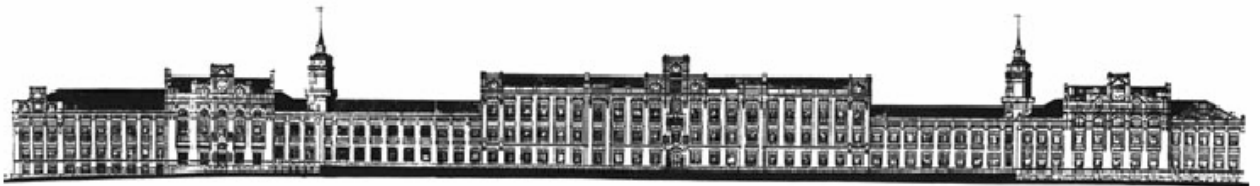




**UNITWIN/UNESCO  
CHAIRS PROGRAMME**

***PROGRESS  
REPORT  
2007-2008***

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



**NTUU “KPI” – KYIV – Ukraine  
2008**

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

**Period of Activity: 1.01.2007 – 30.06.2008**

**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 2007 – 2008 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 2 seminars, 6 international conferences and meeting were carried out with the participation of the UNESCO Chair. Two projects were realized with the support of UNESCO and UNESCO-CEPES.

Intensive interuniversity exchange within the subjects of the UNESCO Chair activity took place (11 visits).

In 2007 the start of the subsidiary of UNESCO Chair in the Research Institute of Applied Informational Technologies took place.

The UNESCO Chair activity was widely illustrated in periodical (8 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.
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<b>City</b>	Kyiv	Kyiv
<b>Country</b>	Ukraine	Ukraine
<b>Phone</b>	+38 044 236 69 13 +38 044 406 80 19	+380-44-236-69-13 +380-44-406 80 19
<b>Fax</b>	+380-44-406 80 19	+380-44-2406 80 19
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<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
Academic Secretary	Prof. Sergiy Shukayev
Partial time support Secretary	Assoc. Prof. Olexandr Zakhovaiko
Partial time support Secretary	Maksym Gladsky

#### 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

### 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 "International Preadmission Training Centre of Excellence "

**Date and place:** January 1, 2006 – December 31, 2007, UNESCO chair:  
“Higher Technical Education, Applied System Analysis And Informatics”, IASA

**Partnerships:** UNESCO; UNESCO chair: “Higher Technical Education, Applied System Analysis and Informatics”, IASA

**Participants:** 7 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		01.01.2006 – 31.12.2007	\$11400
Other contributions	NTUU “KPI”	01.01.2006 – 31.12.2007	\$25000

### **Results:**

In the frame of the UNESCO International Basic Science Programme Project 2-UA-01 entitled “International Preadmission Training Centre of Excellence” proposed by the National Technical University of Ukraine “Kyiv Polytechnic Institute”, aiming at the promotion of education in basic sciences, knowledge transfer, exchange and sharing teaching experience as well contributing to the development of joint international education programmes in basic sciences, implement a first phase of such project by developing a virtual preadmission department internet portal which should provide wide access to international resources.

**During the realization of the project the following tasks were undertaken:**

- a) The correspondent Web site pages were designed;
- b) The necessary computer equipment and license software were ordered;
- c) The Web site was put into operation (NTUU “KPI”, Kyiv, Ukraine).

Web portal is located at NTUU “KPI” server (URL is <http://www.ce-vpd.ntu-kpi.kiev.ua>).

For test entering the web portal the following user profiles:

Login: **unesco member**

Password: **umember1**

- d) The on-line system of registration for preparatory department international entrants was created;
- e) The code, illustrations, forum and the main Web site text part were elaborated;

On the Web site the following is allocated:

- The knowledge demands for the preparatory department entrants according to the general educational program of Ukraine secondary school;
- Educational programs of the preparatory department at international faculty of NTUU “KPI” were allocated;
- Demo version of correspondent multimedia training courses;
- General information which includes the conditions of the entrance and studying; demands for the entrants; the list of documents which are necessary for the reception; the list of specialities; duration and cost of studying and other additional information.

