



Tempus



Report about **ZNTU (P08)** activities

June 2015 – April 2016

Anzhelika Parkhomenko

ICo-op – project meeting Kiev, Ukraine, 01. 04. 2016

***Zaporizhzhya National Technical
University***

Activities of **P08 (ZNTU)** June 2015 – March 2016

Date	Activities	Results
Jul.2015	Pilot teaching results summarizing	Courses translation, modification and improvement
Aug.-Sept.2015	Preparation of the book «Remote and virtual tools in engineering» (UA)	Edition of the book
Oct. 2015	Project conference, Bilbao, Spain	Report on ZNTU web-site
Oct. 2015	Master class by Karsten Henke. Remote lab GOLDI assembling and maintenance in new room.	New «Laboratory of Remote engineering» in ZNTU, room 53a
Nov.2015- Feb.2016	Preparation of students textbook «Remote and virtual tools in engineering» (EN)	Textbook layout
Feb.2016	Participation at REV2016 conference	Proceedings of the conference
Jul.2015- March. 2016	Dissemination and publication of project results	Information on ZNTU web-site, flyer and articles edition

Pilot teaching (March-June 2015) results summarizing: topics, participants, Certificates

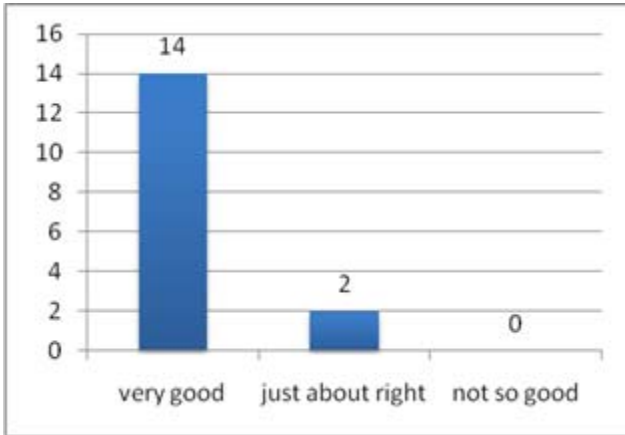
- **Learning modules**
- Control System of Electrical Machines and Apparatuses
- Technologies and systems of virtual and remote engineering
- Quality of Informational Systems
- HR Management of innovative enterprises
- **47 participants** - representatives of 21 Zaporizhzhya companies and enterprises, ZNTU teachers and master students
- **78 training Certificates**



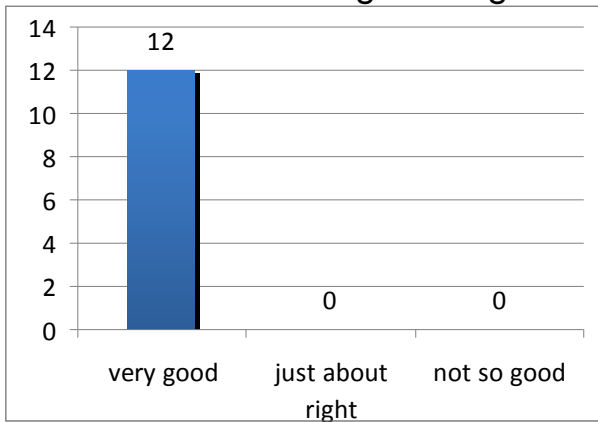
<http://www.zntu.edu.ua/pilotne-navchannya-za-planom-mizhnarodnogo-proektu-tempus-ico-op>

<http://www.zntu.edu.ua/pidsumky-pilotnogo-navchannya-za-programoyu-mizhnarodnogo-osvitnogo-proektu-tempus-ico-op>

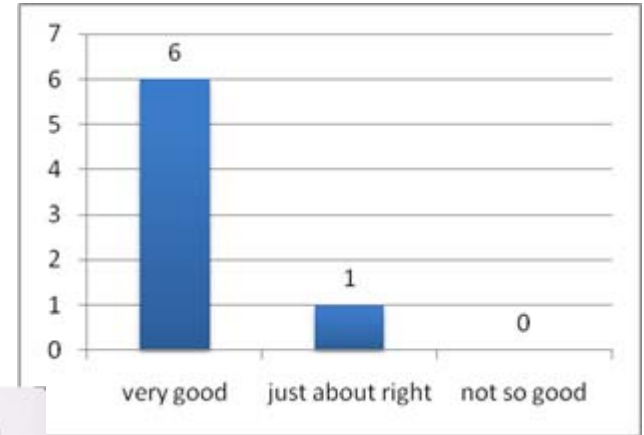
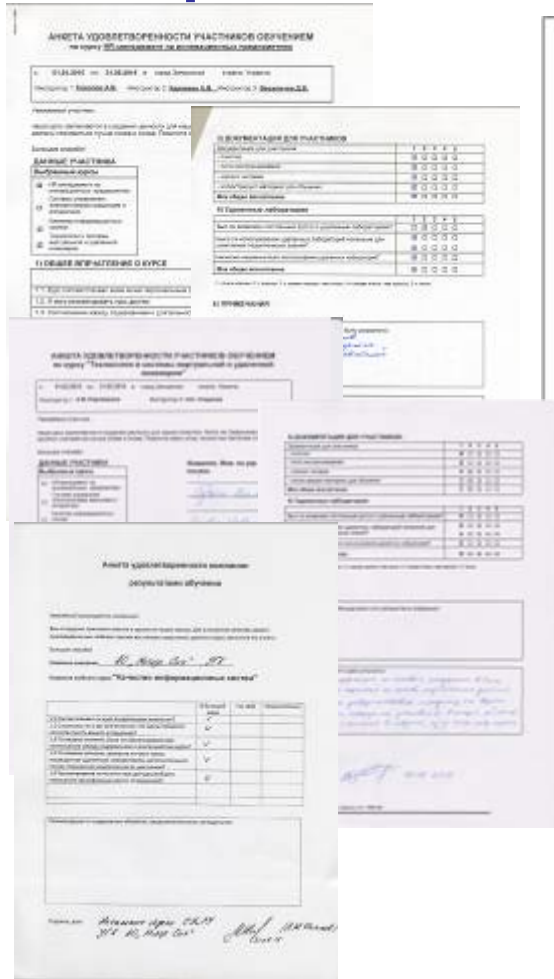
Pilot teaching (March-June 2015) results summarizing : feedback from industrial partners



