Report about *P08 (ZNTU)* activities
September 2014 – June 2015

Mykhailo Poliakov

ICo-op – project meeting Batumi, Georgia, 29. – 30. 06. 2015

Zaporizhzhya National Technical University

Activities of P08 (ZNTU) September 2014 - June 2015

Date	Activities	Results
Sept.-Oct.2014	Develop Learning modules on four courses	4 Learning Modules
Nov.-Dec.2014	Adapting courses in distance learning system	4 Courses online distance learning ZNTU
Jan.-Mar.2015	Mounting a remote lab GOLDI in ZNTU	The hardware part of the lab GOLDI is mounted
Mar.-Jun.2015	Pilot Realization of higher education and industry training	Certificates

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ZNTU departments, involved to development of learning modules:

- Electrical and Electronics Apparatuses Department
- Software Tools Department
- HR management and Labor Economics Department
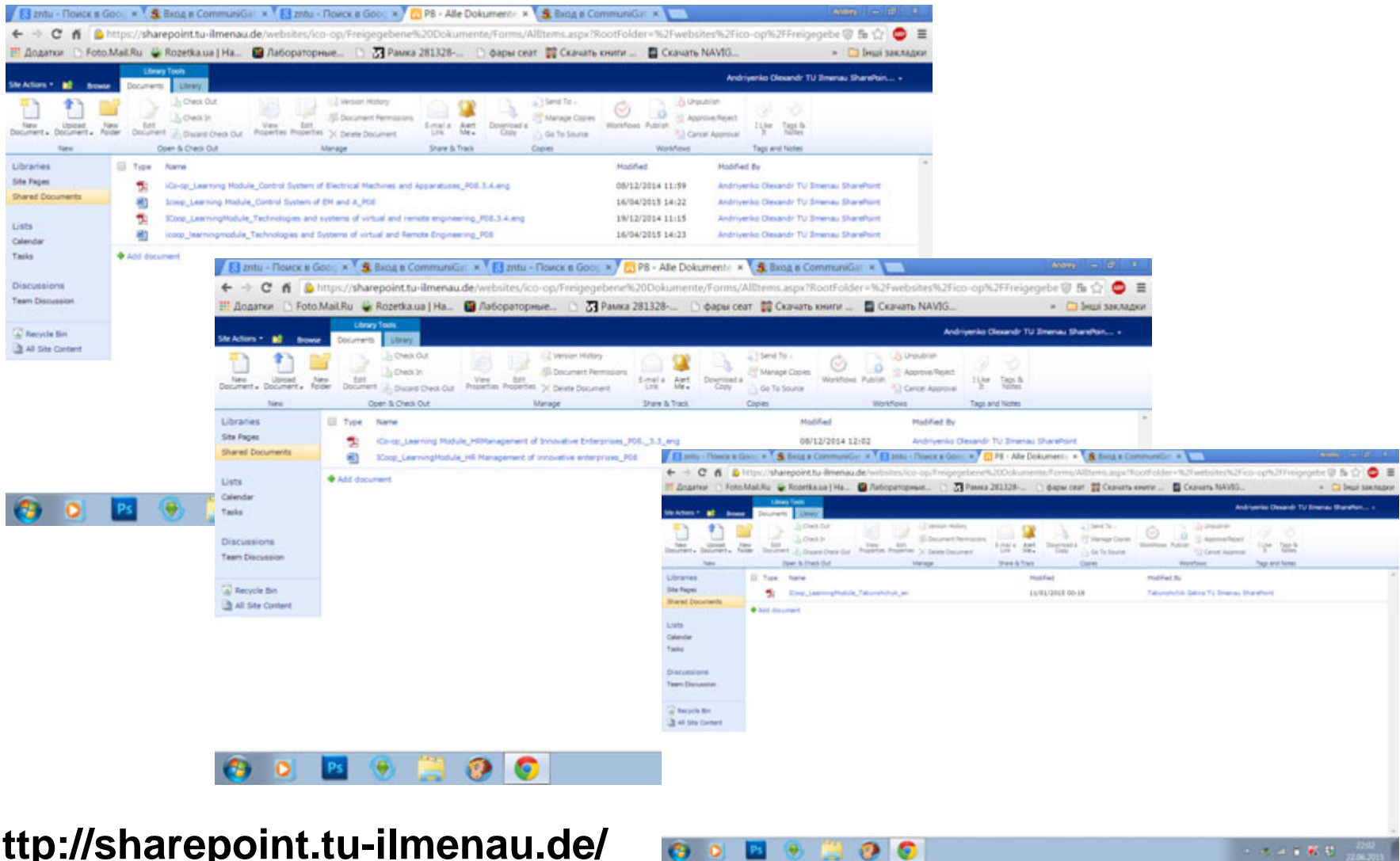
ZNTU Learning modules:

