



Tempus



# Report about **ZNTU (P08)** activities October 2012 – March 2014

*Alexander Andrienko*

3-d ICo-op Project Meeting  
Tbilisi, Georgia,  
March, 24-25, 2014



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**Zaporizhzhya National Technical  
University**

## Setting expert Panel



First Name and Surname	Position
<b>Alexander Andrienko</b>	Assistant of rector for International Cooperation, coordinator of the project from ZNTU, Manager of Expert Panel
<b>Anatolii Prytula</b>	Professor of Software Tools Department
<b>Galyna Tabunshchyk</b>	Associate Professor of Software Tools Department
<b>Anzhelika Parkhomenko</b>	Associate Professor of Software Tools Department
<b>Vadym Onyshchenko</b>	Associate Professor of Software Tools Department
<b>Ravil Kudermetov</b>	Head of Computer Systems and Networks Department
<b>Olexii Petryshchev</b>	Associate Professor of Electronic Devices Information Technology
<b>Oleg Agarkov</b>	Head of Social Work Department

## WP1. Focus group

### Earmarked ZNTU departments involved to the project:

- HR management and Labor Economics
- Electrical Machines and Apparatuses
- Electrical drive and automation of industrial plants
- Software Tools
- Computer Systems and Networks
- Informational Technologies of electronic means
- Transport Technologies
- Machines and Technologies of Foundry Engineering
- Machines and Cutting Tools



## Established University – Enterprises Executive Board

The Board is established according to ICo-op work plan with an aim to support:

- The design of new learning programs focused on labor market needs;
- The development of the Strategy Plan for students' practical placement in enterprises;
- Selection and offering project/thesis topics in cooperation with enterprises.

### Members from the industry:

<b>Mykola Iefymenko</b>	Manager of research-and-production enterprise “Khartron-Yukom”
<b>Andrii Spakhy</b>	Manager of Automation Department of public joint-stock company “Zaporozhtransformator”
<b>Olexii Basov</b>	Manager of technical documentation division of public joint-stock company “Motor Sich”
<b>Mykola Artem'yev</b>	General director of “Sterling Group Ukraine” Ltd
<b>Olexandr Kuznetsov</b>	Manager of bureau of Internet technology and industrial design of automated production control system department of research-and-production trust “Iskra”
<b>Yevgeniy Gofman</b>	Deputy director of Ecological Systems Ltd
<b>Olena Zhytova</b>	Head of the Department of professional orientation of Zaporizhzhya region placement service

## Poll of students, teachers and employers to study their views in knowledge, skills and competence in engineering required by the labor market.

### Participated in the survey:

- 36 masters
- 29 teachers
- 28 representatives from 24 companies – employers

- |                                     |   |
|-------------------------------------|---|
| 1. Pension Fund of Ukraine,         | 13. LLC Innoveks – Ukraine,               |
| 2. SQURO,                           | 14. KP NPK Iskra,                         |
| 3. Zaporozhye College Electronics,  | 15. Metrotek,                             |
| 4. PJSC Motor Sich ,                | 16. JSC Pluton,                           |
| 5. JSC Zaporizhstal,                | 17. A2-Soft,                              |
| 6. Art - Telecom ,                  | 18. GP Ivchenko – Progress,               |
| 7. NPP Hartron-Yukom,               | 19. Ltd. Tehsnabkomplekt service,         |
| 8. Ashberrysoft,                    | 20. Privatbank ,                          |
| 9. Cupid plc,                       | 21. Zaporozhye Electrotechnical College , |
| 10. NPF Business Computer Service , | 22. Sloboda studio,                       |
| 11. JSC ZTR,                        | 23. LLC Wellink ,                         |
| 12. Impulse ,                       | 24. Quasar Horte .                        |

## Meetings project team with representatives of employers in ZNTU



Representative from JSC “Zaporozhtransformator” -  
Andriy Spakhy, from RPT “Iskra” Olexandr Kuznetsov



