UNITWIN/UNESCO Chairs Programme
Progress Report

Period of Activity: 2004 - 2005

Title of the UNESCO Chair or Network:

Higher Technical Education, System Analysis and Informatics

Institution/Country: The National Technical University of Ukraine "Kyiv Polytechnic Institute", Ukraine

Report established by: Prof. Dr. Mykhailo Zgurovsky

Function/Title: Chairholder of the UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics, Rector of the National Technical University of Ukraine "Kyiv Polytechnic Institute", Academician of the National Academy of Sciences of Ukraine

SUMMARY

The main purpose of the UNESCO Chair is the realisation of the Integrated Program of the UNESCO Chair Development as a Research Program in the field of higher technical education, applied system analysis methods, new information technologies and their application for the educational system and analysis of systems of different type such as ecological, economic, social and technical.

The International UNESCO Chair closely collaborates with the National commission of Ukraine for UNESCO, the European Centre for Higher Education (UNESCO-CEPES), the Ministry of Education and Science of Ukraine, the National Academy of Sciences of Ukraine, the UNESCO Institute for Information Technologies in Education (Moscow), the Ukrainian Agency of EDNES (the Earth Data Network for Education and Scientific Exchange), CODATA (the Committee on Data for Science and Technology of the International Council for Science), the World Intellectual Property Organization (WIPO), the Ukrainian Institute for Information Technologies in Education, the Ukrainian Gender Education Centre at NTUU"KPI", and other Ukrainian and international institutions.

C O N T E N T	

I. Address and Contact

	Address of the Host Institution	**Address of the Chairholder (or Coordinator). Other contact person**
Name	Mykhailo Zgurovsky	Mykhailo Zgurovsky
Function/ Title	Rector of the National Technical University of Ukraine "Kyiv Polytechnic Institute" (NTUU'KPI'), Academician of the National Academy of Sciences of Ukraine (NASU)	Rector of the National Technical University of Ukraine "Kyiv Polytechnic Institute" (NTUU"KPI"), Academician of the National Academy of Sciences of Ukraine (NASU)
University/ Institution	The National Technical University of Ukraine "Kyiv Polytechnic Institute" (NTUU"KPI")	The National Technical University of Ukraine "Kyiv Polytechnic Institute" (NTUU"KPI")
Street	37, Peremohy ave.	37, Peremohy ave
Postal Code	03056	03056
City	Kyiv	Kyiv
Country	Ukraine	Ukraine
Phone	+38 044 236 69 13 +38 044 241 76 77	+38 044 236 69 13 +38 044 241 76 77
Fax	+38 044241 76 77	+38 044 241 76 77
E-mail **Web-site**	zgur@zgurov.kiev.ua, sidorenko@uap.ntu-kpi.kiev.ua http://www.unesco.ntu-kpi.kiev.ua	zgur@zgurov.kiev.ua, sidorenko@uap.ntu-kpi.kiev.ua http://www.unesco.ntu-kpi.kiev.ua

II. Available resources

1. Human Resources

1. For the administration of the UNESCO Chair

Coordinator   Prof. Sergiy Sidorenko
Executive Secretary   Olena Poptsova
Partial time support Secretary   Prof. Olexandr Zakhovaiko
Partial time support Secretary   Yuliya Khromova
Partial time support Secretary   Natalie Denysenko
Partial time support Secretary   Olga Potapska

2. For the teaching/training/research activities

The UNESCO Chair has three sections:

- **HIGHER TECHNICAL EDUCATION**, headed by **Corresponding Member of the National Academy of Sciences of Ukraine, Professor Yuri Yakimenko**, *First Vice Rector of the National Technical University of Ukraine "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 Alexander Pavlov**, D*ean of the Faculty of Informatics and Computer Engineering NTUU"KPI"* and the Organizational branch, that provides the formal aspects of daily activity.

3. For the information and documentation activities:

Academic Secretary   Prof. Sergiy Shukayev

2. Material Resources

- **FOR THE ADMINISTRATIVE WORK:** Computers, fax machines, xerocopy machines, printer, and storage systems.