Learning modules using laboratory GOLDI infrastructure:
- Control System of Electrical Machines and Apparatuses (Mykhailo Poliakov)
- Technologies and systems of virtual and remote engineering (Anzhelika Parkhomenko)
- Quality of Informational Systems (Galina Tabunshchyk)

Transversal learning module:
HR Management of innovative enterprises (Andrei Sokolov)

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ZNTU Learning modules on sharepoint web page

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

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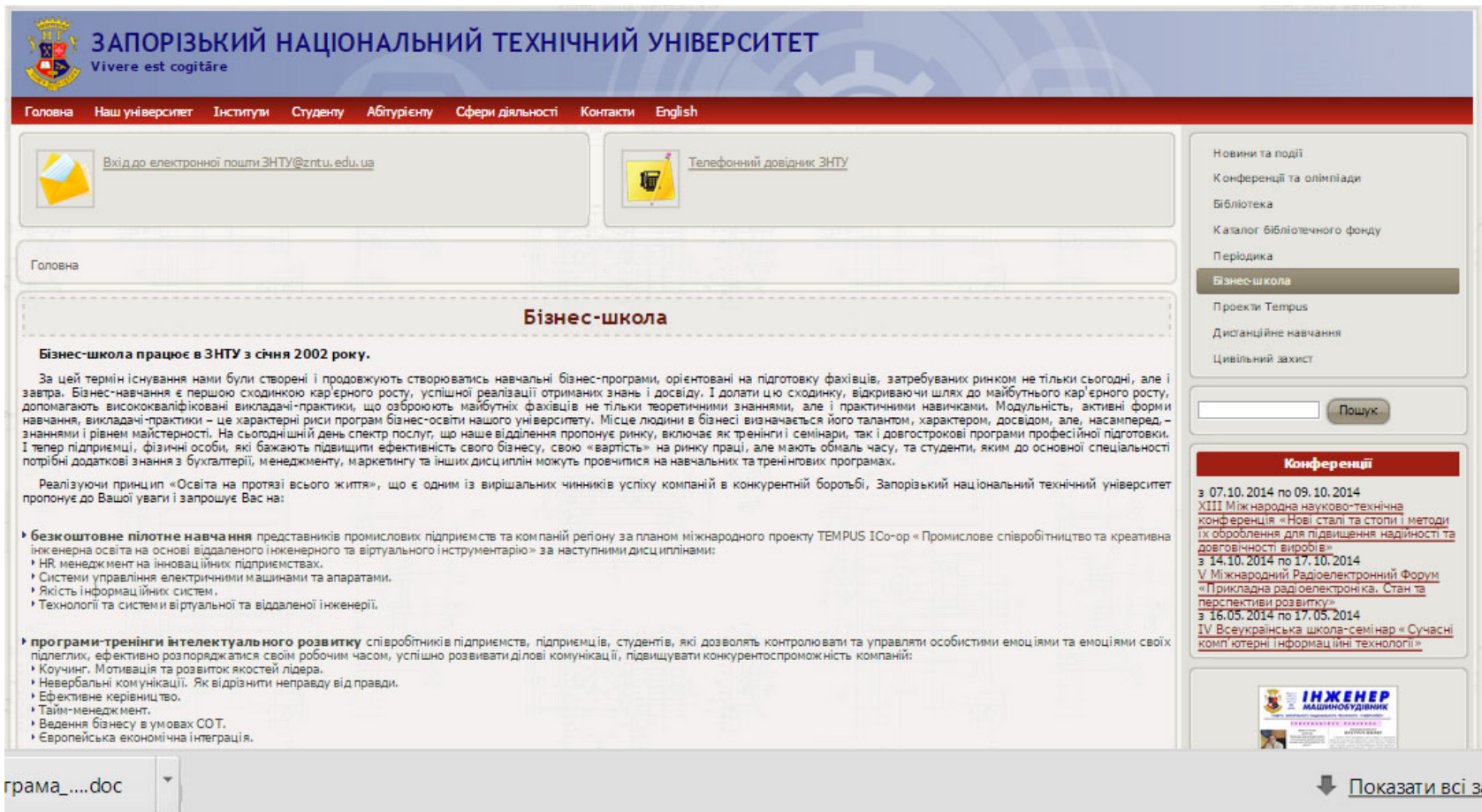
Learning modules on ZNTU distance learning system web page

