.

4. Publications and multimedia material

1. UNESCO Chair official web-site <http://www.unesco.kpi.ua>.

2. Title: Zgurovsky M.Z. Ensuring the Socio-economic Balance of Ukraine's Regional Development / Mykhailo Z. Zgurovsky, Oleg A. Gavrish, Anna D. Kukharuk, Natalia Y. Skorobogatova // Economy and State. – 2018. – № 2. – P. 11-15.

Publisher(s): Economy and State

Year: 2018

Type of document/material: article

3. Title: Michael Z. Zgurovsky, Pavlo O. Kasyanov. Qualitative and Quantitative Analysis of Nonlinear Systems, 2018. – Volume 111. – 240 p.

Publisher(s): Springer

Year: 2018

Type of document/material: book

4. Title: Foresight and construction of the strategies of socio-economic development of Ukraine on mid-term (upto 2020) and long-term (upto 2030) time horizons (Speech at the Congress of the Academy of Political Sciences November 17, 2017) / Mykhailo Zgurovsky // Public political processes. – 2018. – Issue 1. – P. 20-25. – Access mode: http://nbuv.gov.ua/UJRN/pubpolpr_2018_1_4 (accessed on 31.05.2019).

Publisher(s): electronic edition

Year: 2018

Type of document/material: article

5. Title: Michael Z. Zgurovsky, Alexander A. Pavlov. Combinatorial Optimization Problems in Planning and Decision Making: Theory and Applications, 2018. – 518 p.

Publisher(s): Springer

Year: 2018

Type of document/material: book

6. Title: Michael Z. Zgurovsky, Yuriy P. Zaychenko. Big Data: Conceptual Analysis and Applications, 2019. – Volume 58. – 277 p.

Publisher(s): Springer

Year: 2019

Type of document/material: book

7. Title: Michael Z. Zgurovsky, Pavlo O. Kasyanov, Nataliia V. Gorban, Liliia S. Paliichuk. Asymptotic Translation Uniform Integrability and Multivalued Dynamics of Solution for Non-autonomous Reaction-Diffusion Equations, 2019. – P. 413-423.

Publisher(s): Modern Mathematics and Mechanics

Year: 2019

Type of document/material: book

8. Title: Sidorenko S.I. Results of International Activity of Igor Sikorsky Kyiv Polytechnic Institute in 2018 and Tasks for 2019. From the Report of Vice-rector in International Relations S.I. Sidorenko. – P. 4-5.

Publisher(s): Kyiv Polytechnic, No. 30

Year: 2019

Type of document/material: article

IV. Outcomes

International activity of Igor Sikorsky Kyiv Polytechnic Institute is one of the key directions of the university strategic development. It consists of such basic constituents: preparation of specialists and scientific and academic brainpower including for foreign countries; participating in international educational organizations, funds and calls which are held with the purpose of obtaining grants; exchanging information about scientific publications, participation in conferences, exhibitions, seminars, educational fair; collaboration with the oversea institutes of higher education, including academic and student exchanges.

UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics, which has become one of the brain power centres of Ukrainian higher technical education, plays an important role in this process. The Chair took the initiative in organizing the international conferences, information days and festivals concerning the different aspects of higher education growth and understanding of its importance in modern society.

Faculty members and students of Igor Sikorsky Kyiv Polytechnic Institute use the opportunities of training abroad due to educational grants and programmes; implement joint scientific projects with foreign partners, the results of these workshops being published in the newspaper “Kyivskiy Politechnik”.

One of the important directions of activity for the UNESCO Chair is participation in the programme “UNESCO-UNITWIN OCW/OER INITIATIVE” (UUOOI). The aim of this programme is to promote integrated research system, professional training, programmes preparation (education, natural sciences, social sciences, the humanities, culture, communications and information) and collaboration between universities based on knowledge transfer “through borders”.

UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics traditionally has actively facilitated participation of Igor Sikorsky Kyiv Polytechnic Institute in the most prestigious world university ratings, such as QS World University Rankings, Times Higher Education World University Rankings, and U-Multirank, etc.