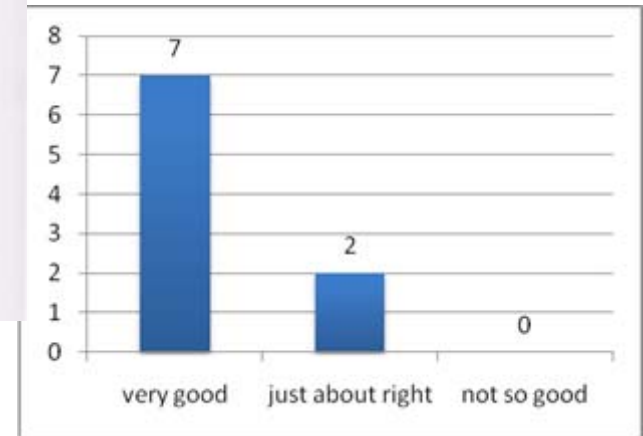
Technologies and systems of virtual and remote engineering



Control System of Electrical Machines and Apparatuses

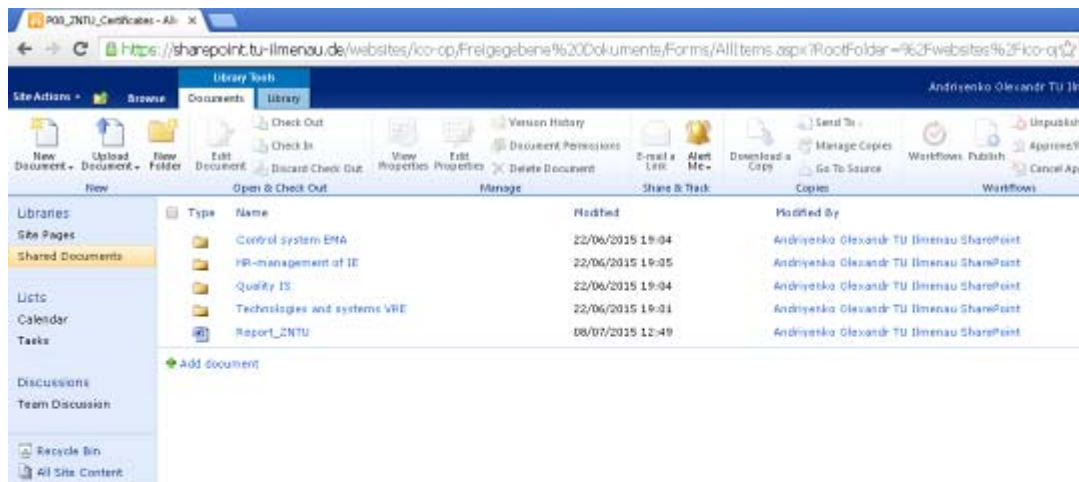


Quality of Informational Systems

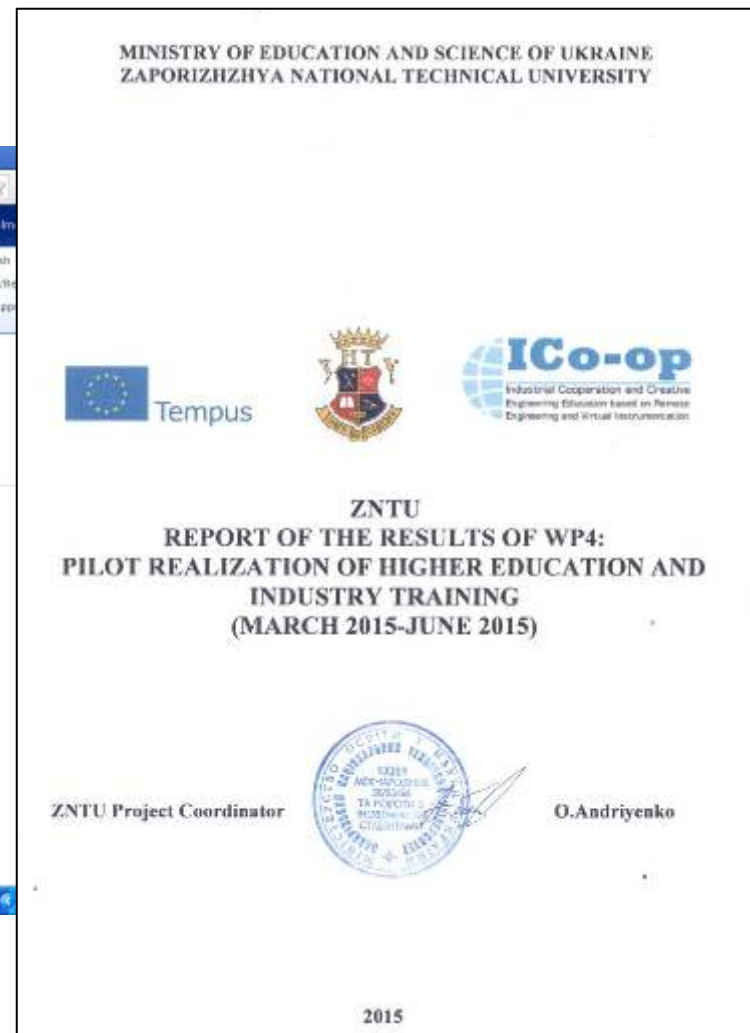


HR Management of innovative enterprises

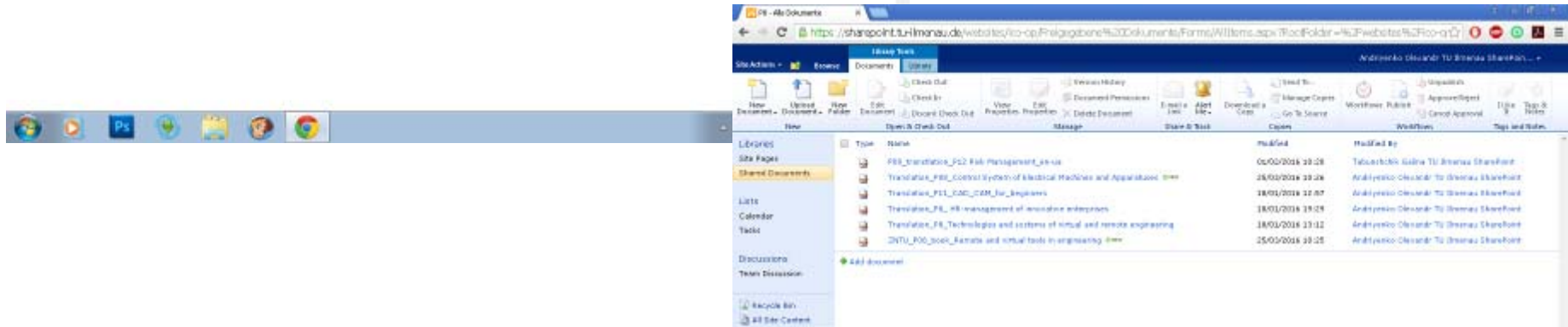
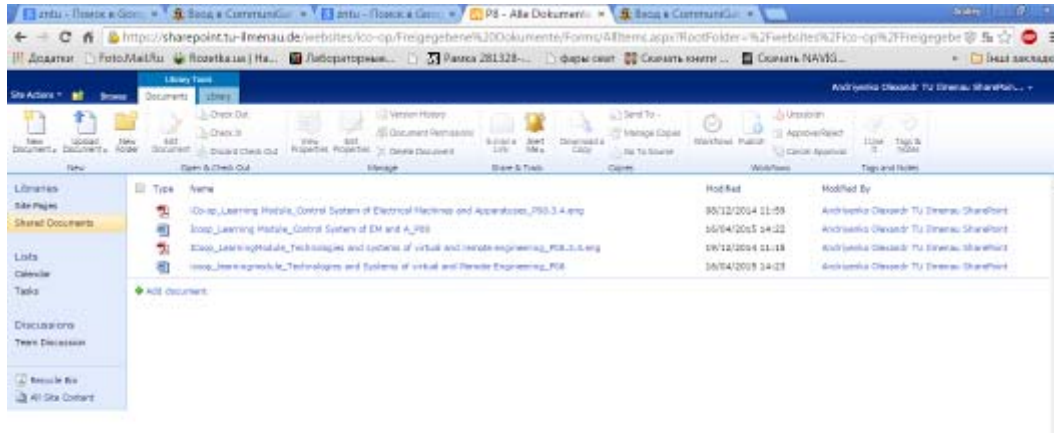
Pilot teaching (March-June 2015) results summarizing : evaluation report about trainings and Certificates on sharepoint



<http://sharepoint.tu-ilmenau.de/>



Pilot teaching (March-June 2015) results summarizing : learning modules in English and Ukrainian on sharepoint



<http://sharepoint.tu-ilmenau.de/>



Preparation of ZNTU report for project conference (October, 8-10, 2015, Bilbao, Spain)



<http://sharepoint.tu-ilmenau.de/>

Project coordinator Karsten Henke visit to ZNTU (October, 22, 2015): awarding of Certificates to best master students and learning modules authors



<http://zntu.edu.ua/?q=node/3965>

Project coordinator Karsten Henke visit to ZNTU (October, 22, 2015): master class, assembling, maintenance of the laboratory GOLDI in new ZNTU «Laboratory of remote engineering» (room 53a).