http://moodle.zntu.edu.ua/

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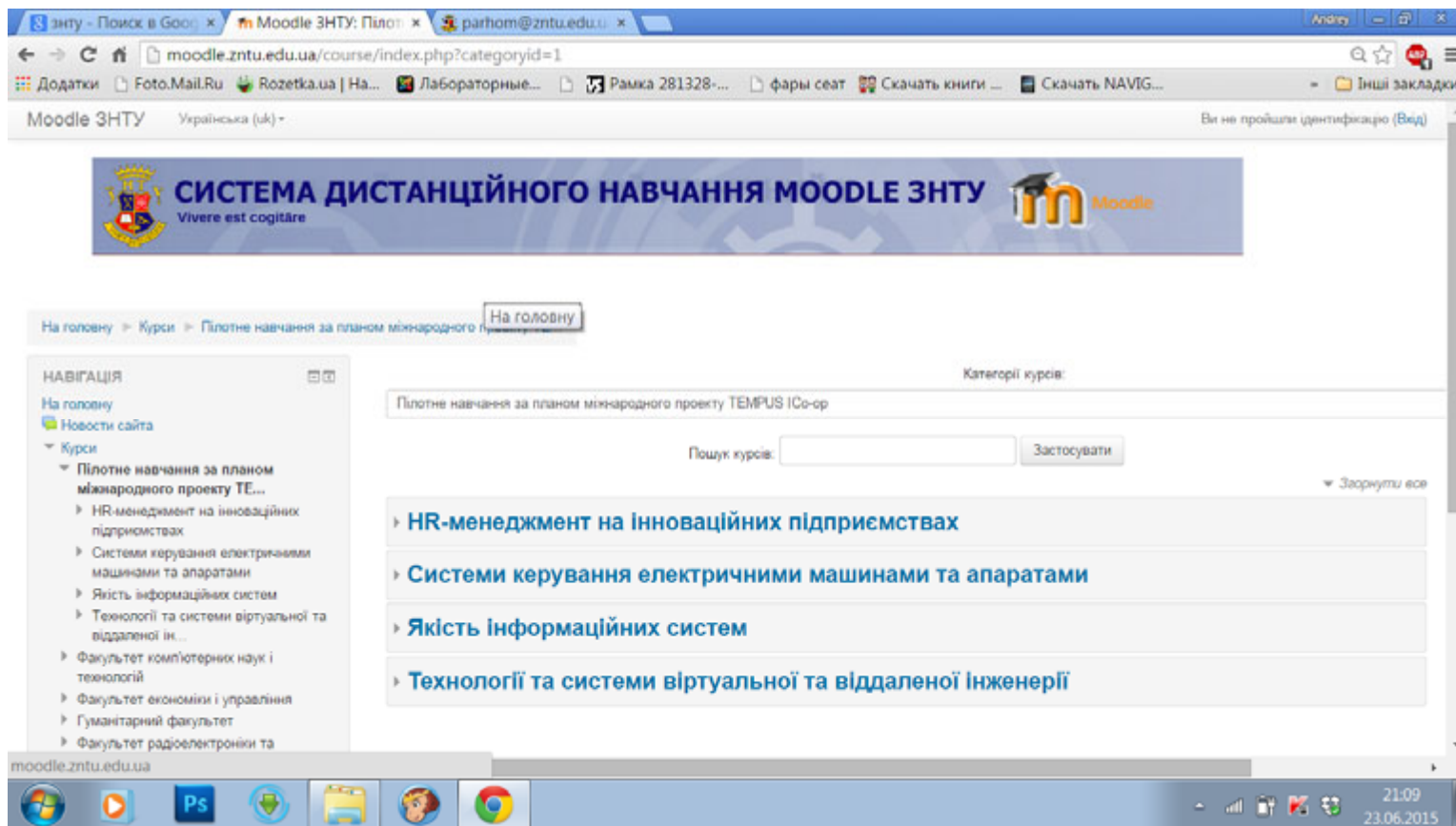
Learning modules on ZNTU Business school web page