In 2018/19 Igor Sikorsky Kyiv Polytechnic Institute was listed in the QS World University Rankings – it’s position 601-650.

In the QS Emerging Europe and Central Asia (EECA) University Rankings it ranked 62.

In 2019, for the first time the University appeared in the QS World University Rankings by Subject and ranked higher than 500.

In 2018 Igor Sikorsky Kyiv Polytechnic Institute was at the top of the ranking “Top 200 Ukraine”.

In January, 2019 Igor Sikorsky Kyiv Polytechnic Institute was the second among Ukrainian universities in the ranking Webometrics.

Another direction of activity of the Chair is comprehensive support of participation of university in researchers in international research programmes (HORIZON 2020,

ERASMUS+, EURASIA, NATO, etc.). Support of international projects in technology transfer was significantly strengthened.

In 2018 Igor Sikorsky Kyiv Polytechnic Institute participated in 3 educational projects of the European Union within Erasmus+ KA2; 1 project within Erasmus+ Jean Monnet Actions; 64 projects within Erasmus+ KA1; 7 projects within DAAD; 4 projects under the programme EURASIA; 2 projects within British Council programme; 5 NATO projects; 3 projects of the Horizon 2020 programme and other international projects. Currently, students and teachers may participate in all projects of programmes mentioned above.

There are two National Contact Points of the EU Horizon 2020 Programme in such fields as "Information and communication technologies" and "Climate and resource use efficiency including raw materials" on the basis of Igor Sikorsky Kyiv Polytechnic Institute.

2 international scientific and practical conferences were held in cooperation with the UNESCO Chair at Igor Sikorsky Kyiv Polytechnic Institute with the assistance of the Representation of the Polish Academy of Sciences in Kyiv during 2018-2019.

In December 2018, Igor Sikorsky Kyiv Polytechnic Institute conducted an Information Day in order to familiarize the Ukrainian scientific community with the process of submission of applications for participation in international programme "Horizon 2020", as well as the process of the creation of consortia. The UNESCO Chair actively participated in this event.

The work of the UNESCO Chair has been fully covered by the media through publications in newspapers and speeches at international conferences.

The All-Ukrainian Festival of Innovative Projects "Sikorsky Challenge 2018" was held in Igor Sikorsky Kyiv Polytechnic Institute. It is the largest technological and innovation event in Ukraine, which gathers young inventors from almost all regions of Ukraine. The purpose of the Festival is to attract pupils and students, scientists and entrepreneurs to participate in research programmes and design activities for their further commercialization, facilitate the creation of startups and output of innovative products in the international and national markets.

Within the framework of the Festival, there were two competitions – the All-Ukrainian Competition of Startups "Sikorsky Challenge 2018" and the Contest of Scientific and Technical Creativity for Schoolchildren "POLYTECO Ukraine 2018-2019" (National level of the World Competition of Scientific and Technical Creativity for Schoolchildren "Intel ISEF").

Due to the active work of the UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics, the international cooperation has become the integral part of Igor Sikorsky Kyiv Polytechnic Institute and IASA for the last years. It creates the favourable conditions for future integration to the international and, in particular, European educational, scientific and informational space and promotes introduction of the reforms which were started with the Bologna process.

VI. Forthcoming Activities

VIII Ukrainian Festival of Innovation Projects “Sikorsky Challenge 2019”

Date and place: October, 2019, Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, Ukraine

Partnership: National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”, Science Park "Kyivska Politechnica", etc.

VI International Scientific and Practical Conference “Clean Water. Fundamental, Applied and Industrial Aspects”

Date and place: November, 2019, Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, Ukraine

Partnerships: National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”, Representative office of the Polish Academy of Sciences in Kyiv, National Academy of Sciences of Ukraine, UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at Igor Sikorsky Kyiv Polytechnic Institute and Institute for Applied System Analysis, Science Park “Kyivska Politechnica”, Ukrainian-Polish Center at Igor Sikorsky Kyiv Polytechnic Institute, Lublin University of Technology, Society of Ecological Chemistry and Engineering, LLC Technologies of Nature.

