



# **UNITWIN/UNESCO CHAIRS PROGRAMME**

## ***PROGRESS REPORT***

**UNESCO Chair**  
***In Higher Technical Education, Applied***  
***System Analysis and Informatics***  
**at NTUU “KPI”**

**UNESCO CHAIR**  
**In Higher Technical Education, Applied System Analysis**  
**and Informatics**  
**at National Technical University of Ukraine**  
**“Kyiv Polytechnic Institute”**  
**and Institute for Applied System Analysis**



**NTUU “KPI” – KYIV – Ukraine**  
**2006**

## **UNITWIN/UNESCO Chairs Programme Progress Report**

**Period of Activity: 1.01. 2005 – 30.06.2006**

**Title of UNESCO Chair:**

Higher Technical Education, System Analysis and Informatics

**Institution/Country:** 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, 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

In the progress report of the UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at the National Technical University of Ukraine "Kyiv Polytechnic Institute" and educational and scientific complex "Institute for Applied System Analysis" the main information about the results of its activity in 2005 – 2006 is represented.

The most significant measures in the sphere of academic activity connected with the organization and holding of seminars, trainings, conferences at national and international level, realization of international projects in the field of education are illustrated. Thus, during the reporting period 4 seminars, 10 international conferences and meeting were carried out with the participation of the UNESCO Chair. One project was realized with the support of UNESCO.

Interuniversity exchange by the subjects of the UNESCO Chair activity actively took place (11 visits).

The presentation of the Coordination Centre of the CEEVU (Central and Eastern European Virtual University) and the Annual 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, the Annual International Conference of the CEEVU took place in 2005.

The UNESCO Chair activity was widely illustrated in periodical (15 publications) and at the UNESCO Chair site <http://www.unesco.ntu-kpi.kiev.ua>

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## I. Address and Contact

	<b>Address of the Host Institution</b>	<b>Address of the Chairholder (or Coordinator). Other contact person</b>
<b>Name</b>	Mykhailo Zgurovsky	Mykhailo Zgurovsky
<b>Function/ Title</b>	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)
<b>University/ Institution</b>	The National Technical University of Ukraine “Kyiv Polytechnic Institute” (NTUU”KPI”)	The National Technical University of Ukraine “Kyiv Polytechnic Institute” (NTUU”KPI”)
<b>Street</b>	37, Peremohy ave.	37, Peremohy ave.
<b>Postal Code</b>	03056	03056
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<b>Fax</b>	+380-44-241 7677	+380-44-241 7677
<b>E-mail</b>	<a href="mailto:zgur@zgurov.kiev.ua">zgur@zgurov.kiev.ua</a> , <a href="mailto:sidorenko@uap.ntu-kpi.kiev.ua">sidorenko@uap.ntu-kpi.kiev.ua</a>	<a href="mailto:zgur@zgurov.kiev.ua">zgur@zgurov.kiev.ua</a> , <a href="mailto:sidorenko@uap.ntu-kpi.kiev.ua">sidorenko@uap.ntu-kpi.kiev.ua</a>
<b>Web Site</b>	<a href="http://www.unesco.ntu-kpi.kiev.ua">http://www.unesco.ntu-kpi.kiev.ua</a>	<a href="http://www.unesco.ntu-kpi.kiev.ua">http://www.unesco.ntu-kpi.kiev.ua</a>

## 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	Olena Shyshatska
Partial time support Secretary	Maksym Gladsky
Partial time support Secretary	Anna Matvienko

#### 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, Dean 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
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### 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

#### UNESCO Project "Technical and Methodological Support of Training Programme for International Project Management"

**Date and place:** October 1, 2005 – April 24, 2006, 2 terms without separation from work, NTUU "KPI"

**Partnership:** United Nations Educational Scientific and Cultural Organization (UNESCO), National Commission of Ukraine for UNESCO, National Technical University of Ukraine "Kyiv Polytechnic Institute" (Faculty of Management and Marketing), the UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at the NTUU „KPI” and IASA

**Participants:** 51 participants

- 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	
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		January 7, 2005	\$13000
Other contributions	NTUU "KPI"	September 1, 2005 – May 1, 2006	\$40000

### Results:

The students are already applying the acquired knowledge when preparing project propositions for participation in the international contests, such as the 6<sup>th</sup> and the 7<sup>th</sup> EU Framework Programmes, TEMPUS-TACIS etc. A part of the students is involved in the organization and holding of the international conference under the aegis of ICDE "International conference on capacity building in Europe for distance and ICT based education", that is going to be held at the NTUU "KPI" in September 2007.