- **FOR THE TEACHING/TRAINING/RESEARCH ACTIVITIES:** Videoconference, 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:** Videoconferencing

III. Activities

1. Academic activities

Education/Training/Research

International Seminar on Higher Education in Ukraine and the Bologna Process

Date and place: 13-14 May 2004, NTUU"KPI"

Partnership: the National Technical University of Ukraine "Kyiv Polytechnic Institute"; the UNESCO-European Centre for Higher Education (UNESCO-CEPES), EUA – the European University Association and Council of Europe, the Ministry of Education and Science of Ukraine

Participants:
- ☑ Undergraduate students
- ☑ Graduate students
- ☑ Academics
- ☑ Public administrators
- ☑ Employees from industry, or other private organisations (*please, specify*)
- ☐ Teachers from primary education
- ☐ Teachers from secondary education
- ☐ Teachers from technical and vocational education
- ☐ Teachers from adult education
- ☐ Other groups (*please, specify*)

Regional Coverage
- ☐ **National**
- ☑ **Regional/Interregional/International**

Regions	Countries
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Ukraine, Poland, Czech Republic
Western Europe and North America	France, Great Britain, Germany, Norway, USA, Belgium
Latin America and the Caribbean	

Funding sources

Funding source	Type of Organisation/Institution	Period	Amount (US$)
UNESCO Contribution	UNESCO/CEPES	May 12-16	$8000
Other contributions	NTUU"KPI" Sponsors	May 12-16 May 12-16	$8600 $3000

Publications:

Publisher(s): Kyiv Polytechnic
Year: June, 2004
Type of document/material:
☐ Book
☑ Periodical (№ 18, 20, 21)
☐ Others (*please, specify*)
Language(s): Ukrainian
Main keywords: the Bologna Process, the higher education system in Ukraine, quality assurance in the Bologna Process, public good and social responsibility in higher education.

Seminar on Technology Foresight Methods and Practices for Ukraine

Date and place: 30 August – 5 September 2004, NTUU"KPI"

Partnership: The National Technical University of Ukraine "Kyiv Polytechnic Institute"; the UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU "KPI", with assistance of the United Nations Industrial Development Organizations (UNIDO)

Participants:
☑ Undergraduate students
☑ Graduate students
☑ Academics
☑ Public administrators
☑ Employees from industry
☐ Teachers from primary education
☐ Teachers from secondary education
☐ Teachers from technical and vocational education
☐ Other groups (*please, specify*)

Regional Coverage

☐ **National**
☑ **Regional/Interregional/International**

Regions	Countries
Africa	
Arab States	
Asia/Pacific	Japan
Eastern and Central Europe	Hungary, Ukraine
Western Europe and North America	Great Britain
Latin America and the Caribbean	

Funding sources

Funding source	Type of Organisation/Institution	Period	Amount (US$)
UNESCO Contribution			

Other contributions	UNIDO Sponsors	August 30 – September 5, 2004	$1200 $7700

Main keywords: foresight technologies, foresight methods

Seminar on Genger Realms and Prospects for the Ukrainian Society

Date and place: 17 May 2005, NTUU "KPI"

Partnership: The Ukrainian Gender Education Centre, the SOCIOPLUS Research Centre for Applied Sociology, Gender Council of Solomensky District, the National information Centre for Ukraine-EU S&T Cooperation

Participants:
- ☑ Undergraduate students
- ☑ Graduate students
- ☑ Academics
- ☑ Public administrators
- ☐ Employees from industry
- ☐ Teachers from primary education
- ☐ Teachers from secondary education
- ☑ Teachers from technical and vocational education
- ☐ Other groups (*please, specify*)

Regional Coverage

☑ **National**
☐ **Regional/Interregional/International**

Regions	Countries
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Ukraine
Western Europe and North America	
Latin America and the Caribbean	

Funding sources

Funding source	Type of Organisation/Institution	Period	Amount (US$)
UNESCO Contribution			
Other contributions	The National Information Centre for Ukraine-EU S&T Cooperation	17 May 2005	$ 600

2. Conferences/Meetings

<u>III International Scientific-practical Conference of the Students, Post-Graduate Students and Young Scientists on "Economics. Technologies. Management."</u>

Date and place: March 24-27, 2004, NTUU"KPI", Kyiv, Ukraine

Partnership: the National Technical University of Ukraine "Kyiv Polytechnic Institute"; the Scientific Association of the students and post-graduate students of the University of Ukraine "Kiev Polytechnic Institute"; the UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at the NTUU „KPI"; the Faculty of Management and Marketing of NTUU"KPI"; the G.M. Dubrov Research Centre for Scientific and technical Potential and History of Science; European Students of Industrial Engineering and Management

Participants: 108 participants
- ☑ Undergraduate students
- ☑ Graduate students
- ☑ Academics
- ☑ Public administrators
- ☑ Employees from industry
- ☐ Teachers from primary education
- ☐ Teachers from secondary education
- ☐ Teachers from technical and vocational education
- ☐ Other groups (*please, specify*)

Regional Coverage

☐ **National**
☑ **Regional/Interregional/International**

Regions	Countries
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Ukraine, Russia
Western Europe and North America	Lithuania
Latin America and the Caribbean	