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

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Meetings with stakeholders

http://zntu.edu.ua/kreatyvna-inzhenerna-osvita-vymoga-sogodennya

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ZNTU staff training on LMS Moodle. Synergy of ICo-op and DESIRE projects.

Participation in the webinars by the Boris Grinchenko Kyiv University (November, December, 2014)

http://zntu.edu.ua/do-uvagy-vykladachiv-zntu

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Couching in Villach (January, 2015)

Assoc. Prof. Galyna Tabunshchyk presented course "Quality of Informational Systems"

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Start meeting with representatives of companies and enterprises of Zaporizhzhya

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

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Start meeting with representatives of companies and enterprises of Zaporizhzhya

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

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Pilot teaching (March - May 2015)

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Pilot teaching (March - May 2015)

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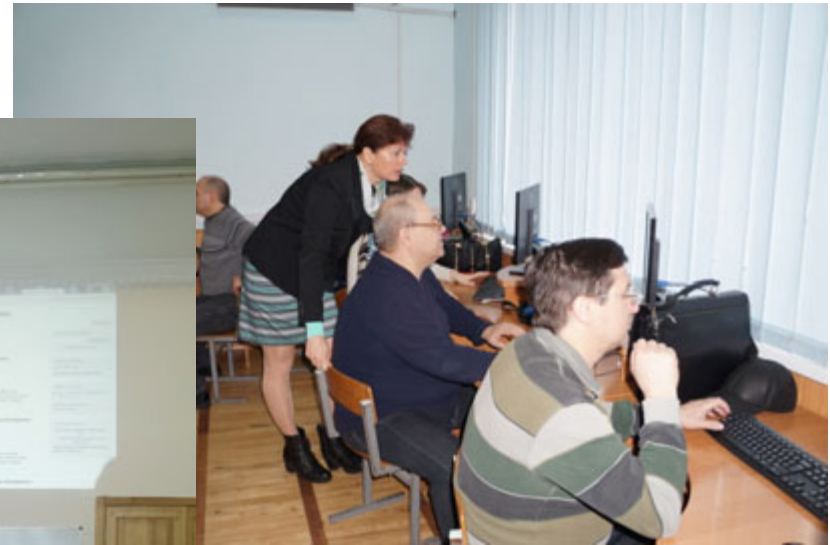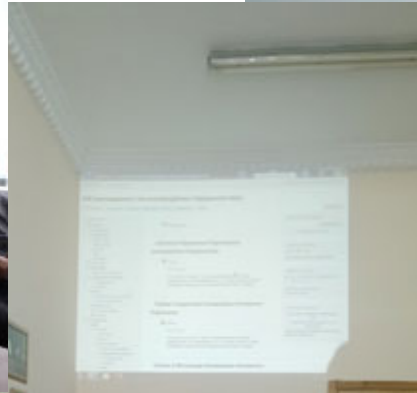
ZNTU Certificates on pilot teaching