### Publications:

**Title:** Technical and Methodological Support of Training Programme for International Project /Proceedings of the 2nd EUI-Net International Workshop, European Models of Synergy between Teaching and Research in Higher Education, 4-6 May 2006.

**Publisher(s):** Technical University of Tallinn

**Year:** 2006

**Type of document/material:**

- Book
- Periodical
- Others (please, specify) — Proceedings of the Conference

**Language(s):** English

**Keywords:** Managers, international project management, training programme, capacity building, higher education.

## Seminar on Gender Realities and Prospects for the Ukrainian Society

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

**Partnership:** National Information Centre for Ukraine-EU S&T Cooperation, The Ukrainian Gender Education Centre at NTUU "KPI", UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU "KPI" and IASA, Institute for Information Technologies in Education at NTUU "KPI", Kyiv Municipal State Administration, Public Organization "Women in Science"

**Participants:** 40 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

### 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 sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	Kyiv Centre of Scientific, Technical and Economic Information	May 17, 2005	600

### Publications:

**Title:** Ukrainian Women in the History. Woman – the Creator of Family, Country, World.

**Publisher(s):** "Lybid"

**Year:** 2005

**Type of document/material:**

- Book
- Periodical
- Other groups

**Language(s):** Ukrainian

**Keywords:** woman's role in the history of Ukraine, science, society, social progress, equal rights and freedoms for the citizens.

**Title:** Gender Realities And European Perspectives

**Publisher(s):** Kyivsky Polytechnic, №19

**Year:** May 26, 2005

**Type of document/material:**

- Book
- Periodical(newspaper)
- Others

**Language(s):** Ukrainian

**Keywords:** society, gender equality, women in science



## International Workshop on Distance Education: Organization, Teacher Training, Technologies and Information Support

**Date and place:** November 30 –December 3 2005, NTUU «KPI»

**Partnership:** National Technical University of Ukraine «Kyiv Polytechnic Institute»; UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU «KPI» and IASA, UNECSO Institute for Information Technologies in Education (Russian Federation)

**Participants:** 22 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

### Regional Coverage

- National
- Regional/Interregional/International

Regions	Countries
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Russian Federation, Ukraine, Belarus, Republic of Kazakhstan, Lithuanian Republic, Republic of Moldova
Western Europe and North America	
Latin America and the Caribbean	

### Funding sources:

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution	UNECISO Institute for Information Technologies in Education (Russian Federation)	November 30 – December 3 2005	11232
Other contributions			

### Publications:

**Title:** UNESCO Workshop on Distance Education

**Publisher(s):** Kyivsky Polytechnic, №39

**Year:** December 15, 2005

**Type of document/material:**

- Book
- Periodical(newspaper)

Others

**Language(s):** Ukrainian

**Keywords:** distance education, information-oriented society, distance education technologies

## Scientific Workshop on the Possibilities for Effective Participations of Ukrainian Scholars in the EU Scientific Programs. Crossing from FP6 to FP7

**Date and place:** December 12-13, 2005, NTUU «KPI»

**Partnership:** National Information Centre for Ukraine-EU S&T Cooperation at Kyiv Centre of Scientific, Technical and Economical Information; National Technical University of Ukraine «Kyiv Polytechnic Institute»; UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU «KPI» and IASA.