Funding sources

Funding source	Type of Organisation/Institution	Period	Amount (US$)
UNESCO Contribution			
Other contributions	Participants fee	March 24-27, 2004	$1500

Publications:
Title: Scientific and Technical development: Economics. Technologies. Management

Publisher(s): Knyga Pamyati Ukrayiny
Year: 2004
Type of document/material:
- ☐ Book
- ☐ Periodical
- ☑ Others (please, specify) — Proceedings of the Conference

Language(s): Ukrainian
Main keywords: economics, management, technologies, development

X International Conference named after M. Kravchuk

Date and place: 13-15 May 2004, NTUU"KPI",

Partnership: the National Technical University of Ukraine "Kyiv Polytechnic Institute", the Institute of Mathematics at the National Academy of Sciences of Ukraine, The National Taras Shevchenko University, the National Dragomanov Pedagogical University.

Participants: 108 participants
- ☑ Undergraduate students
- ☑ Graduate students
- ☑ Academics
- ☑ Public administrators
- ☐ Employees from industry
- ☐ Teachers from primary education
- ☐ Teachers from secondary education
- ☑ Teachers from technical and vocational education
- ☐ Other groups (*please, specify*)

Regional Coverage

☐ **National**
☑ **Regional/Interregional/International**

Regions	Countries
Africa	
Arab States	Iran, Turkey
Asia/Pacific	Japan
Eastern and Central Europe	Ukraine, Russia, Belorus, Poland
Western Europe and North America	Germany, Great Britain, Italy, Lithuania, Latvia, Estonia, USA
Latin America and the Caribbean	

Funding sources

Funding source	Type of Organisation/Institution	Period	Amount (US$)
UNESCO Contribution			
Other contributions	Participants fee	13-15 May 2004	

Publications:

Title: Proceedings of the X International Kravchuk Conference
Publisher(s): Zadruga
Year: 2004
Type of document/material:
- ☐ Book
- ☐ Periodical
- ☑ Others (please, specify) — proceedings

Language(s): Ukrainian, Russian, English
Main keywords: differential and integral equations, algebra, geometry, probability theory, mathematical statistics,and numerical analysis.

Title: Development of the mathematical ideas of academician Mykhailo Kravchuk
Publisher(s): Kyiv – New York, XLVIII
Year: 2004
Type of document/material:
- ☑ Book
- ☐ Periodical
- ☐ Others (please, specify) — proceedings

Language(s): Ukrainian, English
Main keywords: development of mathematical ideas, probability theory, mathematical statistics,and numerical analysis.

Title: Academician Kravchuk's Golgofa
Publisher(s): Central TV Studio
Year: 2004
Type of document/material:
- ☐ Book
- ☐ Periodical
- ☑ Others (please, specify) — documentary

Language(s): Ukrainian

International Conference on Printing Technology and Techniques 2004.

Date and place: 29 – 30 May 2004, NTUU "KPI"

Partnership: the Faculty of Publishing and Polygraphy, the Moscow State University of Printing Arts (Russia), the Ukrainian Academy of Printing (Ukraine), the Berg University of Printing (Germany), the Polygraphy Institute at the Warsaw Polytechnic (Poland), UkrNDISVD Public Corporation (Ukraine), the Kharkiv National University of Radioelectronics (Ukraine), the Omsk State Technical University (Russia), Ukraine Publishing Centre (Ukraine), the National Kyiv Taras Shevchenko University (Ukraine), Presa Ukrainy State Publishing House, Gaidelberg company (Germany), Kyivpolygraphmach (Ukraine)

Participants: 130 participants
- ☑ Undergraduate students
- ☑ Graduate students
- ☑ Academics
- ☑ Public administrators
- ☑ Employees from industry
- ☐ Teachers from primary education
- ☐ Teachers from secondary education

☑ Teachers from technical and vocational education
☐ Other groups (*please, specify*)

Regional Coverage

☐ **National**
☑ **Regional/Interregional/International**

Regions	Countries
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Ukraine, Russia, Poland
Western Europe and North America	Germany
Latin America and the Caribbean	

Funding sources:

Funding source	Type of Organisation/Institution	Period	Amount (US$)
UNESCO Contribution			
Other contributions	Participants fee	29 – 30 May 2004	

Publications:
Title: Collected papers on Printing Technology and Techniques
Publisher(s): the Faculty of Publishing and Polygraphy
Year: 2004
Type of document/material:
☐ book
☐ periodical
☑ Other – proceedings
Language(s): Ukrainian
Main keywords: printing, printing technology

VIII International Conference on Problems of Present – Day Electrotechnics - 2004