**UNESCO-CEPES and UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics joint project “Development of Conceptual Notions and Tools for Native Education Institutions Ranking Evaluation” (continuation)**

**Date and place:** since May 1, 2006, UNESCO chair subsidiary in the Research Institute for Applied Information Technologies in Cybernetic Center of National Academy of Sciences of Ukraine.

**Partnership:** UNESCO-CEPES, Institute for Applied System Analysis, UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU “KPI”, UNESCO chair subsidiary in the Research Institute for Applied Information Technologies in Cybernetic Center of National Academy of Sciences of Ukraine

**Participants:** 15 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			
Other contributions	Ukrainian Government	September 1, 2005 – August 31, 2007	6000

**Results:** with the intention to implement the project the subsidiary of the UNESCO Chair was opened in the Research institute for the Applied Informational Technologies in the Cybernetic center of the National Academy of Science of Ukraine, which allowed to involve in this activity complex ICS “Osvita” (developed in the RI AIT) which provides facilities for gathering, formation and processing data, necessary for Ukrainian higher education institutions activity Ranking evaluation.

In 2006 project “Development of Conceptual Notions and Tools for Native Education Institutions Ranking Evaluation” was presented on the competition of scientific projects of the Ministry of Education and Science of Ukraine “Investigation of Conceptual notions for Educational Institutions Evaluation and Development of System of Licensing, Accreditation and Ranking for Native



Higher Education Institutions”, where it was supported by the State Fund for Fundamental Researches.

On the March 24<sup>th</sup>, 2007 in the “Dzerkalo Tyzhnya” newspaper first results of the project were published – ranking of higher education institutions of Ukraine “Top 200 – Ukraine”, which was realized accordingly to the principles, developed by the international group of experts IREG (International Ranking Expert Group).

### International workshop "Nanotechnologies and Nanosciences, Materials and new Industrial Processes"

**Date and place:** September 24, 2007, NTUU «KPI»

**Partnership:**

- National information center for EU collaboration in science and technologies sphere at the Kyiv scientific and technical center of economic information
- National Technical University of Ukraine “Kyiv Polytechnic Institute”
- UNESCO chair: “Higher Technical Education, Applied System Analysis And Informatics”, IASA

**Participants: 54**

- Undergraduate
- Graduate students
- Academics
- Public administrators
- Employees from industry
- Teachers from primary education
- Teachers from secondary education
- Other groups (*please, specify*)

**Geographical coverage for participants and partners:**

- National
- Regional/Interregional/International

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

**Funding sources:**

Funding source	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	National information center for EU collaboration in science and technologies sphere at the Kyiv scientific and technical center of economic information	September 24, 2007	1200

## Strategy workshop for Policy Makers: Scenarios for a co-ordinated approach to sustainable S/T co-operation with the Eastern Neighbors of the EU

**Date and place:** May 15, 2008, NTUU «KPI»

### **Partnership:**

- Ministry of Education and Science of Ukraine
- National Technical University of Ukraine "Kyiv Polytechnic Institute";
- National Academy of Sciences of Ukraine
- Ministry of Education and Research of France
- Federal Ministry of Education and Research of Germany
- The National Information Center for Ukraine-EU Cooperation
- UNESCO chair: "Higher Technical Education, Applied System Analysis And Informatics", IASA
- The Scientific and Technological Research council of Turkey
- State Fund for Fundamental Research

### **Participants:** 36 participants

- Undergraduate
- Graduate students
- Academics
- Public administrators
- Employees from industry
- Teachers from primary education
- Teachers from secondary education
- Other groups (*please, specify*)

### **Geographical coverage for participants and partners:**

- National
- Regional/Interregional/International

Regions	Countries
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Ukraine, Russian Federation
Western Europe and North America	France, Finland, German Federation, Turkey, Austria, Romania, Estonia
Latin America and the Caribbean	

### **Funding sources:**

Funding source	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	National information center for EU collaboration in science and technologies sphere at the Kyiv scientific and technical center of economic information	May 15, 2008	2185

## 2. Conferences/Meetings

### X Students' scientific and practical conference "Days of Science", dedicated to the Sociology Department decade

**Date and place:** 19-20 April 2007, NTUU "KPI, Kyiv

**Partnership:**

- National Technical University of Ukraine «Kyiv Polytechnic Institute»;
- Sociology Department;
- UNESCO Chair "Higher Technical Education, Applied System Analysis And Informatics", IASA.