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ZNTU Certificates on sharepoint web page

http://sharepoint.tu-ilmenau.de/
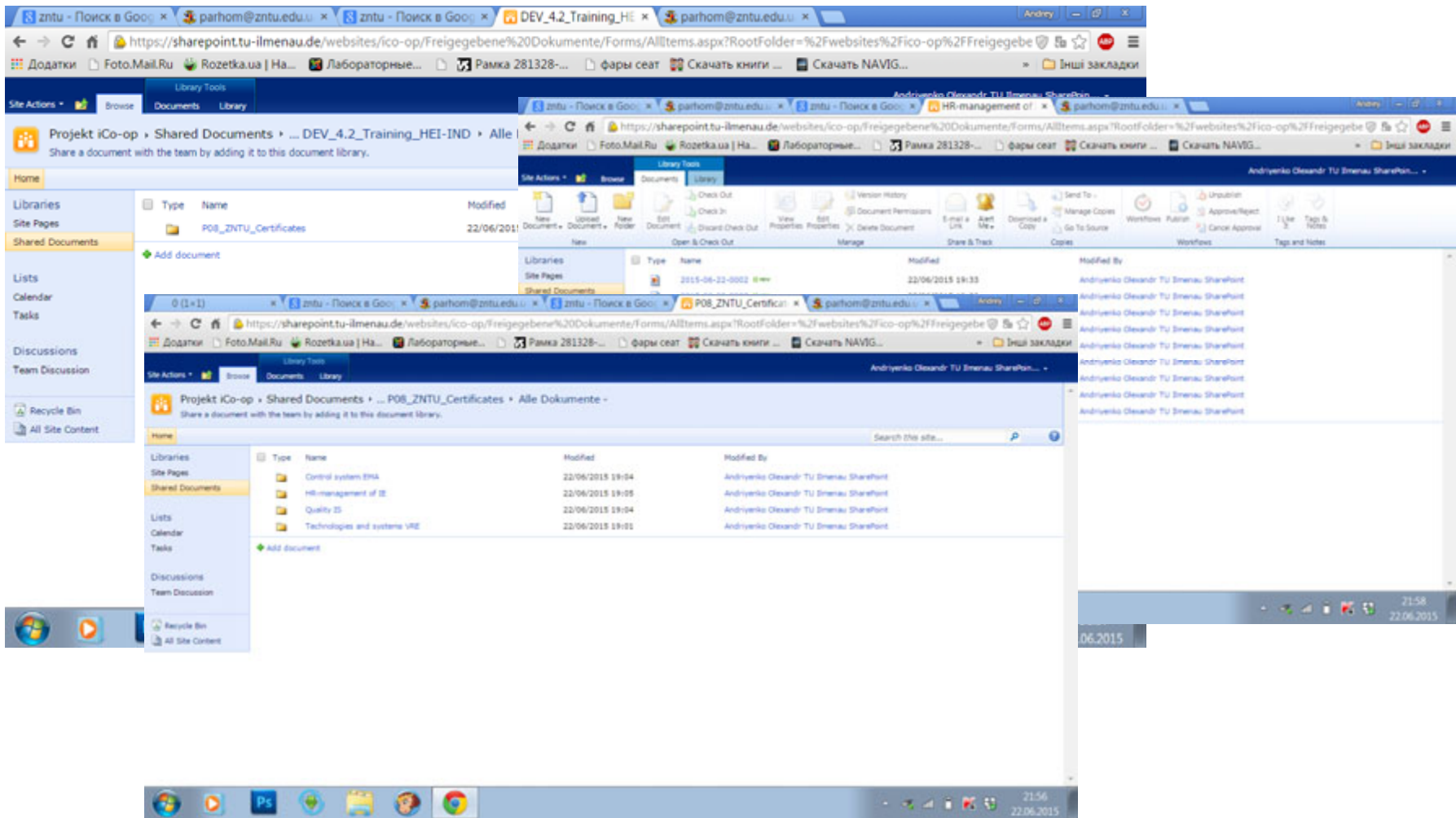
Summarizing of the pilot teaching results (26 June, 2015)