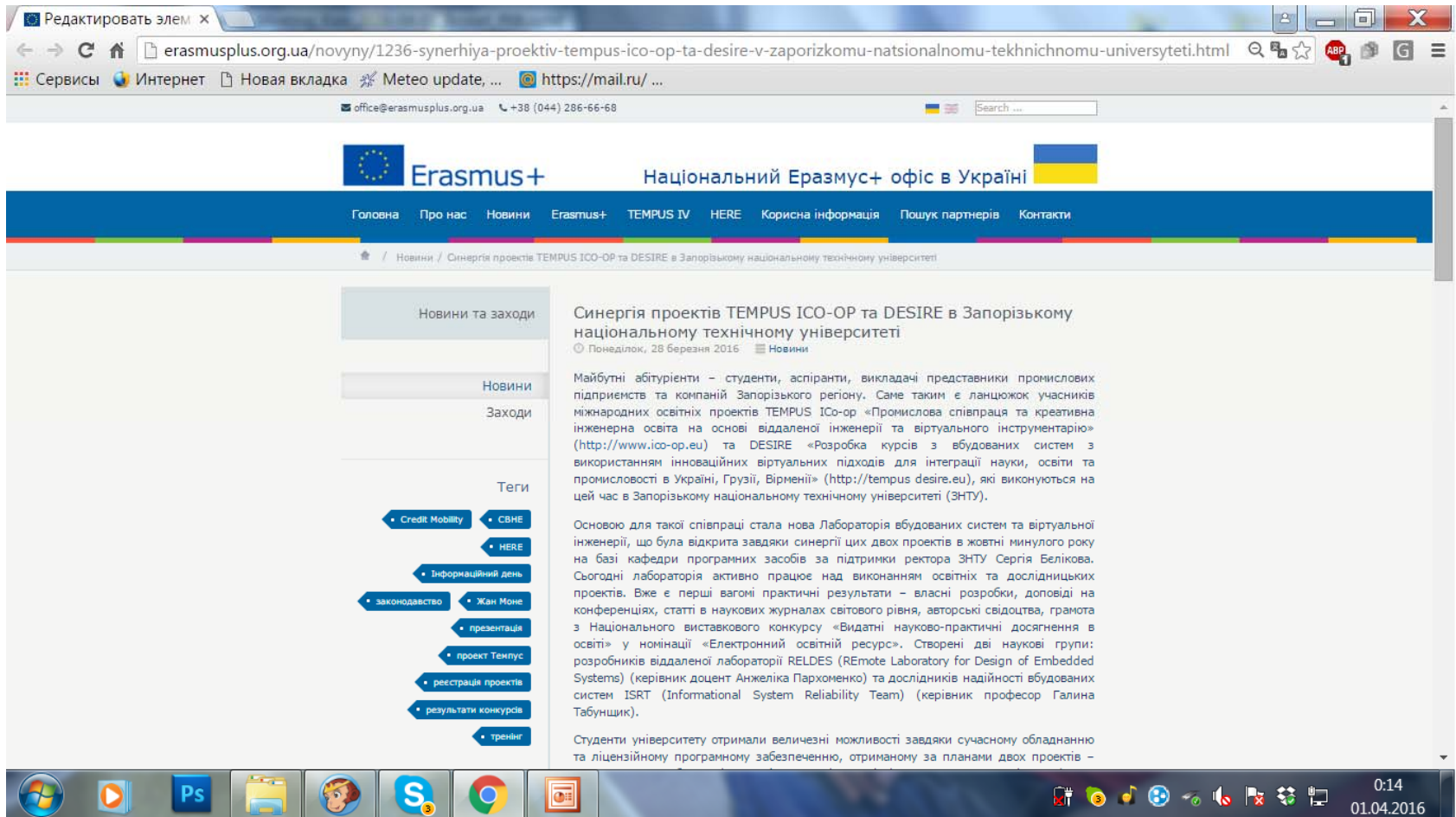


<http://zntu.edu.ua/?q=node/3965>

Dissemination of project results: meetings with foreign guests and scholars



Dissemination of project results: National Erasmus+ Office in Ukraine web-site



Редактировать элем x

erasmusplus.org.ua/novyny/1236-synerhiya-proektiv-tempus-ico-op-ta-desire-v-zaporizkomu-natsionalnomu-tekhnichnomu-universyteti.html

Сервисы Интернет Новая вкладка Meteo update, ... https://mail.ru/ ...

office@erasmusplus.org.ua +38 (044) 286-66-68

Erasmus+ Національний Еразмус+ офіс в Україні

Головна Про нас Новини Erasmus+ TEMPUS IV HERE Корисна інформація Пошук партнерів Контакти

Новини / Синергія проектів TEMPUS ICO-OP та DESIRE в Запорізькому національному технічному університеті

Новини та заходи

Новини

Заходи

Теги

- Credit Mobility
- СВНЕ
- HERE
- Інформаційний день
- законодавство
- Жан Моне
- презентація
- проект Темпус
- реєстрація проектів
- результати конкурсів
- тренінг