Date and place: 1 – 4 June, 2004

Partnership: the National Academy of Sciences of Ukraine, the Institute of Electrodynamics, the Scientific Council of National Ukrainian Academy of Sciences "Scientific fundamental of electrical engineering" the National Technical University of Ukraine "Kyiv Polytechnic Institute", the National Technical University of Ukraine "Kharkiv Polytechnic Institute", the National University "Lvivska Politechnika", the Chernigiv State Technological University, IEEE, Section Ukraine, the Fund "Lady Science"

Participants:
☑ Undergraduate students
☑ Graduate students

- ☑ Academics
- ☑ Public administrators
- ☐ Employees from industry
- ☐ Teachers from primary education
- ☐ Teachers from secondary education
- ☑ Teachers from technical and vocational education
- ☐ Other groups (*please, specify*)

Regional Coverage

- ☐ **National**
- ☑ **Regional/Interregional/International**

Regions	Countries
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Ukraine, Russia, Belorus
Western Europe and North America	Germany, USA
Latin America and the Caribbean	

Funding sources

Funding source	Type of Organisation/Institution	Period	Amount (US$)
UNESCO Contribution			
Other contributions	Participants fee	1 – 4 June, 2004	

<u>IX International Conference on Hydroaeromechanics in Engineering</u>

Date and place: 2 – 5 June, 2004

Partnership: the National Technical University of Ukraine "Kyiv Polytechnic Institute", the Research Institute for Applied problems of Hydroaerodynamics and Heat Exchange at NTUU "KPI", the Institute of Mechanical Engineering, the Atoll Scence Centre, the Sumy State University, the Cherkassy State Technical University, the National Technical University of Ukraine "Kharkiv Polytechnic Institute"

Participants:
- ☑ Undergraduate students
- ☑ Graduate students
- ☑ Academics
- ☑ Public administrators
- ☐ Employees from industry
- ☐ Teachers from primary education
- ☐ Teachers from secondary education
- ☑ Teachers from technical and vocational education
- ☐ Other groups (*please, specify*)

Regional Coverage
☐ **National**
☑ **Regional/Interregional/International**

Regions	Countries
Africa	
Arab States	Palestina
Asia/Pacific	
Eastern and Central Europe	Ukraine, Russia, Poland
Western Europe and North America	
Latin America and the Caribbean	

Funding sources

Funding source	Type of Organisation/Institution	Period	Amount (US$)
UNESCO Contribution			
Other contributions	Participants fee	June 2-5, 2004	$4000

IV International Conference on Progressive Equipment and Technology 2004

Date and place: June 24 - 28, 2004, the Sevastopol National Institute of Nuclear Energy and Industry, Sevastopol, Ukraine

Partnership: the Ministry of Education and Science of Ukraine; the Scientific Council on Mechanics Rigid Deformable Skew Field NAS of Ukraine; the National Technical University of Ukraine "Kyiv Polytechnic Institute"; the Institute of Mechanical Engineering of the NTUU "KPI"; the National Metallurgical Academy; the Sevastopol National Institute of Nuclear Energy and Industry; the Society of Mechanical Engineers at the NTUU "KPI"; the Otto-von-Gürike University of Magdeburg; the Faculty of Mechanical Engineering of University of Belgrade (Yugoslavia); the UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at the NTUU "KPI

Participants: 74 participants
- ☑ Undergraduate students
- ☑ Graduate students
- ☑ Postgraduate students
- ☑ Academics
- ☐ Public administrators
- ☐ Employees from industry
- ☐ Teachers from primary education
- ☐ Teachers from secondary education
- ☐ Teachers from technical and vocational education
- ☐ Other groups (*please, specify*)

Regional Coverage

☐ **National**
☑ **Regional/Interregional/International**

Regions	Countries
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Ukraine, Russia, Poland
Western Europe and North America	Germany
Latin America and the Caribbean	

Funding sources

Funding source	Type of Organisation/Institution	Period	Amount (US$)
UNESCO Contribution			
Other contributions	The Institute of Mechanical Engineering of the NTUU ”KPI“ The Society of Mechanical Engineers at the NTUU ”KPI“	June 24-28, 2004	$1250 $1850

VI International Conference for Students, Postgraduates, and Young Scientists on System Analysis and Information Technology

Date and place: 1 - 3 June 2004

Partnership: the National Academy of Sciences of Ukraine, the Ministry of Science and Education of Ukraine, the National Technical University of Ukraine "Kyiv Polytechnic Institute", the Institute of Applied System Analysis, Student Science Association of the Institute of Applied System Analysis