Anzhelika Parkhomenko

Andrei Sokolov
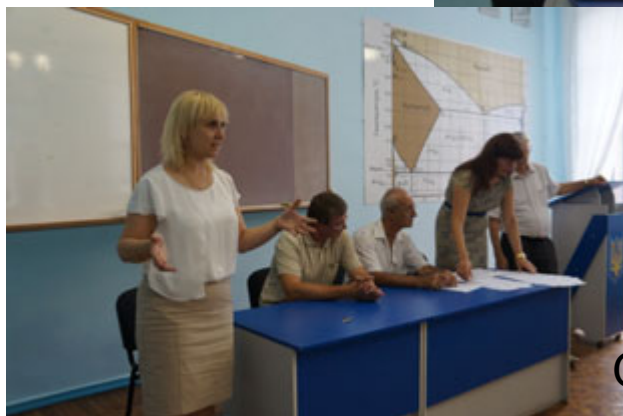
Galina Tabunshchyk

Olexander Andriyenko
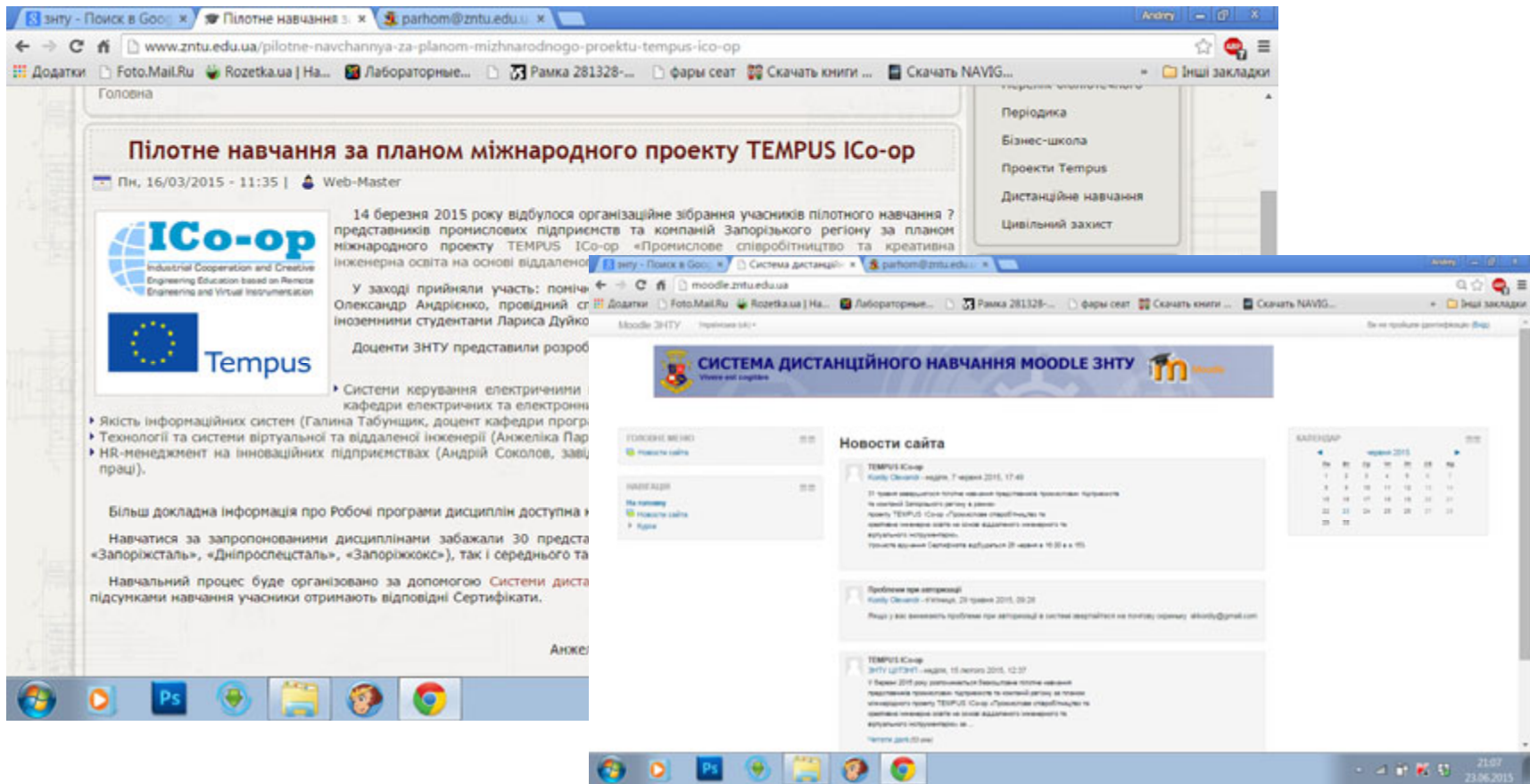
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Awarding of Certificates (26 June, 2015)