Синергія проектів TEMPUS ICO-OP та DESIRE в Запорізькому національному технічному університеті

Понеділок, 28 Березня 2016

Майбутні абітурієнти – студенти, аспіранти, викладачі представники промислових підприємств та компаній Запорізького регіону. Саме таким є ланцюжок учасників міжнародних освітніх проектів TEMPUS ICo-op «Промислова співпраця та креативна інженерна освіта на основі віддаленої інженерії та віртуального інструментарію» (<http://www.ico-op.eu>) та DESIRE «Розробка курсів з вбудованих систем з використанням інноваційних віртуальних підходів для інтеграції науки, освіти та промисловості в Україні, Грузії, Вірменії» (<http://tempus-desire.eu>), які виконуються на цей час в Запорізькому національному технічному університеті (ЗНТУ).

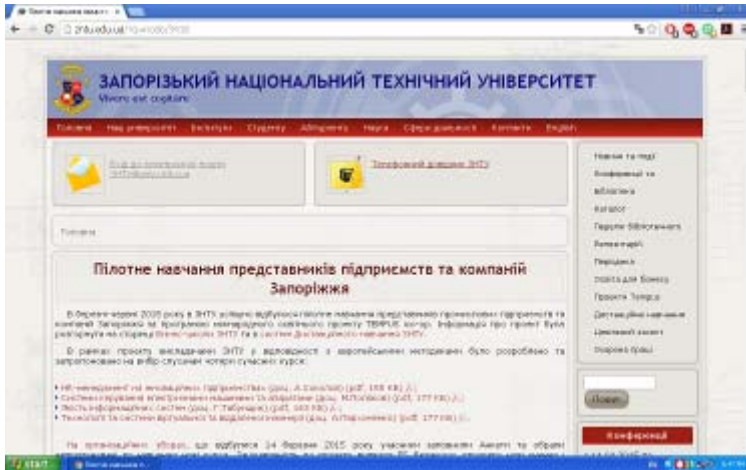
Основою для такої співпраці стала нова Лабораторія вбудованих систем та віртуальної інженерії, що була відкрита завдяки синергії цих двох проектів в жовтні минулого року на базі кафедри програмних засобів за підтримки ректора ЗНТУ Сергія Белікова. Сьогодні лабораторія активно працює над виконанням освітніх та дослідницьких проектів. Вже є перші вагомі практичні результати – власні розробки, доповіді на конференціях, статті в наукових журналах світового рівня, авторські свідоцтва, грамота з Національного виставкового конкурсу «Видатні науково-практичні досягнення в освіті» у номінації «Електронний освітній ресурс». Створені дві наукові групи: розробників віддаленої лабораторії RELDES (REmote Laboratory for Design of Embedded Systems) (керівник доцент Анжеліка Пархоменко) та дослідників надійності вбудованих систем ISRT (Informational System Reliability Team) (керівник професор Галина Табуншик).

Студенти університету отримали величезні можливості завдяки сучасному обладнанню та ліцензійному програмному забезпеченню, отриманому за планами двох проектів –

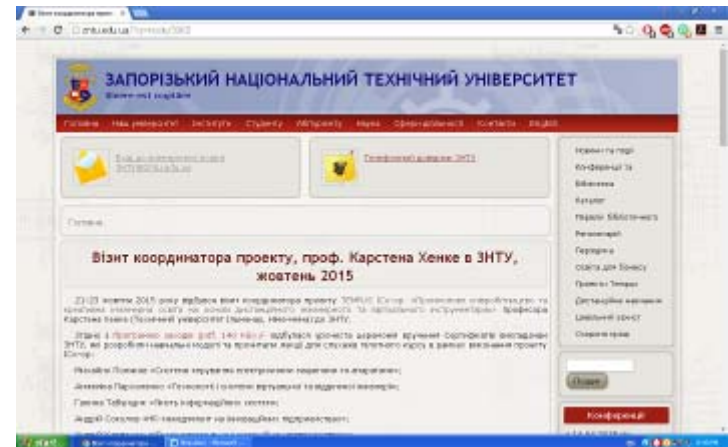
0:14
01.04.2016

<http://erasmusplus.org.ua/novyny/1236-synerhiya-proektiv-tempus-ico-op-ta-desire-v-zaporizkomu-natsionalnomu-tekhnichnomu-universyteti.html>

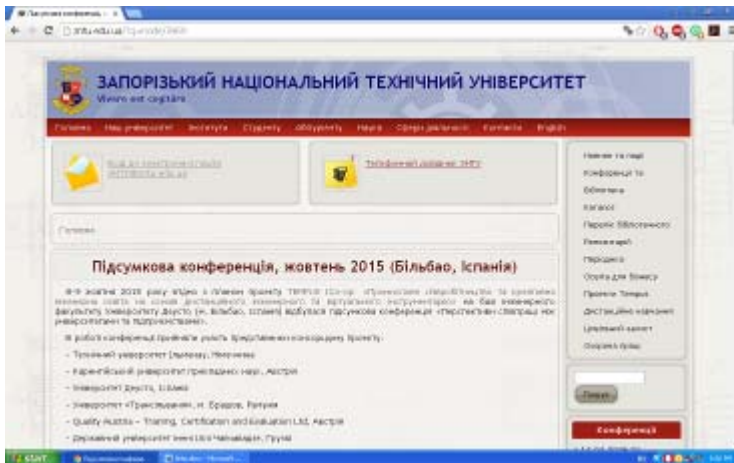
Dissemination of project results: ZNTU web-site