XXI International Scientific and Practical Conference “Renewable Energy and Energy Efficiency of the XXI Century”

Date and place: May, 2020, Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, Ukraine

Partnership: National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”, Warsaw University of Technology, Representative office of the Polish Academy of Sciences in Kyiv, Institute of Renewable Energy at National Academy of Sciences of Ukraine, Inter-Branch Scientific and Technical Center for Wind Power Engineering at NASU, Ukrainian Hydrogen Council, Minor Academy of Sciences of Ukraine, UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at Igor Sikorsky Kyiv Polytechnic Institute and Institute for Applied System Analysis.

VII. Development Prospects

Further activity of the UNESCO Chair is aimed at fulfilling the main tasks in the educational, scientific and innovative areas of the University.

Activities will be aimed at the increasing of the collaboration between specialists and experts in the fields of education, science and culture on both national level and international level. The UNESCO Chair will assist employees and students of the University in receiving grants for the educational, research and culture projects.

UNESCO Chair will continue to actively develop and implement ranking of higher education institutions of Ukraine according to the statements of Memorandum about Cooperation with UNESCO-CEPES from 25th April 2006.

The activity of the Ukrainian Gender Education Centre, established at NTUU “KPI” in 2001 under the aegis of the UNESCO Chair, is based on creating tools that allow to implement new information technology into gender education. It acts up to the Memorandum of UNDP in Ukraine and National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”.

UNESCO Chair in Higher Technical Education, Applied Systems Analysis and Informatics at Igor Sikorsky Kyiv Polytechnic Institute plans to continue development and collaboration in the frame of Founding of the UNESCO/UNITWIN Chairs Programme, approved in 1992 at the 26th UNESCO General Conference. The main fields of this program’s charity concern higher educational institutions of the developing countries and countries in transit. The UNESCO/UNITWIN Chairs projects refer to research preparation and cover all main fields of UNESCO Chair in Higher Education, Applied Systems Analysis and Informatics: education, human rights, environmental protection, humanities and applied science, communication, etc.

UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics along with typical areas of activity plans to expand its activities in the field of innovation activity. A striking example is holding of the Festival of Innovative Projects “Sikorsky Challenge” in Igor Sikorsky Kyiv Polytechnic Institute. The Festival unites people for whom the sense of life is the opportunity to realize their ideas to improve the world.

In 2019–2020 Igor Sikorsky Kyiv Polytechnic Institute is going to proceed with implementation of the following projects:

- Project “European business models: transformation, harmonization and implementation in Ukraine” Erasmus+ Jean Monnet Actions;
- Project “Master-level Studies in Information Systems” Erasmus+ Programme;
- Project “Approximation Methods for Molecular Modelling and Diagnosis Tools” [AMMODIT] EU Framework Programme for Research and Innovation “Horizon 2020”;
- Project “Teaching Fuel Cell and Hydrogen Science and Engineering Across” [TeachHy2020] EU Framework Programme for Research and Innovation “Horizon 2020”;

– Project “NTNU-KPI Collaboration within Industry 4.0 Education” Eurasia Programme, etc.

UNESCO Chair “Higher Technical Education, Applied Systems Analysis and Informatics” at Igor Sikorsky Kyiv Polytechnic Institute continues to implement activities in order to enhance level of training quality by increasing the number of international projects and Programmes with foreign partner universities, where students will have an opportunity to undergo training/ internship at renowned foreign universities and gain experience of international education.

Activities of the UNESCO Chair “Higher Technical Education, Applied System Analysis and Informatics” focuses on solving urgent problems of modern higher technical education, in particular the objectives defined in 2030 Agenda for Sustainable Development.

Igor Sikorsky Kyiv Polytechnic Institute has become more open and susceptible to the experience of other universities, its interuniversity and international relations have grown, a wider opportunity for spreading one’s achievements and experience has appeared.