**Participants: 286**

- 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 sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	Sociology Department of NTUU "KPI"	19-20 April, 2007	1 000

## VI International Conference “Gyro Technology, Navigation, Movement Control and Aerospace Technical Engineering”

**Date and place:** April 26-27, 2007, on the base of NTUU “KPI”, Kyiv, UKRAINE

### **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 the NTUU “KPI”;
- National Space Agency of Ukraine;
- National Academy of Sciences of Ukraine

### **Participants: 117**

- Undergraduate
- 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	States
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Ukraine, Russian Federation
Western Europe and North America	
Latin America	

### **Funding sources:**

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	Participants fee Air and Spacecraft Systems Department at NTUU “KPI”	April 26-27, 2007	4500

## IX International Science Conference “System Analysis and Informational Technologies”

**Date and place:** 15-19 May 2007, NTUU “KPI”, Kyiv, Ukraine

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

**Participants: 347**

- 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	Iran
Asia/Pacific	
Eastern and Central Europe	Ukraine, Russian Federation, Republic of Belarus, Azerbaijan, Latvia, Georgia
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 15-19,2007	6 000

**Publications:**

**Title:** Abstracts book of IX International Science Conference “System Analysis and Informational Technologies” (15-19 May 2007, Kyiv, Ukraine)

**Publishers:** NTUU “KPI”

**Year of Publication:** 2007

**Type of document/material:**

- Book
- Periodical
- Others – Proceedings of the Conference

**Language(s):** Ukrainian

**Keywords:** system analysis, methods of analysis, intellectual decision-taking systems, progressive informational technologies.

## Congress of the Black Sea University Network «Forum on higher education»

**Date and place:** 2-5 April 2008, National Technical University of Ukraine «Kyiv Polytechnic Institute», Kyiv, Ukraine

**Partnership:** Ministry of Education and Science of Ukraine, National Technical University of Ukraine «Kyiv Polytechnic Institute», Black Sea University Network, Ukrainian Peace Council, UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU «KPI».

**Under the auspices:** of the UNESCO-CEPES.

### **Participants: 212**

- 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

<b>Regions</b>	<b>Countries</b>
Africa	
Arab States	
Asia/Pacific	
Eastern and Central Europe	Azerbaijan, Albania, Bulgaria, Armenia, Greece, Georgia, Moldova, Russian Federation, Rumania, Serbia, Ukraine, Turkey
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 Government of Ukraine	April 2-5, 2008	14000 28000

### **Publications:**

**Title:** Proceeding «Forum on higher education». Congress of the Black Sea University Network, April 2-5, 2008.- Kyiv, 2008. – 132 p.

**Publishers:** NTUU “KPI”

**Year of Publication:** 2008

**Type of document/material:**

- Book
- Periodical
- Others – Proceedings of the Conference

**Language(s):** English

**Keywords:** Black Sea Region, University Network, education, science, innovations, mobility, regional cooperation, development.

**Title:** Congress of the BSUN “Forum on higher education”

**Publishers:** Kyivsky Polytechnic, №14

**Year of Publication:** May 18, 2008

**Type of document/material:**

- Book
- Periodical (Newspaper)
- Others

**Language(s):** Ukrainian

**Keywords:** Black Sea Region, University Network, education, regional cooperation, development.

## IX International Scientific and Practical Students’, Postgraduates’ and Young Scientists’ Conference. “Ecology. Person. Society”.

**Date and place:** May 13-18, 2008, NTUU «KPI»

**Partnership:** Scientific Student Association of NTUU “KPI”, The Royal Institute of Technology (Sweden), Delft University of Technology (the Netherlands), State Polytechnic University of Catalonia, NTUU «KPI» Department for scientific and educational work, State Ecologic Inspection of the Ministry of Environmental Protection of Ukraine, NTUU “KPI” Chair in Ecology and Technology of Plant Polymers, NTUU “KPI” Chair in eco-biotechnology and bio-power engineering, UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU «KPI» and IASA

**Participants:** 201

- 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, Poland, Russian Federation,

	Republic of Belarus, Azerbaijan, Lithuania, Moldova
Western Europe and North America	Sweden, Spain, the Netherlands
Latin America and the Caribbean	