Representative from RPE “Khartron-Yukom”  
Mykola Iefymenko

# Teachers and students visits to the JSC Zaporozh Transformator” and JSC “DneproSpetsStal”



# The meeting of representatives of employers with students







# Students ZNTU Employment Center



<http://pks-zntu.org.ua/index.php/pratsevlashtuvannia>

# Participation of ZNTU representatives in project activities



Kick-off meeting (Ilmenau University of Technology)

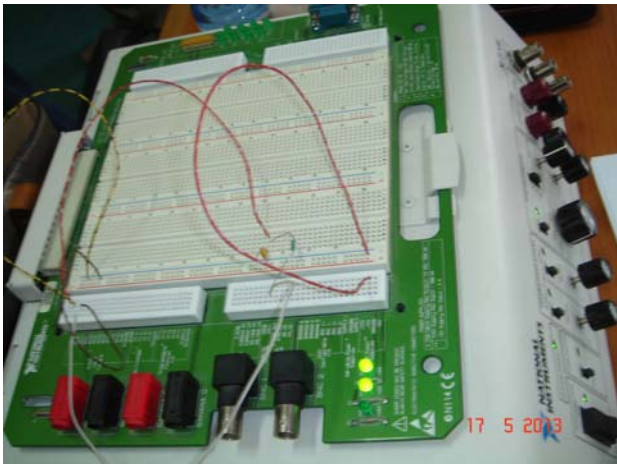
2nd project meeting (NTU "KhPI" )

# Participation of ZNTU representatives in project activities



Monitoring meeting (NTU “KhPI” ), November, 2013

# Participation in the training «Best EU practice» Transilvania University of Brasov, Romania, May, 2013



# Participation in the training «IMPROVING QUALITY IN LEARNING SERVICES USING MANAGEMENT SYSTEMS» Yerevan, Armenia, December, 2013

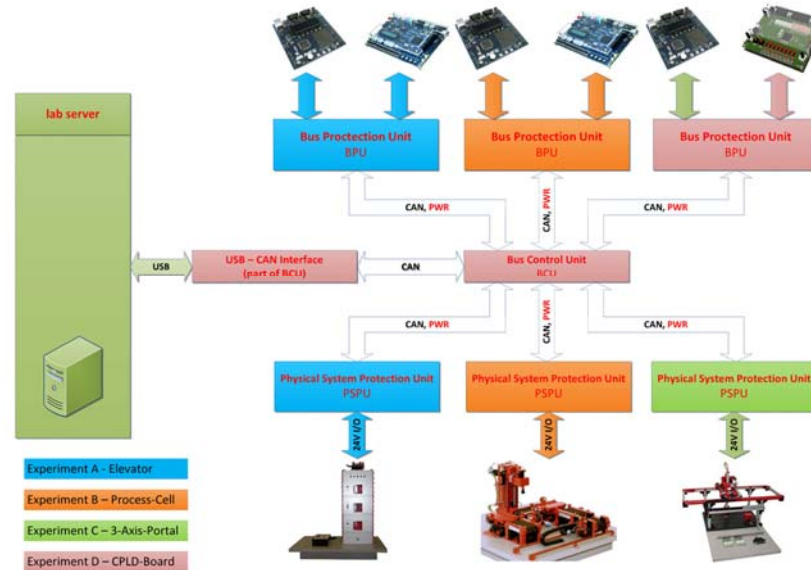
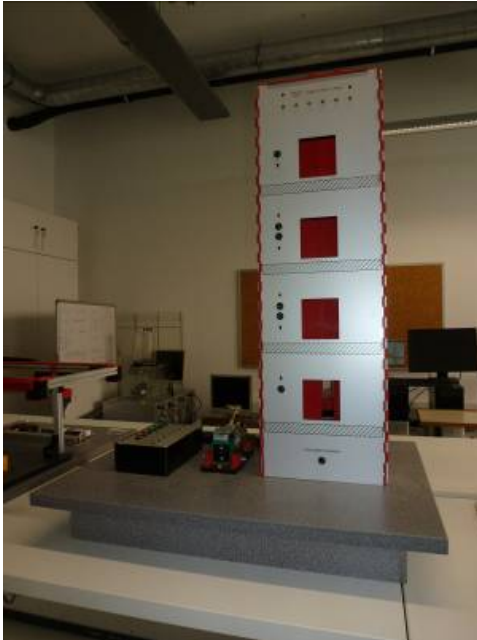