<http://zntu.edu.ua/?q=node/3418>



<http://zntu.edu.ua/?q=node/3965>



<http://zntu.edu.ua/?q=node/3965>



<http://www.zntu.edu.ua/pidsumky-pilotnogo-navchannya-za-programoyu-mizhnarodnogo-osvitnogo-proektu-tempus-ico-op>

Dissemination of project results: flyer edition

 2006-2009	 2010-2013	 2012-2016
EU-UA JOINT MASTER COURSE IN SOFTWARE ENGINEERING	PRACTICE ORIENTED MASTER PROGRAMMES IN ENGINEERING IN RU, UA, UZ	INDUSTRIAL COOPERATION AND CREATIVE ENGINEERING EDUCATION BASED ON REMOTE ENGINEERING AND VIRTUAL INSTRUMENTATION
JEP-26182-2005	510920-Tempus-1-2010-1-De-Tempus-JPCR	530278-TEMPUS-1-2012-1-DE-TEMPUS-JPHES

Main results:
 New Curriculum & Syllabi (11 disciplines) for Master Degree in specialty «Automated systems software»
 New laboratory of Software Engineering (room 58)
 Staff training in EU universities (9 teachers)
 EU-UA Master Degree diplomas (5 students)



Main results:
 New Syllabi (9 disciplines) for Master Degree in specialties «Systems software» and «Information technology of design»
 New laboratory of CAD/CAM/CAE with licensed software Altium Designer and Creo (room 57)
 Staff training in EU universities (5 teachers)
 Distance pilot teaching «Modern TRIZ» (7 students)
 Publishing of four students' textbooks
 Agreements on cooperation with enterprises: Motor Sich, Khartron-TUJDM, Zaporozhtransformator



[HTTP://WWW.PROMENG.EU/](http://www.promeng.eu/)
[HTTP://PROMENG.ZNTU.EDU.UA/](http://promeng.zntu.edu.ua/)

Main results:
 New Syllabi (4 disciplines) for industrial enterprises staff
 New laboratory of Remote engineering (room 53a)
 Staff training in EU universities (5 teachers)
 Pilot teaching for representatives of enterprises and companies, ZNTU teachers and students (47 participants, 78 training certificates)
 Students' textbooks publishing (Ukrainian/English languages)
 Agreements on cooperation with companies: PROCOM, Brig Retail



[HTTP://WWW.ICO-OP.EU](http://www.ico-op.eu)
[HTTP://ZNTU.EDU.UA/?0=NODE/2126](http://zntu.edu.ua/?0=NODE/2126)

 2013-2016	2016-2020	 Co-funded by the Tempus Programme of the European Union
DEVELOPMENT OF EMBEDDED SYSTEM COURSES WITH IMPLEMENTATION OF INNOVATIVE VIRTUAL APPROACHES FOR INTEGRATION OF RESEARCH, EDUCATION AND PRODUCTION IN UA, GE, AM	ERASMUS + KEY ACTION 1 2015-1-BE02-KA107-012245 KU LEUVEN (BELGIUM)	ZAPORIZHZHYA NATIONAL TECHNICAL UNIVERSITY
544091-TEMPUS-1-2013-1-BE-TEMPUS-JPCR	Main results: Second cycle / Student mobility for studies to KU Leuven from ZNTU (spring semester 2016, three students) Staff mobility for teaching to KU Leuven from ZNTU (spring semester 2016, 1 prof. of Software Tools department) Third cycle / Student mobility for studies to KU Leuven from ZNTU (fall semester 2015/spring semester 2016, two PhD students) Agreements on cooperation: Inter-institutional agreement 2015-2017 between ZNTU and KU Leuven Bilateral agreement for Academic cooperation between Ilmenau University of Technology (Germany) and Zaporizhzhya National Technical University (Ukraine) Bilateral agreement for Academic cooperation between Thomas More Mechelen Antwerpen (Belgium) and Zaporizhzhya National Technical University (Ukraine) Bilateral agreement for Academic cooperation between Slovak University of Agriculture in Nitra (Slovak) and Zaporizhzhya National Technical University (Ukraine) Bilateral agreement for Academic cooperation between University of Konstantin Phylosofer in Nitra (Slovak) and Zaporizhzhya National Technical University (Ukraine) Bilateral agreement for Academic cooperation between Transilvania University of Brasov (Romania) and Zaporizhzhya National Technical University (Ukraine)	SOFTWARE TOOLS DEPARTMENT TEMPUS & ERASMUS+

Main results:
 New Syllabi (17 disciplines) for Bachelor and Master Degree in specialties «Systems' software», «Information technology of design» and «Artificial intelligence systems»
 New laboratory of Embedded systems (room 53a)
 Staff training in EU universities (5 teachers)
 Pilot teaching for ZNTU teachers and students
 Publishing of three students' textbooks
 Agreements on cooperation with companies: AKTIV, Noosphere Ventures, Livestream LLC