Participants: 140 participants
- ☑ Undergraduate students
- ☑ Graduate students
- ☑ Academics
- ☑ Public administrators
- ☐ Employees from industry
- ☐ Teachers from primary education
- ☐ Teachers from secondary education
- ☑ Teachers from technical and vocational education
- ☐ Other groups (*please, specify*)

Regional Coverage

☐ **National**
☑ **Regional/Interregional/International**

Regions	Countries
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Ukraine, Russia
Western Europe and North America	
Latin America and the Caribbean	

Funding sources

Funding source	Type of Organisation/Institution	Period	Amount (US$)
UNESCO Contribution			
Other contributions	Participants fee	1 - 3 June	

Publications:
Title: Proceedings of the VI International Conference for Students, Postgraduates, and Young Scientists
Publisher(s): NTUU "KPI"
Year: 2004
Type of document/material:
- ☐ Book
- ☐ Periodical
- ☑ Others — proceedings

Language(s): Ukrainian
Main keywords: system analysis, mathematical methods, complex systems research models and technologies.

Meeting of Participants of the UNESCO Project of the Open Virtual Campus of E-learning Centres, Technological and Engineering Universities of Central and Eastern Europe

Date and place: September 30 – October 2, 2004, NTUU"KPI"

Partnership: UNESCO; the National Commission of Ukraine for UNESCO; the Ministry of Education and Science of Ukraine; the National Technical University of Ukraine "Kyiv Polytechnic Institute"; the UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics of the NTUU "KPI; the Ukrainian Distance Learning Centre; the NETTUNO/UNINETTUNO Consortium (the Association of 38 Italian and other Western European universities); the International Renaissance Foundation; the Brno University of Technology; the Central and Eastern European Networking Association (CEENet); the State Engineering University of Armenia; the Politehnica University of Bucharest; the National Technical University "Kharkiv Polytechnic Institute"; the Tallinn Technical University; the International University of Finance; the Lviv Polytechnic National University; the Kaunas University of Technology; the Technical University of Sofia; the Donetsk National Technical University

Participants: 26 participants
- ☑ Undergraduate students
- ☑ Graduate students
- ☑ Postgraduate students
- ☑ Academics
- ☑ Public administrators
- ☐ Employees from industry
- ☐ Teachers from primary education
- ☐ Teachers from secondary education
- ☑ Teachers from technical and vocational education
- ☑ Distance education officials

Regional Coverage

☐ **National**

☑ **Regional/Interregional/International**

Regions	Countries
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Bulgaria, Armenia, Poland, Romania, Czech Republic, Ukraine
Western Europe and North America	Estonia, Lithuania
Latin America and the Caribbean	

Funding sources

Funding source	Type of Organisation/Institution	Period	Amount (US$)
UNESCO Contribution		30 September – 2 October 2004	$4.500
Other contributions	NTUU "KPI"	30 September – 2 October 2004	$4.500
	International Renaissance Foundation	30 September – 2 October 2004	$4.150

Outputs: 26 participants from Bulgaria, Armenia, Czech Republic, Estonia, Lithuania, Poland, Romania and Ukraine representing UNESCO and participating universities, and guests from the Ministry of Education and Science of Ukraine, United Nations Development Programme in Ukraine, National Commission of Ukraine for UNESCO, attended the meeting. Social community and mass-media showed great interest to the workshop operation and this fact testifies to the obvious positive outcome of the meeting.

Publications:
Title: Article devoted to the meeting of the UNESCO Project of the Open Virtual Campus of e-learning Centres, Technological and Engineering Universities of Central and Eastern Europe

Publisher(s): Zerkalo Nedeli, №42

Year: 16-22 October 2004

Type of document/material:
- ☐ Book
- ☑ Periodical (newspaper)

☐   Others (please, specify)
Language(s): Russian
Main keywords: distance learning, virtual universities

Title: Virtual University is created
Publisher(s): Kyivsky Polytechnic, №7
Year: October, 2004
Type of document/material:
    ☐   Book
    ☑   Periodical (newspaper)
    ☐   Others (please, specify)
Language(s): Ukrainian
Main keywords: distance learning, virtual universities

Title: Event
Publisher(s): Kyivsky Polytechnic, №31
Year: 14 October, 2004
Type of document/material:
    ☐   Book
    ☑   Periodical (newspaper)
    ☐   Others (please, specify)
Language(s): Ukrainian
Main keywords: distance learning, virtual universities

International Student Forum: Globalisation and Students' Role in the European Integration

Date and place: 18 – 24 April 2005, NTUU "KPI"

Partnership: the National Technical University of Ukraine "KPI", technical universities of Poland, Estonia, Czech Republic