**Participants:** 78 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

### Regional Coverage

- National
- Regional/Interregional/International

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

### Funding sources:

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	Kyiv Centre of Scientific, Technical and Economical Information	December 12-13, 2005	800

## International Workshop “Virtual Integrated University Systems (VIUS)”

**Date and place:** April 24-26, 2006, NTUU «KPI»

**Partnership:** National Technical University of Ukraine «Kyiv Polytechnic Institute»; UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU «KPI» and IASA, Ukrainian Institute for Information Technologies in Education, Stockholm University, Tallinn University of Technology, St. Petersburg State Polytechnic University

**Participants:** 21 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

### Regional Coverage

- National
- Regional/Interregional/International

Regions	Countries
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Ukraine, Republic of Estonia, Russian Federation
Western Europe and North America	Sweden
Latin America and the Caribbean	

### Funding sources:

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	VISBY Programme	April 24-26, 2006	

## 2. Conferences/Meetings

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

**Date and place:** April 18-24, 2005, NTUU «KPI»

**Partnership:** National Technical University of Ukraine «Kyiv Polytechnic Institute», UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU «KPI» and IASA, technical universities of Poland, Estonia, Czech Republic

**Participants:** 100 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

#### Regional Coverage

- National
- Regional/Interregional/International

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

#### Funding sources:

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU «KPI»	April 18-24, 2005	1200

#### Publications:

**Title:** Making Our Way to the Integrated Europe

**Publisher(s):** Kyivsky Polytechnic, №17

**Year:** May 12, 2005

**Type of document/material:**

- Book

Periodical(newspaper)

Others

**Language(s):** Ukrainian

**Keywords:** student self government, Bologna process, students' rights, exchange of experience

## VIII International Scientific and Practical Students', Postgraduates' and Young Scientists' Conference. "Ecology. Person. Society".

**Date and place:** May 11-13, 2005, NTUU «KPI»

**Partnership:** Scientific Student Association of NTUU "KPI", State Ecological Inspection of the Ministry of Environmental Protection of Ukraine, NTUU "KPI" Chair in Ecology and Technology of Plant Polymers, UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU «KPI» and IASA, Students' Job Placement Centre at NTUU «KPI».

**Participants:** 180 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

### Regional Coverage

National

Regional/Interregional/International

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

### Funding sources:

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	Participants fee	May 11-13, 2005	2400

**Publications:**

**Title:** Abstracts book of the VIII International Scientific and Practical Students', Postgraduates' and Young Scientists' Conference. "Ecology. Person. Society" (May 11-13, 2005 Kyiv, Ukraine )

**Publisher(s):** "Politekhnikha"

**Year:** 2005

**Type of document/material:**

- Book
- Periodical
- Others– Proceedings of the Conference

**Language(s):** Ukrainian

**Keywords:** development and appliance of recycling technologies, protection of flora and fauna, environment, people's health, mathematic modeling methods, industrial ecology, ecological safety

**Title:** Ecology. Person. Society.

**Publisher(s):** Kyivsky Polytechnic, №10

**Year:** May 19, 2005

**Type of document/material:**

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

**Language(s):** Ukrainian

**Keywords:** environment, people's health, mathematic modeling methods, industrial ecology, ecological safety

**V International Conference on Intellectual Analysis of Information IAI-2005**

**Date and place:** May 17-20, 2005, NTUU «KPI»

**Partnership:** Ministry of Education and Science of Ukraine, National Technical University of Ukraine «Kyiv Polytechnic Institute», UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU «KPI», Faculty of Applied Mathematics at NTUU «KPI», Institute for Applied System Analysis, Prosvita Publishing House, Russian Association of the Artificial Intellect

**Participants:** 100 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

**Regional Coverage**

- National
- Regional/Interregional/International

<b>Regions</b>	<b>Countries</b>
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Ukraine, Russian Federation, Republic of Belarus
Western Europe and North America	
Latin America and the Caribbean	

**Funding sources:**

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	Participants fee	May 17-20, 2005	

**International Conference on Bologna Process: New Aspects of Cooperation of Association of European High Technical Institutions International Departments**

**Date and place:** June 6-10, 2005, NTUU «KPI»

**Partnership:** National Technical University of Ukraine «Kyiv Polytechnic Institute»; UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU «KPI» and IASA, Association of High Technical Educational Institutions International Departments of Countries of Eastern and Central Europe