### Funding sources:

Funding sources	Type of Organisation/Institution	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	Participants fee	May 13-18, 2008	2400

### Publications:

**Title:** Proceedings of XI International Scientific and Practical Students', Postgraduates' and Young Scientists' Conference. "Ecology. Person. Society" (May 13-18, 2008, Kyiv, Ukraine )

**Publishers:** NTUU "KPI"

**Year of Publication:** 2008

**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.

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

**Publishers:** Kyivsky Polytechnic, №19

**Year of Publication:** May 30, 2008

**Type of document/material:**

- Book
- Periodical (Newspaper)
- Others

**Language(s):** Ukrainian

**Keywords:** ecological future, modern technologies, water purification, ecological education and awareness, ecological laws.

## IX International Conference "Progressive Equipment and Technology - 2008»

**Date and place:** 20-24 May 2008, on the base of National Technical University of Ukraine «Kyiv Polytechnic Institute», Kyiv, Ukraine

**Partnerships:** Ministry of Education and Science of Ukraine, Ministry of industrial policy, National Technical University of Ukraine «Kyiv Polytechnic Institute», Institute of Mechanical Engineering of the NTUU "KPI", Institute of ultra-hard materials (NAS of Ukraine), Scientific council on a mechanics rigid deformable skew field NAS of Ukraine, The Society of Mechanical Engineers at the NTUU "KPI", Public Corporation «Research Institute of Aeronautical Technology» (Ukraine), Sevastopol National Institute of Nuclear Energy and Industry, Sevastopol National Technical University, Wroclaw University of



Technology (Poland), Otto-von-Gürke University of Magdeburg, Faculty of Mechanical Engineering of University of Belgrade, Technical University of Gabrovo (Bulgaria), UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU «KPI».

**Participants: 202**

- 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, Russian Federation, Serbia, Montenegro, Poland, 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, Institute of Mechanical Engineering of the NTUU "KPI", The Society of Mechanical Engineers at the NTUU "KPI"	May 20-24, 2008	

**3. Interuniversity Exchanges/Partnership**

Visit of M.Z. Zgurovsky as the member of official delegation of Ukraine

**Date and place:** January 25 – 28, 2007, Dubai, Union Arabian Emirates

**Purpose:** discussing of mutual scale projects in state economic sector of Ukraine in common firms and companies UAE

**Funding sources:**

Funding source	Type of Organization/Institute	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU "KPI"	January 25 – 28, 2007	190

**Visit of M.Z. Zgurovsky to the headquarters of the Black Sea Universities Network (BSUN)**

**Date and place:** February 18 – 20, 2007 Constantia, Bucharest, Romania

**Purpose:** participation in negotiations with government of Romania

**Funding sources:**

Джерела фінансування	Type of Organization/Institute	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU "KPI"	February 18 – 20, 2007	117

**Visit of M.Z. Zgurovsky to the Minnesota University**

**Date and place:** March 18-24, 2007, Duluth, USA

**Purpose:** to sign the Framework Agreement between universities

**Funding sources:**

Funding source	Type of Organization/Institute	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU "KPI"	March 18-24,- 2007	500

**Visit of M.Z. Zgurovsky to the headquarter of CODATA**

**Date and place:** March 25-28- 2007, Paris, France

**Purpose:** to participate in the session of the Executive CODATA Committee

**Funding sources:**

Funding source	Type of Organization/Institute	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU "KPI"	March 25-28, 2007	412

## Visit of M.Z. Zgurovsky to the European Innovation Technologies Institute

**Date and place:** April 25-28, 2007, London, Great Britain

**Purpose:** the presentation on theme: “Sustainable development in the general context and modern situation of Ukraine”

### **Funding sources:**

Funding source	Type of Organization/Institute	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU “KPI”	April 25-28, 2007	1100

## Visit of M.Z. Zgurovsky to the Kennan Institute

**Date and place:** April 28-May 4, 2007, Washington, USA

**Purpose:** the presentation on theme: “Stable development in the general context and modern situation of Ukraine”

### **Funding sources:**

Funding source	Type of Organization/Institute	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU “KPI”	April 28 -May 4, 2007	1380

## Visit of the delegation of students to the Concordia University (Nebraska, USA). Delegation Head: the prof. Endi Langevishman