[HTTP://ZNTU.EDU.UA/?0=NODE/2198](http://zntu.edu.ua/?0=NODE/2198)
[HTTP://TEMPUS-DESIRE.EU/](http://tempus-desire.eu/)

**SOFTWARE TOOLS DEPARTMENT
TEMPUS & ERASMUS+**



**10
YEARS EXPERIENCE
2006-2016**



64, ZHUKOVSKY STR., ZAPORIZHZHYA 69003 UKRAINE WWW.ZNTU.EDU.UA
 041 884 740100/041884740100 FAX 041884 740100/041884740100

Dissemination of project results: XIII International Conference on Remote Engineering and Virtual Instrumentation (REV2016), February, 24-26, 2016



International Conference **REV**

Publications of project results: Proceedings of XIII International Conference on Remote Engineering and Virtual Instrumentation (REV2016)

- Remote laboratory for teaching of control systems design as an integrated system/
K. Henke, M. Poliakov, T. Larionova , G. Tabunshchyk, A. Parkhomenko, pp.333-340.
- Reusable Solutions for Embedded Systems Design A. Parkhomenko,
O. Gladkova, A. Sokolyanskii, V. Shepelenko, Y. Zalyubovskiy, pp. 313-317
- Remote Experiments For Reliability Studies Of Embedded Systems/
G. Tabunshchyk, D. Van Merode , P. Arras , K. Henke, pp. 68-71.



REV2016 24-26 February 2016, UNED, Madrid, Spain

Publications of project results: books and scientific articles



p-ISSN 1407-3274
e-ISSN 2313-488X



**ВІДАЛЕНИЙ ТА ВІРТУАЛЬНИЙ
ІНСТРУМЕНТАРІЙ
В ІНЖИНІРИНГУ**
монографія

Запоріжжя
2015



ISSN 2328-2231 (Print)
DOI: 10.17265/2328-2231

From Knowledge to Wisdom

**Journal of
Control Science
and Engineering**

Volume 3, Number 2, Mar-Apr 2015



National Technical University
"Kharkiv Polytechnic Institute"

**INNOVATIVE
ENTREPRENEURSHIP**

Textbook

Edited by Prof. Olga Savchenko



Project 530278-TEMPUS-1-2012-DE-TEMPUS-JPHES «ICo-op»: Industrial Cooperation and Creative Engineering Education based on Remote Engineering and Virtual Instrumentation



Co-funded by the
Tempus Programme
of the European Union

Kharkiv 2016



Nation
Univer
Polytec

Iliia St

State
Univer
(Polytec

Zaporizhzhya National
Technical University
(Ukraine)



ISBN 978-617-7229-28-4

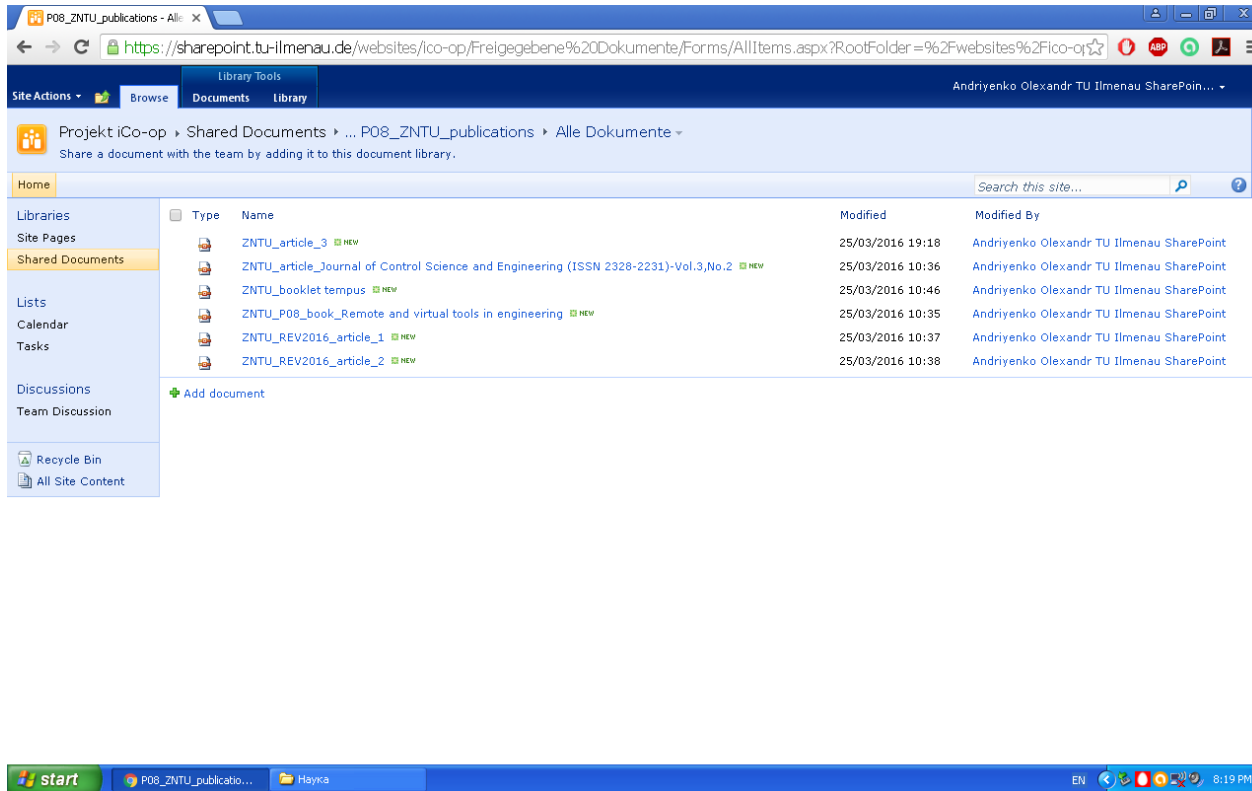
The textbook is prepared by a team of authors who are participants of the international TEMPUS Project «ICo-op»-Industrial Cooperation and Creative Engineering Education based on Remote Engineering and Virtual Instrumentation