**Participants:** 24 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

**Regional Coverage**

- National
- Regional/Interregional/International

Regions	Countries
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Ukraine, Russian Federation, Poland, Czech Republic, Republic of Bulgaria
Western Europe and North America	Germany
Latin America and the Caribbean	

**Funding sources:**

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	Participants fee	June 6-10, 2005	1822
	Nadra Bank Sponsorship	June 6-10, 2005	1000

**Publications:**

**Title:** 11<sup>th</sup> AID Conference in Kyiv

**Publisher(s):** Transportnyk, № 20-21

**Year:** June 28, 2005

**Type of document/material:**

- Book  
 Periodical(newspaper)  
 Others

**Language(s):** Russian

**Keywords:** interuniversity cooperation, distance education, Bologna process, international departments

**VII International Scientific and Technical Conference on System Analysis and Information Technologies**

**Date and place:** June 28– July 2, 2005, NTUU «KPI»

**Partnership:** Ministry of Education and Science of Ukraine, National Academy of Sciences of Ukraine, National Technical University of Ukraine «Kyiv Polytechnic Institute», Institute for Applied System Analysis at the Ministry of Education and Science of Ukraine and the National Academy of Sciences of Ukraine, UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU «KPI» and IASA, Chernivtsi Institute for Finance and Law, Scientific Student Association at NTUU “KPI” and IASA

**Participants:** 85 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

### Regional Coverage

- National
- Regional/Interregional/International

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

### Funding sources:

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	Participants fee	June 28– July 2, 2005	

### Publications:

**Title:** Abstracts book of the VII International Scientific and Technical Conference on System Analysis and Information Technologies (June 28– July 2, 2005, Kyiv)

**Publisher(s):** NTUU “KPI”

**Year:** 2005

**Type of document/material:**

- Book
- Periodical
- Others– Proceedings of the Conference

**Language(s):** Ukrainian

**Keywords:** system analysis of complex systems of various nature, intellectual decision-making systems, advanced information technologies, electronic commerce, mathematic methods, models and technologies of complex systems analysis, intellectual data analysis, technological processes management in industry

**Title:** Participants’ reports of the VII International Scientific and Technical Conference on System Analysis and Information Technologies (June 28– July 2, 2005, Kyiv)

**Publisher(s):** “System Research and Information Technologies”

**Year:** 2005

**Type of document/material:**

- Book
- Periodical
- Others– Proceedings of the Conference

**Language(s):** Ukrainian

**Keywords:** theory and methods of efficient decision-making, decision making under uncertain conditions, intellectual decision-making systems, management system providing and data processing, creation technologies, database, environment of project and management information support

## IV International Scientific and Methodical Conference on Psychology and Pedagogical Subjects Teaching at the Technical University: Methods, Experience, Perspectives

**Date and place:** October 27-28, 2005, NTUU «KPI»

**Partnership:** Ministry of Education and Science of Ukraine, Academy of Pedagogical Sciences of Ukraine, National Technical University of Ukraine «Kyiv Polytechnic Institute»; UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU «KPI», Faculty of Management and Marketing at NTUU «KPI», Psychology and Pedagogics Department, Ukrainian Institute for Information Technologies in Education, Institute for Higher Education, G.S.Kostiuk Institute for Psychology

**Participants:** 82 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

### Regional Coverage

- National
- Regional/Interregional/International

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

### Funding sources:

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	Participants fee, sponsors' support	October 27-28, 2005.	1200

## International Scientific and Practical Conference "Gender Component in the Structure of Higher Technical Education and Natural Sciences"

**Date and place:** November 3-5, 2005, NTUU «KPI»

**Partnership:** Ministry for Family, Youth and Sport of Ukraine, State committee for Family and Youth Affairs, Ministry of Education and Science of Ukraine, UNDP Programme of Equal Opportunities, National Technical University of Ukraine «Kyiv Polytechnic Institute», UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU «KPI» and IASA, International Organizaton “Zhinocha Gromada”, Ukrainian International Committee for Scientific and Cultural Issues at NAS of Ukraine, Ukrainian Gender Education Centre at NTUU «KPI»