## Analysis and choice of laboratory

- **Lab *GOLDI*** (Ilmenau University of Technology)
- **WebLab-Deusto** (University of Deusto)
- **NI ELVIS lab** (University “Transilvania” )



# Lab GOLDI (Ilmenau University of Technology)





## Internship activities

- Meeting with the representatives of the TU Ilmenau Service GmbH according the delivering equipment to ZNTU
- Participation the meetings on the supporting and developing tools for the integrated online lab GOLDI
- Visiting the presentation of Students Works at the „Basic Engineering School“
- Visiting Job Fair for Students Acquaintance with the laboratories of the Communication Systems Group
- Working on teaching materials on using the SMT rapid prototyping board



# Agreement between Ilmenau University of Technology and ZNTU



**AGREEMENT**  
of Academic Cooperation between  
*Ilmenau University of Technology (Germany)*  
and  
*Zaporizhzhya National Technical University (Ukraine)*

The contracting parties agree to develop a co-operation in education and science that mutually benefits teaching staff, research workers and students of both universities.

The main purpose of this cooperation is to engage in joint scientific work in the fields of Automation Systems, Computer and Software Engineering and Remote Engineering.

**I**

In order to realise the aims mentioned above both Parties agree to carry out mobility of:

- teaching staff, research workers and students (graduate and PhD) under specified in the work-programmes of the co-operation, which will be pre-agreed in the framework of this Agreement,
- scientific publications and results in the field of science,
- knowledge in the fields of education and training teaching staff as well as advancing teaching material and applying modern teaching methods.

**II**

Both Parties agree to cooperate in research, to publish the results of joint scientific co-operation in joint scientific projects and to implement the results of the scientific work in their institutes.

**III**

Both Parties will participate in scientific conferences, seminars and similar meetings organised by either Party, in the mutual exchanges of the lecturers as well as in the creation of programmes.

**IV**

Both Parties agree to prepare work programmes for every academic year that take into account the objectives of this Agreement.

**V**

The present agreement does not exclude other forms of cooperation aimed at the development of relations between universities.

**VI**

This Agreement is made in 2 copies, in English: 1 copy for each party. All copies are identical.

**VII**

This Agreement is valid for a period of 5 years. It enters into effect from the date of its signing by the statutory representatives of both institutions. In case of a premature cancellation of this Agreement the Party that intends to cancel the Agreement has to notify the other Party in writing no less than 6 months prior to the cancellation. This agreement will be renewed automatically for the next five years unless one of the two contracting parties expresses a wish to cancel the agreement with at least 3 month notice.

All modifications and additions to this Agreement are made in written form upon mutual consent of both Parties.

**VIII**

Coordination of cooperation is assigned on the Dr.-Ing. Karsten Henke from Ilmenau University of Technology and Assoc. Prof. of Software Tools Department Galyna Tabunashchik from Zaporizhzhya National Technical University.

The agreement is signed on the "05" November, 2013 by:

<p><b>From Ilmenau University of Technology</b> Dean of the Faculty of Computer Science and Automation</p> <p> Prof. Dr.-Ing. Kai-Uwe Sattler</p>	<p><b>From Zaporizhzhya National Technical University</b> Director of the Institute of Computer Science and RadioElectronics</p> <p> Prof. Dr. D. Piza</p>
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Helmholtzplatz 5  
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98693 Ilmenau  
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Fax: +49 3677 69-5009

Address:  
Zukovskogo Str. 64  
Zaporizhzhya, 69063,  
Ukraine  
Tel +38 0617642506  
Fax +38 0617642141

Seal: 

# Agreement between Transilvania University of Brasov and ZNTU



**AGREEMENT**  
of Academic Cooperation between  
*Transilvania University of Brasov (Romania)*  
and  
*Zaporizhzhya National Technical University (Ukraine)*

The contracting parties agree to develop a co-operation in education and science that mutually benefits teaching staff, research workers and students of both universities.