This project is co-funded by the European Commission. The information and views set out in this deliverable are those of the author(s) and do not necessarily reflect the official opinion of the European Union. Neither the European Union institutions and bodies nor any person acting on their behalf may be held responsible for the use which may be made of the information contained therein.



Co-funded by the
Tempus Programme
of the European Union

Publications of project results by P08 (ZNTU) on sharepoint



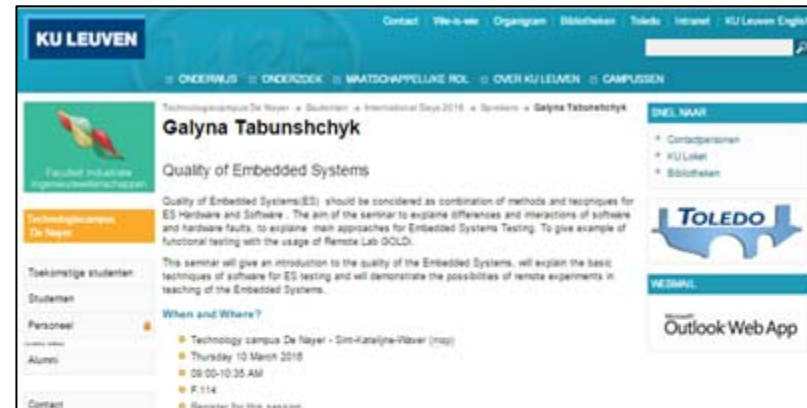
The screenshot displays a SharePoint document library interface. The browser address bar shows the URL: <https://sharepoint.tu-ilmenau.de/websites/ico-op/Freigegebene%20Dokumente/Forms/AllItems.aspx?RootFolder=%2Fwebsites%2Fico-op>. The page title is "Projekt iCo-op > Shared Documents > ... P08_ZNTU_publications > Alle Dokumente". The left sidebar contains navigation options: Home, Libraries, Site Pages, Shared Documents, Lists, Calendar, Tasks, Discussions, Team Discussion, Recycle Bin, and All Site Content. The main content area shows a table of documents:

Type	Name	Modified	Modified By
	ZNTU_article_3	25/03/2016 19:18	Andriyenko Olexandr TU Ilmenau SharePoint
	ZNTU_article_Journal of Control Science and Engineering (ISSN 2328-2231)-Vol.3, No.2	25/03/2016 10:36	Andriyenko Olexandr TU Ilmenau SharePoint
	ZNTU_booklet tempus	25/03/2016 10:46	Andriyenko Olexandr TU Ilmenau SharePoint
	ZNTU_P08_book_Remote and virtual tools in engineering	25/03/2016 10:35	Andriyenko Olexandr TU Ilmenau SharePoint
	ZNTU_REV2016_article_1	25/03/2016 10:37	Andriyenko Olexandr TU Ilmenau SharePoint
	ZNTU_REV2016_article_2	25/03/2016 10:38	Andriyenko Olexandr TU Ilmenau SharePoint

At the bottom of the table, there is a link: [Add document](#). The Windows taskbar at the bottom shows the Start button, the active window title "P08_ZNTU_publicatio...", and the system tray with the time "8:19 PM".

WP_6 - Dissemination and Sustainability / DEV_6.4_Information_Material / P08_ZNTU_publications

Sustainability of project results



Open issues: students textbook in English edition



Open issues: invitation for new group



The screenshot shows the website of the Zaporizhzhia National Technical University (ZNTU) Business School. The page is in Ukrainian and features a navigation menu at the top with links for Home, Ukrainian, English, Studies, Offerings, News, and Contacts. The main content area is titled "Бізнес-школа" (Business School) and includes a section for "Бізнес-школа працює в ЗНТУ з січня 2002 року." (Business school has been operating at ZNTU since January 2002). Below this, there is a list of bullet points detailing the school's activities and achievements, such as providing training for students and faculty, and organizing various events and conferences. The right sidebar contains a list of services and resources, including a library, a portal, and a list of conferences.

<http://zntu.edu.ua/biznes-shkola-0>

Contact Information

Address:

Zaporizhzhya National Technical
University
Zhukovskogo Str, 64
Zaporizhzhya
Ukraine 69063

E-mail:

interdep@zntu.edu.ua
parhom@zntu.edu.ua

Telephone:

+38-061-2244237
(international department)