**Participants:** 128 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

### Regional Coverage

- National
- Regional/Interregional/International

Regions	Countries
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Ukraine, Russian Federation, Poland, Republic of Moldova
Western Europe and North America	Germany, USA
Latin America and the Caribbean	

**Funding sources:**

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	Ministry for Family, Youth and Sport of Ukraine	November 3-5, 2005	720
	UNDP	November 3-5, 2005	560

**Publications:**

**Title:** Woman in Science and Education

**Publisher(s):** SEA “Mykola Melnyk”

**Year:** 2005

**Type of document/material:**

- Book  
 Periodical  
 Others– Proceedings of the conference

**Language(s):** Ukrainian, Russian, English.

**Keywords:** women-scientists, eurointegration in science and education, gender education, Bologna process, theory of real gender difference

**Title:** Gender Conferences at KPI

**Publisher(s):** Kyivsky Polytechnic, №35

**Year:** November 17, 2005

**Type of document/material:**

- Book  
 Periodical(newspaper)  
 Others

**Language(s):** Ukrainian

**Keywords:** gender realities, women in science and education, gender culture

**Presentation of the Central and Eastern European Virtual University (CEEVU) Coordination Centre and the Annual Meeting of Participants, UNESCO Project of the Open Virtual Campus of E-learning Centres, Technological and Engineering Universities of Central and Eastern Europe**

**Date and place:** November 10-11, 2005, NTUU «KPI»

**Partnership:** UNESCO, National Commission of Ukraine for UNESCO, International Public Organization CEEVU, Ministry of Education and Science of Ukraine, National Technical University of Ukraine «Kyiv Polytechnic Institute», UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU “KPI” and IASA

**Participants:** 77 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

### Regional Coverage

- National
- Regional/Interregional/International

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

### Funding sources:

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution		November10-11, 2005	\$15000
Other contributions	Hewlett-Packard sponsorship	November10-11, 2005	

### **Publications:**

**Title:** CEEVU Coordination Centre Opening

**Publisher(s):** Kyivsky Polytechnic, №36

**Year:** November 17, 2005

**Type of document/material:**

- Book
- Periodical(newspaper)
- Others

**Language(s):** Ukrainian

**Keywords:** distance education, information technologies, information society

## IX International Scientific and Practical Students', Postgraduates' and Young Scientists' Conference. "Ecology. Person. Society".

**Date and place:** May 17-19, 2006, NTUU «KPI»

**Partnership:** National Technical University of Ukraine «Kyiv Polytechnic Institute», State Ecologic Inspection of the Ministry of Environmental Protection of Ukraine, NTUU «KPI» Department for scientific and educational work, Scientific Student Association of NTUU "KPI", NTUU "KPI" Chair in Ecology and

Technology of Plant Polymers, UNESCO Chair in Higher Technical Education,  
Applied System Analysis and Informatics at NTUU «KPI» and IASA

**Participants:** 165 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

**Regional Coverage**

- National
- Regional/Interregional/International

Regions	Countries
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Ukraine, Poland, Russian Federation, Republic of Belarus
Western Europe and North America	
Latin America and the Caribbean	

**Funding sources:**

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	Participants fee	May 17-19, 2006	2400

**Publications:**

**Title:** Abstracts book of IX International Scientific and Practical Students', Postgraduates' and Young Scientists' Conference. "Ecology. Person. Society" (May 17-19, 2006, Kyiv, Ukraine )

**Publisher(s):** NTUU "KPI"

**Year:** 2006

**Type of document/material:**

- Book
- Periodical
- Others– Proceedings of the Conference

**Language(s):** Ukrainian

**Keywords:** protection of flora and fauna, ecological monitoring, ecological legislation, problems of ecological education and awareness, mathematic modeling methods, efficient usage of natural resources