The main purpose of this cooperation is to engage in joint scientific work.

**I**

In order to realise the aims mentioned above both Parties agree mobility of:

- a) teaching staff, research workers and students (graduate as specified in the work-programmes of the co-operation, within the framework of this Agreement,
- b) scientific publications and results in the field of science,
- c) knowledge in the fields of education and training (including advancing teaching material and applying modern teaching methods).

**II**

Both Parties agree to cooperate in research, to publish the results of co-operate in joint scientific projects and to implement the results of their institutes.

**III**

Both Parties will participate in scientific conferences, seminars and programmes either Party, in the mutual exchanges of the lecturers.

**IV**

Both Parties agree to prepare work programmes for every academic objectives of this Agreement.

**V**

The present agreement does not exclude other forms of cooperation development of relations between universities.

**VI**

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All modifications and additions to this Agreement are made in written form upon mutual consent of both Parties.

**VIII**

Coordination of cooperation is assigned on the vice-rector for international cooperation and Prof. Dr. Eng. Cornel Samoilă from Transilvania University of Brasov and Assoc. Prof. of Software Tools Department Galyna Tabunshchik from Zaporizhzhya National Technical University.

The agreement is signed on the 20<sup>th</sup> of June, 2013 by:

<p><b>From Transilvania University of Brasov</b> Rector</p> <p style="text-align: center;">Prof. Dr. Ioan Vasile Abrudan</p>	<p><b>From Zaporizhzhya National Technical University</b> Rector</p> <p style="text-align: center;">Prof. Dr. S. Byelko</p>
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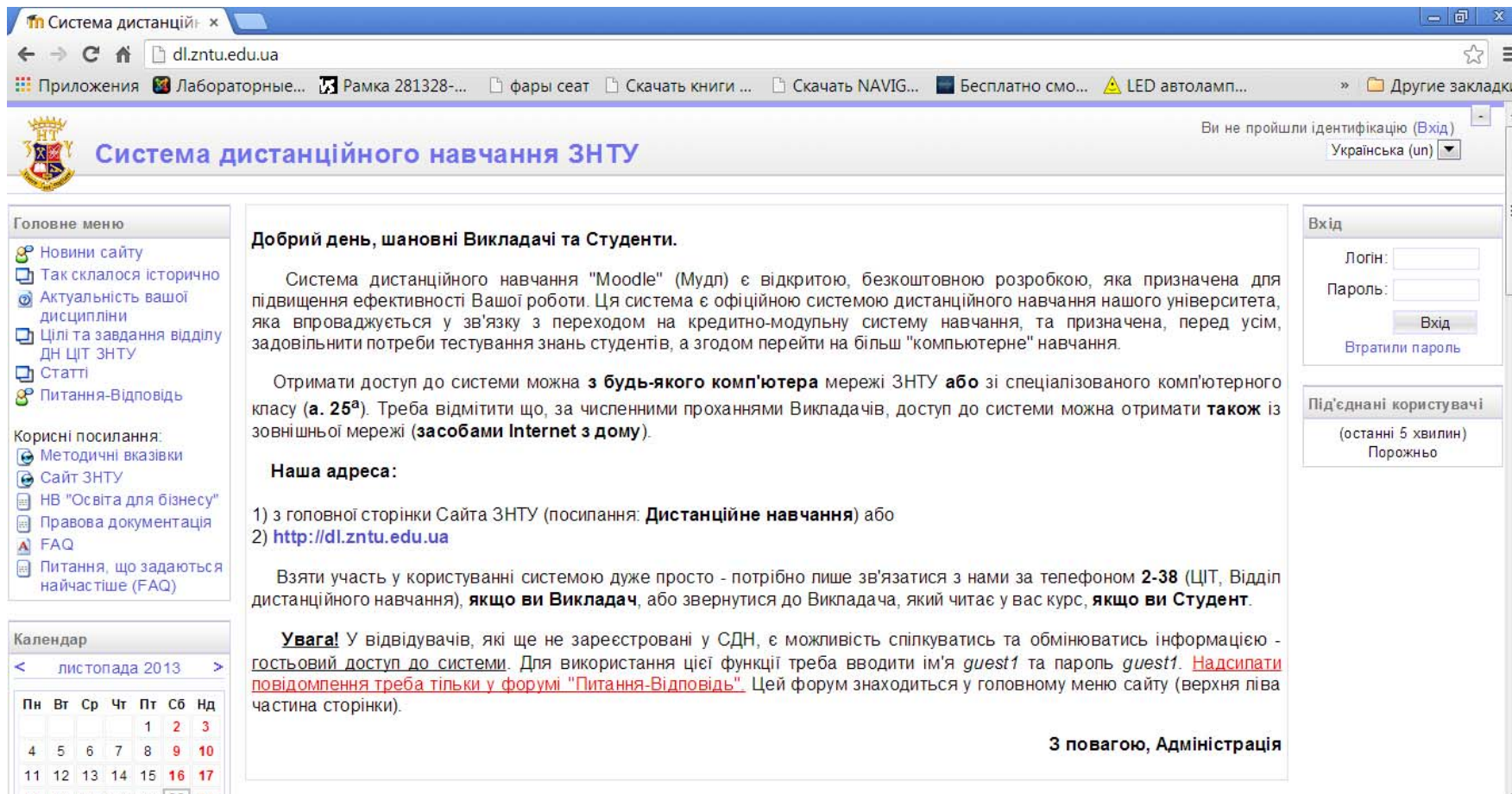
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Ukraine  
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Seal