Participants: 100 participants
    ☑   Undergraduate students
    ☑   Graduate students
    ☑   Postgraduate students
    ☐   Academics
    ☐   Public administrators
    ☐   Employees from industry
    ☐   Teachers from primary education
    ☐   Teachers from secondary education
    ☐   Teachers from technical and vocational education
    ☐   Distance education officials

Regional Coverage

☐ **National**
☑ **Regional/Interregional/International**

Regions	Countries
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Poland, Czech Republic, Ukraine

Western Europe and North America	Estonia
Latin America and the Caribbean	

Funding sources

Funding source	Type of Organisation/Institution	Period	Amount (US$)
UNESCO Contribution			
Other contributions	NTUU "KPI"	April 18 –24, 2005	$1.200

International Conference for Students, Postgraduates and Young Scientists on Ecology. Human. Society

Date and place: 11-13 May 2005, NTUU "KPI"

Partnership: the Scientific Student Association of NTUU "KPI", the Student Labour Centre of NTUU "KPI", the State Ecological Inspection of the Ministry of Environmental Protection of Ukraine, the Department of Ecology and Technology of Vegetable Polymers of NTUU "KPI"

Participants: 180 participants
- ☑ Undergraduate students
- ☑ Graduate students
- ☑ Postgraduate students
- ☑ Academics
- ☐ Public administrators
- ☐ Employees from industry
- ☐ Teachers from primary education
- ☐ Teachers from secondary education
- ☑ Teachers from technical and vocational education
- ☐ Distance education officials

Regional Coverage

☐ **National**
☑ **Regional/Interregional/International**

Regions	Countries
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Poland, Ukraine, Russia, Belorus
Western Europe and North America	
Latin America and the Caribbean	

Funding sources

Funding source	Type of Organisation/Institution	Period	Amount (US$)

UNESCO Contribution			
Other contributions	Participants fee	May 11 –13, 2005	

International Conference on Intellectual Analysis of Information IAI – 2005

Date and place: 17 – 20 May 2005, NTUU "KPI"

Partnership: the Ministry of Education and Science of Ukraine, the Institute of Applied System Analysis, the Russian Association for Artificial Intelligence, the Faculty of Applied Mathematics, Prosvita Publishing House

Participants: 100 participants
- ☑ Undergraduate students
- ☑ Graduate students
- ☑ Postgraduate students
- ☑ Academics
- ☑ Public administrators
- ☐ Employees from industry
- ☐ Teachers from primary education
- ☐ Teachers from secondary education
- ☑ Teachers from technical and vocational education
- ☑ Distance education officials

Regional Coverage

☐ **National**
☑ **Regional/Interregional/International**

Regions	Countries
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Ukraine, Russia, Belarus
Western Europe and North America	
Latin America and the Caribbean	

Funding sources

Funding source	Type of Organisation/Institution	Period	Amount (US$)
UNESCO Contribution			
Other contributions	Participant fee	May 17–20, 2005	

3. Interuniversity Exchanges/Partnerships

The visit to NTUU "KPI" of Dr. Anama Tan, President of the International Women's Council

Dates: 14 June 2004

Outputs: meetings on gender education problems

The visit of the delegation of the St. Petersburg State Polytechnic University to NTUU "KPI"

Dates: 27 June – 1 July 2004

Outputs: both sides negotiated the exchange of delegations in humanities to reinforce the universities' mobility

The visit of Prof. S.Shukayev to the Jiamusi University, China

Dates: 29 June – 07 July 2004 року

Outputs: Prof. Shukayev read a series of lectures for students of the Jiamusi University

The visit of Dr.Helene Getshel, the University of Hamburg (Germany)

Dates: 11 October 2004 року

Outputs: participation in the seminar on Women in Science

The visit of the delegation of the National Technical University of Ukraine "KPI" to the St. Petersburg State Polytechnic University

Date: 19 – 23 October 2004 року

Outputs: the programme on collaboration for 2004-2005 was developed and signed

Lectures on Medical Imaging and Pattern Recognition at the Inter – University Medical Engineering Faculty, the National Technical University of Ukraine "Kyiv Polytechnic Institute" (Oleh Tretiak, the Drexel University, USA, Fulbright Fellow)

Number: 17

Duration: September 1, 2004 – January 25, 2005

University of origin: the Drexel University, USA

Outputs: about 20 students of the Inter – University Medical Engineering Faculty, NTUU "KPI" have familiarized with experience of American scientists in the field of Medical Imaging and Pattern Recognition