## VI International Conference on Intellectual Analysis of Information IAI-2006

**Date and place:** May 16-19, 2006, NTUU «KPI»

**Partnership:** Ministry of Education and Science of Ukraine, National Technical University of Ukraine «Kyiv Polytechnic Institute», Russian Association of the Artificial Intellect, UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU «KPI», Faculty of Applied Mathematics at NTUU «KPI», Institute for Applied System Analysis at NTUU «KPI», Prosvita Publishing House

**Participants:** 62 учасника

- 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

### Regional Coverage

- National
- Regional/Interregional/International

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

### Funding sources:

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	Participants fee	May 16-19, 2006	

### **3. Interuniversity Exchanges/Partnerships**

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

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)

**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

Visit of M.Zgurovsky, International Conference on the Education for Sustainable Development: Making the Way to the Knowledge Society

**Destination:** Minsk, Republic of Belarus

**Mission:** taking part in the conference and meeting the Ministers of Education of CIS countries

**Duration:** April 4 – 6, 2005



**Funding sources:**

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU «KPI»	April 4 – 6, 2005	165

**Visit of Tallinn University of Technology Delegation**

**Date and place:** April 20 2005, Ukrainian Institute for Information Technologies in Education at NTUU «KPI»

**Mission of the visit:** discussion of the possible cooperation within the UNESCO Project of the Open Virtual Campus of E-learning Centres, Technological and Engineering Universities of Central and Eastern Europe

**Funding sources:** no sponsorship provided

**Results:** cooperation within the UNESCO Project of the Open Virtual Campus of E-learning Centres, Technological and Engineering Universities of Central and Eastern Europe, possibility of new joint project implementation under the TEMPUS Programme

**Visit of M.Zgurovsky, VII Session of the UNESCO Institute for Information Technologies in Education Heads Council**

**Destination:** Moscow, Russian Federation

**Mission:** taking part in the Session work

**Duration:** June 9-11, 2005

**Funding sources:**

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU «KPI»	June 9-11, 2005	261

**International Conference on Engineering Education “Global Education Interlink”, Visit of Prof. S.Shukayev, the Secretary of the UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU «KPI»**

**Destination:** Gliwice, Poland

**Mission:** taking part in the conference

**Duration:** July 25-29, 2005

**Funding sources:**

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU «KPI»	July 25-29, 2005	700

**Visit of International Council of the Open and Distance Education Delegation (Kingdom of Norway)**

**Date and place:** November 7-12, 2005, the main academic building of the NTUU «KPI»

**Mission of the visit:** discussion of the possible ways of cooperation, taking part in the Presentation of the Central and Eastern European Virtual University (CEEVU) Coordination Centre and the Annual Meeting of Participants within the UNESCO Project of the Open Virtual Campus of E-learning Centres, Technological and Engineering Universities of Central and Eastern Europe

**Funding sources:**

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU «KPI»	November 7-12, 2005	236

**Results:** the delegation of the International Council of the Open and Distance Education headed by the General Secretary Prof. R.Roll has familiarized with potential of NTUU «KPI» and Ukrainian Institute for Information Technologies in Education (UIITE) and took part in the Presentation of the Coordination Centre within the UNESCO Project of Central and Eastern European Virtual University (CEEVU), development and introduction of the distance education were discussed

**Visit of M.Zgurovsky, World Summit on the Information Society**

**Destination:** Tunis, Tunisia

**Mission:** taking part in the Summit

**Duration:** November 12-19, 2005

**Funding sources:**

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU «KPI»	November 12-19, 2005	1931

**Visit of the UNESCO Institute for Information Technologies in Education Delegation headed by the IITE director V.Kinelev (Moscow, Russian Federation)**

**Date and place:** November 30 – December 3, 2005, the main academic building of the NTUU «KPI»

**Mission of the visit:** discussion of the ways of distance education development in Ukraine, establishing contacts with the colleagues from CIS and Baltic States

**Funding sources:**

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU «KPI»	November 30 – December 3 2005	312