**Date and place:** May 9-24, 2007, NTUU “

**Purpose:** delivering lectures and seminars on the “Finances” in English and official relationship establishment.

### **Funding sources:**

Funding source	Type of Organization/Institute	Period	Amount (US\$)
UNESCO Contribution	Concordia University, USA		
Other contributions	NTUU “KPI”	May 9-12, 2007	200

## Visit of M. Z. Zgurovsky, International Conference “The 50<sup>th</sup> International Geophysical Year”

**Date and place:** September 15-19, 2007, Suzdal, Russian Federation

**Purpose:** to take part in the conference

**Funding sources:**

Funding source	Type of Organization/Institute	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU "KPI"	September 15-19, 2007	691

### Visit of the Vice-rector S.I. Sidorenko, The 34th Session of the General Conference of UNESCO

**Date and place:** October 18 – 26, 2007, Paris, France

**Purpose:** to participate in the 34th Session of the General Conference of UNESCO

**Funding sources:**

Funding source	Type of Organization/Institute	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	Government of Ukraine	October 18 – 26, 2007	2784

### Visit of M. Z. Zgurovsky, International Educational Fair

**Date and place:** March 6-8, 2008, Warszawa, Poland

**Purpose:** to participate in the International Educational Fair

**Funding sources:**

Funding source	Type of Organization/Institute	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU "KPI"	March 6 – 8, 2008	114

### Visit of M.Z. Zgurovsky to the headquarter of CODATA

**Date and place:** April 5-7, 2008, Paris, France

**Purpose:** to participate in the session of the executive CODATA Committee

**Funding sources:**

Funding source	Type of Organization/Institute	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU "KPI"	April 5 – 7, 2008	150

## Visit of M. Z. Zgurovsky to the Warszawa Technical University

**Date and place:** April 16-19, 2008, Warszawa, Poland

**Purpose:** to participate in the International Education Conference “Warszawa-2008”

### **Funding sources:**

Funding source	Type of Organization/Institute	Period	Amount (US\$)
UNESCO Contribution			
Other contributions	NTUU”KPI”	April 25 – 28, 2008	150

## **4. Publications and multimedia materials**

1. UNESCO Chair official web-site <http://www.unesco.ntu-kpi.kiev.ua>
2. **Title:** M.Z. Zgurovsky, N.D. Pankratova, System Analysis Theory  
**Publisher(s):** Kyiv, BHV Publishing Group  
**Year:** 2007  
**Type of document/material:** textbook for higher educational institutions
3. **Title:** Zgurovsky M.Z.: System Analysis  
**Publisher(s):** Springer Verlag Gmbh & Co.KG  
**Year:** 2007  
**Type of document/material:** Book
4. **Title:** Kyiv Polytechnica: International Aspect  
**Publisher(s):** Polytechnica Press, Newspaper №10  
**Year:** March 14 2007  
**Type of document/material:** periodical, article
5. **Title:** Scientific Park or how Ukrainian Scientist can become a Millionaire (interview with M.Z. Zgurovsky, Rector of NTUU “KPI”)  
**Publisher(s):** «Dzerkalo Tyzhnya», Newspaper №25  
**Year:** June 30 – July 6 2007  
**Type of document/material:** periodical, article
6. **Title:** At the General UNESCO Conference  
**Publisher(s):** Polytechnica Press, Newspaper №36  
**Year:** November 30 2007  
**Type of document/material:** periodical, article
7. **Title:** M.Z. Zgurovsky, D. Ikeda: Dialogues «Ukraine-Japan»  
**Publisher(s):** „Todai”, magazine, №5 (572)  
**Year:** 2008  
**Type of document/material:** periodical, article
8. **Title:** M.Z. Zgurovsky, D. Ikeda: Dialogues «Ukraine-Japan»  
**Publisher(s):** „Todai”, magazine, №6 (573)

**Year:** 2008

**Type of document/material:** periodical, article

## 5. Others

### Start of the subsidiary of UNESCO Chair in the Research Institute of Applied Informational Technologies

**Date and place:** 6 July 2007, Research Institute for Applied Informational Technologies, Kyiv

**Partnership:** NTUU “KPI”, UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics at NTUU «KPI», Institute for Applied System Analysis, Supervision Council of Research Institute for Applied Information Technologies.