Funding sources: Fulbright Scholarship

Lectures on Practice of Translation and Gender Studies at the Faculty of Linguistics, Faculty of Sociology, National Technical University of Ukraine "Kyiv Polytechnic Institute"(Marian Rubchak, Valparaiso University, USA, Fulbright Fellow)

Number: 17

Duration: February 1, 2004 – June 1, 2004

University of origin: Valparaiso University, USA

Outputs: about 40 students of the Faculty of Linguistics and the Faculty of Sociology of NTUU "KPI" have familiarized with experience of American scientists in the field of Gender Studies and Practice of Translation

Funding sources: Fulbright Scholarship

Lectures on Management Science, Corporate Finance, the Faculty of Management and Marketing, the National Technical University of Ukraine "Kyiv Polytechnic Institute"(Dr.Andrew T. Langewisch, Concordia University, USA, Fulbright Fellow)

Number: 51

Duration: February 1, 2005 – June 1, 2005

University of origin: Concordia University, USA

Outputs: about 50 students of the Faculty of Management and Marketing of NTUU "KPI" have studied practical and theoretical aspects of Management Science and Corporate Finance

Funding sources: Fulbright Scholarship

<u>Lectures on Public Administration, Grantwriting, the Faculty of Management and Marketing, the National Technical University of Ukraine "Kyiv Polytechnic Institute"(Dr.Linell Fromm, University of San Diego, USA, Fulbright Fellow)</u>

Number: 34

Duration: February 11, 2005 – June 1, 2005

University of origin: University of San Diego, USA

Outputs: about 25 students of the Faculty of Management and Marketing of NTUU "KPI" have studied practical and theoretical aspects of Public Administration, Grantwriting

Funding sources: Fulbright Scholarship

4. Publication and multimedia materials

1. Web-site of the UNESCO Chair www.unesco.ntu-kpi.kiev.ua

2. **Title:** M.Zgurovsky, N.Pankratova, *Basics of System Analysis*
   Publisher: Osvita
   Year: 2004
   Type of material: book

3. **Title:** M.Zgurovsky, *The State and Tasks of Ukrainian Higher Education in the context of the Bologna Process*
   Publisher: Polytechnica
   Year: 2004
   Type of material: book

4. **Title:** D.Snitsareva, *E-University: Fifteen Floors Facing UNESCO*
   Publisher: Dzerkalo Tyzhnia Newspaper
   Year: 2004
   Type of material: article

5. **Title:** G.Synichich, *Information Society. Strategic View*
   Publisher: Dzerkalo Tyzhnia Newspaper
   Year: 2004
   Type of material: article

6. **Title:** M.Zgurovsky, *General Trends in the Development of Information Society in the Gobal Context: Transformation of the Global System*
   Publisher: www.isu.org.ua
   Year: 2004
   Type of material: article

7. **Title:** S.Rybnikov, *The UNESCO Chair at NTUU "KPI": Age of Formation*
   Publisher: Vseukrainska Tekhnichna Gazeta Newspaper
   Year: 2004
   Type of material: article

8. **Title:** S.Sydorenko,*The New Role of European Universities*
   Publisher: Uriadoviy Kuryer Newspaper
   Year: 2004
   Type of material: article

9. **Title:** S.Sydorenko, *On the Way to the Knowledge Society*
   Publisher: Vseukrainska Tekhnichna Gazeta Newspaper
   Year: 2004
   Type of material: article

10. **Title:** *Technology Foresight for Ukraine*
    Publisher: Kyivsky Polytechnic
    Year: 2004
    Type of material: article

11. **Title:** M.Zgurovsky, *Ukraine Has Still Got a Chance*
    Publisher: Dzerkalo Tyzhnia Newspaper
    Year: 2005
    Type of material: article

IV. Impact

NTUU "KPI" is developing efficiently international activity, thus realising the modern model of the technical university development as the international education scientific and information complex.

UNESCO Chair on Higher Technical Education, Applied System Analysis and Informatics which became one of the centres of the intellectual elite of the Ukrainian higher technical school, plays a significant role in this process. The Chair expressed its initiative in realisation of the number of international congresses, conferences and seminars concerning different aspects of the higher education development and comprehension of its importance in the modern society.

A significant result of this activity was the appearance of new scientific and educational courses in the university among which are such as the technological foresight, intellectual property, counteraction to the terrorist attacks, ecologically clean technologies, bioinformatics, mechatronics and others. As a whole 46 new specialisations were established in the University.

NTUU "KPI" cooperates with the UNESCO Institute for Informational Technologies (Moscow) on the questions concerning distance learning projects. The base station of this Institute was established and numerous projects on distance learning techniques implementations in Ukraine were started. Among them there is the UNESCO Project on the Virtual Campus of Central and Eastern Europe countries (NTUU "KPI" is the coordinator of the Project).