**Results:** improvement of the university studying process, raising the education quality, widening of NTUU «KPI» teachers' and student' access to the educational resources, providing conditions for continuous study by means of using information and communication technologies effectively, including distance education. Providing quality education which meets the European standards, diversification of the educational services sphere by means of introduction of innovative information technologies and appearance of NTUU «KPI» in the education market of the CIS and Baltic States

**International Conference within the ERASMUS EU Industry-University Thematic Network Project, Visit of Associate Professor O.Zakhovajko, partial time support Secretary of the UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU «KPI»**

**Destination:** Tallinn, Republic of Estonia

**Mission:** taking part in the conference and reporting on the realization of the UNESCO Project "Technical and Methodological Support of Training Programme for International Project Management"

**Duration:** May 1-5, 2006

**Funding sources:**

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU «KPI»	May 1-5, 2006	300

Visit of M.Zgurovsky, 2<sup>nd</sup> Meeting of the International Ranking Expert Group (IREG): “Methodology and Quality Standards of Rankings”

**Destination:** Berlin, Germany

**Mission:** taking part in the Meeting

**Duration:** May18-21, 2006

**Funding sources:**

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU «KPI»	May 18-21, 2006	191

## 4. Publication and multimedia materials

1. Web-site of the UNESCO Chair <http://www.unesco.ntu-kpi.kiev.ua>
2. **Title:** M. Zgurovsky, Bologna process: the main principles and ways of structural reforming of higher education in Ukraine  
**Publisher(s):** Kyiv: NTUU “KPI”  
**Year:** 2006  
**Type of document/material:** book
3. **Title:** M. Zgurovsky, Ukraine still has a chance...  
**Publisher(s):** Dzerkalo Tyzhnia Newspaper, №20  
**Year:** May 28 – June 3, 2005  
**Type of document/material:** article
4. **Title:** M. Zgurovsky, Way to the information society – from Geneva to Tunis  
**Publisher(s):** Dzerkalo Tyzhnia Newspaper, №34  
**Year:** September 3 – 9, 2005  
**Type of document/material:** article
5. **Title:** Mykhailo Zgurovsky, Serhiy Sydorenko, Inna Malyukova, Serhiy Shukayev, Vyacheslav Valuysky. Central and Eastern European Virtual University (CEEVU)  
**Publisher(s):** Materials of the International Conference on Engineering Education "Global Education Interlink", (July 25-29, 2005, Gliwice, Poland)  
**Year:** 2005  
**Type of document/material:** article
6. **Title:** M. Zgurovsky, Way to society based on knowledge  
**Publisher(s):** Dzerkalo Tyzhnia Newspaper, №2  
**Year:** January 21 – 27, 2006  
**Type of document/material:** article
7. **Title:** M. Zgurovsky, Graduate pseudoeducation or contradictions of the transition period in the sphere of higher education in Ukraine  
**Publisher(s):** Dzerkalo Tyzhnia Newspaper, №6  
**Year:** February 18 – 24, 2006  
**Type of document/material:** article
8. **Title:** S. Sydorenko. Distribution of ethic and moral aspects in higher education and science: new initiative of UNESCO on European level.  
**Publisher(s):** Materials of the IV scientific and methodological conference on psychology and pedagogical subjects teaching at the technical university: methodology, experience, perspectives» (October 27-28, 2005, Kyiv, Ukraine)

**Year:** 2005

**Type of document/material:** article

9. **Title:** S. Sydorenko, Collaboration of KPI with UNO structures:  
Innovational breaks in education and science

**Publisher(s):** Kyivsky Polytechnic, №31

**Year:** October 24, 2005

**Type of document/material:** article

10. **Title:** K. Yushchenko, S. Sydorenko. Mobility in Europe: international  
programs, contests, grants, travels.

**Publisher(s):** Polytechnica

**Year:** 2005

**Type of document/material:** methodic recommendations

11. **Title:** S. Sydorenko. New UNESCO initiative: ethic and moral  
measurements for higher education and science

**Publisher(s):** Pedagogics and psychology

**Year:** 2005

**Type of document/material:** article

12. **Title:** S. Sydorenko. New realities – active measures. Ethic and moral  
measurements for higher education and science

**Publisher(s):** Stolychny region, №1

**Year:** 2005

**Type of document/material:** article

## VII. Other

### Contest for female students from Korean EWHA Womans University «International partnership program»

EWHA Womans University (Korean Republic, Seoul) opened the world-wide partnership program EWHA. This scholarship program will support 120 women – future world leaders from developing countries during the next four years.