The main aims of creation and further activities of UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics subsidiary in the structure of Research Institute for Applied Information Technologies are activity coordination and cooperation of efforts and possibilities of both sides with involving of the third side for development, implementation and expansion of principles of international expertise of education quality and ranking evaluation of activity of higher education institutions in Ukraine, targeted at realization of the statements of the Memorandum about cooperation between UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics and UNESCO-CEPES European centre of Higher education from 25<sup>th</sup> of April 2006.

## IV. Outcomes

NTUU “KPI” is now effectively extending the international relations, in such a way it is implementing the modern development model of the technical university as the international educational scientifically-informational complex.

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

One of the remarkable results of the UNESCO Chair’s work was the new scientific and educational programs appearance in the university, in particular, such as «Technological forecasting», «Intellectual property», «Terrorist attack opposition», «Ecologically harmless technologies», «Bioinformatics», «Mechotronics» and others. In general, 46 new specialties were introduced in the university.

Among the important activity directions the cooperation of the UNESCO Chair and UNESCO European Centre for Higher Education (UNESCO-CEPES) should be singled out. The main functions of which are treatment, introduction and

development of the international examination principles of education quality and Ukrainian higher educational institutions work rating evaluation. The result of these activities was the compiling and publishing in 2007-2008 of the rating of Higher Educational institutions of Ukraine „Top-200 Ukraine” that caused to broad discussion in the Ukrainian educational environment.

NTUU “KPI” cooperate with the UNESCO Institute for Information Technologies in Education (Moscow) by developing the projects in the sphere of distant education. The National key point of the Institute was created and the great number of projects was started in the sphere of introduction of the distant education methods in Ukraine.

Owing to the active work of the UNESCO Chair in Higher Technical Education, Applied System Analysis and Informatics the international cooperation for the last years became the integral part of NTUU “KPI” and IASA. This creates the favourable conditions for future integration in the international and, in particular, European educational, scientific and informational space and promotes introduction of the reforms, which were started with the Bologna process. It also facilitates the realization of the “Dacar activity restrictions” that has the immediate importance in the United Nations educational strategy and also for the UNESCO interim strategy on 2002-2007, program tasks of the UNITWIN/UNESCO Chair and other directions of the UNESCO activities.

## **VI. Forthcoming Activities**

### International Conference “European Council for Business Education”

**Date and place:** May 31 – June 3, 2007, Kyiv, NTUU «KPI»

**Partnership:** NTUU «KPI», International university of Finance, UNESCO Chair

### VIII International Scientific and Methodical Conference “Higher technical education: problems and prospects in the scope of Bologna process”

**Date and place:** September 21-22, 2007, Kyiv, NTUU «KPI»

**Partnership:** NTUU «KPI», UNESCO Chair

### Round table on the issues of sustainable development for the members of the Black Sea Universities Network (BSUN)

**Date and place:** June 14-16, 2007, Kyiv, NTUU «KPI»

**Partnership:** NTUU «KPI», UNESCO Chair, Black Sea Universities Network

### Forum of the higher educational institutions of the Black Sea Region Countries

**Date and place:** April 2008, Kyiv, NTUU «KPI»

**Partnership:** National Commission of Ukraine for UNESCO, Black Sea Universities Network, NTUU «KPI», UNESCO Chair

## VII. Development prospects

Medium-term strategy of United Nations Organization 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).

UNESCO Chair will go on with realization of the statements of Memorandum About Cooperation with UNESCO-CEPES from 25<sup>th</sup> April 2006 and will actively develop and implement ranking of higher education institutions of Ukraine as the instrument for evaluating quality and level of education services.

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.

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.

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.

The 34th Session of the General Conference of UNESCO approved the strategical guiding lines of development on 2008-2013. Particularly, as a result of the round table work of Ministries of education, the Communiqué was decided, which designate the reference points for participating countries in fields of education and economic development, rights of education for everybody, education and sustainable development, partner relations in the interests of education and economic development. The Communiqué marks that the education and economic development are interconnected: the improvement of standards of education promotes the economic development, which for one’s turn is the sources of resources for education.

Forthcoming activities of the UNESCO Chair in Higher Technical Education, Applied Systems Analysis and Informatics will be directed to take an active part in these strategical guiding lines realization.



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.