Due to the active work of the UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics, the international activity in last few years became the integral feature of the modern NTUU "KPI" and IASA. This fact creates favourable conditions for the further integration to the international and, particularly, European educational, scientific and informational space and helps to implement reforms initiated by the Bologna Process with the assistance of UNESCO. It also assists to realise "Dakkar activity limits" which are the main priorities of the UNO strategy in the educational field, as well as the Medium-term UNESCO strategy for 2002-2007, UNITWIN/UNESCO Chair Programme tasks and other precious UNESCO initiatives.

V. Forthcoming Activities

1. International Seminar on Technology Foresight

Date and place: 2005, NTUU "KPI"

Partnership: The Institute of Applied System Analysis

2. International Conference on Higher Technical Education: Problems and Development Prospects in the Bologna Process

Date and place: May 2005, NTUU "KPI"

Partnership: to be specified

3. XI International Conference of the Association of the International Departments of Eastern and Central European Technical Universities

Date and place: 6 – 10 June 2005, NTUU "KPI"

Partnership: to be specified

4. International Conference of International Alumni of NTUU "KPI"

Date and place: 20 – 22 June 2005, NTUU "KPI"

Partnership: The International Relations Department at NTUU "KPI"

5. VII International Conference on System Analysis and Information Technology

Date and place: 28 June – 2 July 2005, NTUU "KPI"

Partnership: The Institute of Applied System Analysis

6.International Conference on Gender Component in Higher technical Education and Science

Date and place: October 2005, NTUU "KPI

Partnership: The Ministry of Ukraine for Family, Children and Youth, the Ukrainian Gender Education Centre, the Women in Science Organisation

7.Seminar on Women in Education and Science

Date and place: October 2005, NTUU "KPI"

Partnership: The Ukrainian Gender Education Centre, NTUU "KPI" Women Association

VI. Development prospects

Medium-term strategy of United Nations Organisation for education, science and culture for 2002-2007, adopted at the 31st UNESCO General Conference in October-November 2001, proposes twelve strategic goals which include provision of wide access to information and communication technology. Ukraine as the UNESCO member in forming the education system of the future "Education for all, lifelong and limitless learning" should take this strategy into consideration.

Expanding its international activity in the new environment, NTUU"KPI", Institute for Applied Systems Analysis, UNESCO Chair in Higher Technical Education, Applied Systems Analysis and Informatics have been participating actively in the implementation of the above-listed priorities in the recent years. The role of the UNESCO Chair in Higher Technical Education, Applied Systems Analysis and Informatics in this process is hard to overestimate (the list of international actions held by it presents convincing evidence).

In the field of distance learning the UNESCO Chair in Higher Technical Education, Applied Systems Analysis and Informatics is collaborating actively with the UNESCO Institute for Information Technologies in Education, Moscow. As the result the Focal Point of the Institute was opened, and new projects on introducing distance learning techniques in Ukraine were started, particularly, nowadays a new wide-range UNESCO project of the Open Virtual Campus of E-Learning Centres, Technological and Engineering Universities of Central and Eastern Europe is commencing. The Ukrainian Institute for Information Technologies in Education and the Ukrainian Gender Education Centre at NTUU"KPI" are expanding their activities due to wider use of information and communication technologies.

Another very important grant on Introducing Distance Learning Programmes on Technological Foresight in the Ukrainian Institute for Information Technologies in Education was started in 2003, opening opportunities to widen the use of new distance learning technologies in the whole region, provide staff for implementation of technological foresight methods in Ukrainian economy.

The activity of the Ukrainian Gender Education Centre, established at NTUU"KPI" in 2001 under the aegis of the UNESCO Chair in Higher Technical Education, Applied Systems Analysis and Informatics, is also based on information technology. It acts up to the Memorandum of UNDP in Ukraine and National Technical University of Ukraine, aiming at further joint work on introduction of gender component into educational programmes and educational system, particularly, higher engineering education, personnel training and retraining in this field using innovative computer learning technologies.

In 1992 the 26th UNESCO General Conference approved founding of the UNESCO/UNITWIN Chairs Programme. The UNESCO/UNITWIN Chairs projects refer to research preparation and holding and cover all main UNESCO fields of knowledge: education, human rights, environmental protection, humanities and applied science, communication, etc. The main fields of this programme charity concern higher educational institutions of the developing countries and countries in transit. The UNESCO Chair in Higher Technical Education, Applied Systems Analysis and Informatics at NTUU"KPI" is aiming at further development and cooperation in the framework of the UNESCO/UNITWIN Chairs Programme.