**Duration:** September 1, 2005 – May 15, 2005

**Outputs:** under organizational support of the UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics the participation of NTUU "KPI" female students in the contest for scholar of the EWHA Womans University was provided.

**Financial support:** Scholar fully covers expences for education aw well as for accomodation for students and post-graduates.

### Students' exchange in the framework of the familiarization practice between the National Technical University of Ukraine "KPI" and the Tallinn University of Technology (Estonian Republic)

**Duration:** June 20 – July 1, 2005, July 11 – July 22, 2005

**Outputs:** Institute of Mechanical Engineering of NTUU "KPI" and the Faculty of Mechanical Engineering of TUT under the organizational support of the UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics have carried out students' exchange in the direction «Mechanotronics».

During the practice Ukrainian students had the opportunity to get familiarized with laboratories of the Faculty of Mechanical Engineering of TUT, organization of educational process, scientific works, student projects and qualified works. In the course of practice students visited leading enterprises of Tallinn in the field of mechanical engineering and instrument making, got familiarized with modern technologies of manufacture, new equipment. The practice promoted an establishment of personal contacts between students and teachers of NTUU "KPI" and TUT, that will encourage development of new public projects in a future.

#### **Publications:**

**Title:** Practice at the Tallinn University of Technology

**Publisher(s):** Kyivsky Polytechnic, №38

**Year:** December 8, 2005

**Type of document/material:**

- Book
- Periodical(газета)
- Others– materials of the conference

**Мова(и):** Ukrainian

**Ключові слова:** students' exchange, accredited laboratories, education system

**Financial support:** Was carried out on the principle of mutual compensation of expences.

## **Creation of the educational, scientific and informational complex "Evroosvita"**

On the 16th of September 2005 in Kyiv a constituent agreement on the creation of the educational, scientific and informational complex "Evroosvita" of the National Technical University of Ukraine "Kyiv Polytechnic Institute", International Non-Governmental Assosiation "Central and Eastern European Virtual University" (CEEVU), UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at the NTUU "KPI" and ESC "IASA", scientific and research institute for applied system technologies.



## 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.

## VI. Forthcoming Activities

### International Scientific and Practical conference on Printing Technology and Techniques

**Date and place:** May 30 – June 3, 2006, NTUU «KPI»

**Partnership:** under verification

### International Conference on Progressive Equipment and Technology

**Date and place:** June 22 -26, 2006, Sevastopol, Ukraine

**Partnership:** under verification

### Annual International Crimean Conference on Libraries and Information Resources in the Modern Scientific, Cultural, Education and Business World

**Date and place:** June 10 -18, 2006, NTUU «KPI»

**Partnership:** NTUU «KPI», Scientific Student Association of NTUU “KPI”

### VIII International Scientific and Practical Students', Postgraduates' and Young Scientists' Conference on System Analysis and Information Technology

**Date and place:** June 29 – July1, 2006, NTUU «KPI»

**Partnership:** NTUU «KPI», Institute for Applied System Analysis

### VIII International Scientific and Practical Conference on System Analysis and Information Technology

**Date and place:** July 10-13, 2006, NTUU «KPI»

**Partnership:** Institute for Applied System Analysis, NTUU «KPI», UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics

## International Conference on Distance Education, Annual Meeting of Virtual University Project Participants

**Date and place:** September-October 2006, Institute for Information Technologies in Education, NTUU «KPI»

**Partnership:** NTUU «KPI», UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics, Institute for Information Technologies in Education

## V International Scientific and Practical Students', Postgraduates' and Young Scientists' Conference on Corporate Management within the Transformation Economy

**Date and place:** November 2006, NTUU «KPI»

**Partnership:** under verification

## **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 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.