# Moodle – Learning Management System in ZNTU



Система дистанційної навчання ЗНТУ

Ви не пройшли ідентифікацію (Вхід)  
Українська (ua)

**Головне меню**

- Новини сайту
- Так склалося історично
- Актуальність вашої дисципліни
- Цілі та завдання відділу ДН ЦІТ ЗНТУ
- Статті
- Питання-Відповідь

Корисні посилання:

- Методичні вказівки
- Сайт ЗНТУ
- НВ "Освіта для бізнесу"
- Правова документація
- FAQ
- Питання, що задаються найчастіше (FAQ)

**Календар**

листопада 2013

Пн	Вт	Ср	Чт	Пт	Сб	Нд
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17

**Добрий день, шановні Викладачі та Студенти.**

Система дистанційного навчання "Moodle" (Мудл) є відкритою, безкоштовною розробкою, яка призначена для підвищення ефективності Вашої роботи. Ця система є офіційною системою дистанційного навчання нашого університета, яка впроваджується у зв'язку з переходом на кредитно-модульну систему навчання, та призначена, перед усім, задовільнити потреби тестування знань студентів, а згодом перейти на більш "комп'ютерне" навчання.

Отримати доступ до системи можна **з будь-якого комп'ютера** мережі ЗНТУ **або** зі спеціалізованого комп'ютерного класу (**a. 25<sup>a</sup>**). Треба відмітити що, за численними проханнями Викладачів, доступ до системи можна отримати **також** із зовнішньої мережі (**засобами Internet з дому**).

**Наша адреса:**

- з головної сторінки Сайта ЗНТУ (посилання: **Дистанційне навчання**) або
- <http://dl.zntu.edu.ua>**

Взяти участь у користуванні системою дуже просто - потрібно лише зв'язатися з нами за телефоном **2-38** (ЦІТ, Відділ дистанційного навчання), **якщо ви Викладач**, або звернутися до Викладача, який читає у вас курс, **якщо ви Студент**.

**Увага!** У відвідувачів, які ще не зареєстровані у СДН, є можливість спілкуватись та обмінюватись інформацією - гостьовий доступ до системи. Для використання цієї функції треба вводити ім'я *guest1* та пароль *guest1*. **Надсилати повідомлення треба тільки у форумі "Питання-Відповідь"**. Цей форум знаходиться у головному меню сайту (верхня ліва частина сторінки).

**З повагою, Адміністрація**

**Вхід**

Логін:

Пароль:

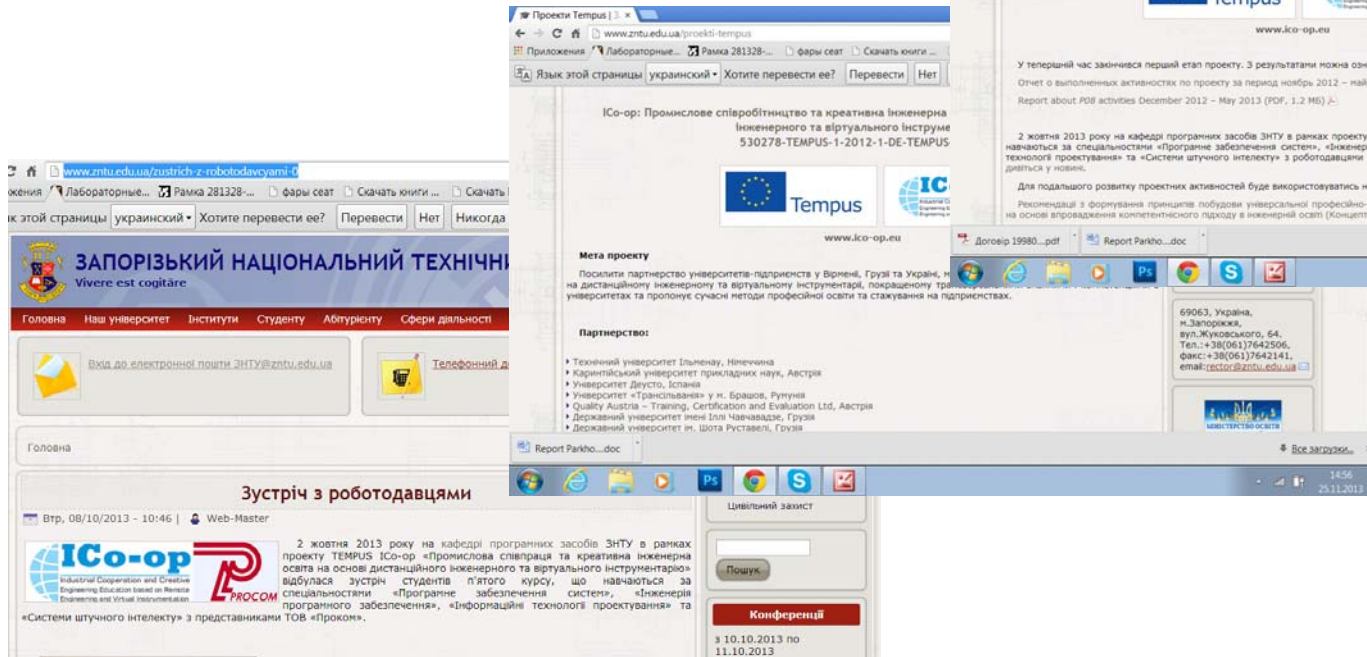
[Втратили пароль](#)

**Під'єднані користувачі**

(останні 5 хвилин)  
Порожньо

# Dissemination of project results (1-year)

[www.ico-op.eu](http://www.ico-op.eu)



The collage displays several screenshots related to the ICo-op project dissemination:

- Top Left:** Screenshot of the ICo-op website home page, showing the logo and navigation menu.
- Top Right:** Screenshot of a project page titled "ІСo-ор: Промислове співробітництво та креативна інженерна освіта на основі дистанційного інженерного та віртуального інструментарію". It features logos for Tempus and ICo-op, and lists project documents.
- Middle Left:** Screenshot of a meeting announcement titled "Зустріч з роботодавцями" (Meeting with employers), dated 08/10/2013.
- Middle Right:** Screenshot of a project page titled "ІСo-ор: Промислове співробітництво та креативна інженерна інженерного та віртуального інструментарію 530278-TEMPUS-1-2012-1-DE-TEMPUS". It includes a "Мета проекту" (Project goal) and a list of "Партнерство:" (Partnership) institutions.
- Bottom:** Screenshot of a meeting announcement titled "Зустріч з роботодавцями" (Meeting with employers), dated 10.10.2013.

<http://zntu.edu.ua/zustrich-z-robotodavcyami-0>

<http://www.zntu.edu.ua/?q=node/2044>

<http://www.zntu.edu.ua/proekti-tempus>

<http://www.zntu.edu.ua/uchast-zntu-u-proektah-programi-tempus>

## Publications of project results (1-year)

- XII International Conference “The Experience of Designing and application of CAD Systems in Microelectronics (CADSM 2013)”, Polyana Svalyava (Zakarpattya), February 2013
- IX International Conference “PERSPECTIVE TECHNOLOGIES AND METHODS IN MEMS DESIGN (MEMSTRCH 2013)”, Polyana Svalyava (Zakarpattya) , April 2013
- Annual scientific-practical conference ZNTU «Science Week 2013», Zaporizhzhya, April 2013

International scientific-practical conference "PRACTICE AND PROSPECTS OF PARTNERSHIP IN HIGHER EDUCATION“, Donetsk, April 2013

International Conference “Quality strategy in industry and education“, Varna, Bulgaria, May - June 2013

- International Conference "Cooperation between universities and enterprises in the field of IT outsourcing (ICCUBITO 2013)“, Kharkov, June 2013
- The 7th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems Technology and Applications (IDAACS 2013), Berlin, September 2013
- Article in scientific journal «Naukovi pratsi DonNTU» Series: Informatics, Cybernetics and Computer Science



## Publications of project results (2-year)

- XI International Conference on Remote Engineering and Virtual Instrumentation (REV2014), Porto, Portugal, February, 2014

- XII International Conference “Modern Problems of Radio Engineering, Telecommunications and Computer Science” Lviv, Ukraine, February- March, 2014



# Inter TEMPUS coaching at REV2014 Conference, Porto, 27 February, 2014





# Inter TEMPUS coaching, ZNTU meeting, Zaporizhzhya, 20 March, 2014



## ZNTU activities on purchasing and delivery lab REAL equipment

1. Consultations with local custom broker, getting ZNTU accounting card for transactions with goods (October, 2013)
2. Discussion of server configuration required for the functioning of the *GOLDI* laboratory, negotiation with Ukrainian suppliers of hardware (November-December, 2013)
3. Getting of projects registration card (January, 2014)
4. Signing an Delivery agreement with GMBH (February, 2014)

## Open Questions

### 1) Study of documents provided by the project partners:

- Guide of initiation ICo-op VET Programme (Conceptual Design) (NTU “KhPI” )
- Module specifications (University of Deusto)

### 2) Development of learning modules using laboratory GOLDI infrastructure:

- Control System of Electrical Machines and Apparatuses (Michael Poliakov)
- Technologies and systems of virtual engineering (Anzhelika Parkhomenko, Olga Gladkova)
- Quality of Informational Systems (Galina Tabunshchyk)

### 3) Development of transversal learning module:

- HR Management of innovative enterprises (Elena Vasilieva, Andrei Sokolov, Andrei Karpenko, Denis Vasilychev)

### 4) Preparations for the Annual scientific-practical conference ZNTU

«Science Week 2014», Zaporizhzhya, April 2014

### 5) Preparations for the Scientific-practical conference «Modern Problems and Achievements of Radio Engineering, Telecommunications and Information Technology», Zaporizhzhya, September, 2014

### 6) Coordination of the documentation for the delivery of a remote lab GOLDI equipment to ZNTU

## Contact Information

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# THANK YOU!