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Dissemination of project results through web resources

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

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Dissemination of project results

- Scientific-practical conference «Modern Problems and Achievements of Radio Engineering, Telecommunications and Information Tecnology», (Zaporizhzhya, Ukraine, September, 2014)
- International scientific-practical Conference «Internet-Education-Science-2014» (IES-2014), October 2014, Vinnitsa

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Dissemination of project results

- XI International Conference on Remote Engineering and Virtual Instrumentation (REV2015) (25-28 February, 2015, Bangkok, Thailand)
- XIII International Conference «The Experience of Designing and application of CAD Systems in Microelectronics (CADSM 2015)», (February 24 – 27, 2015, Lviv-Polyana, Ukraine)
- Annual scientific conference «Science Week ZNTU-2015», April, 2015

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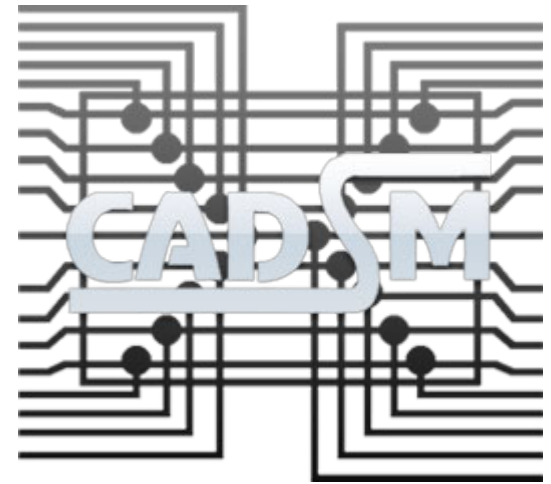
Dissemination of project results

International Symposium "Problems of improving the electrical machines and apparatuses" (October 2014 NTU "KPI" (Kharkov, Ukraine))

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Publications of project results

1) Development and Application of Remote Laboratory for Embedded Systems Design/ A. Parkhomenko O. Gladkova, E. Ivanov, A.Sokolyanskii, S. Kurson // iJOE – Volume 11, Issue 3, 2015.- pp.27-31

2) Complex requirements analysis for the high-level design of Embedded Systems / A. Parkhomenko, O.Gladkova // Bulletin of "Lviv Polytechnic". Computer systems design. Theory and Practice. - Lviv, Lviv Polytechnic, №808(2015). – pp.3-10

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Publications of project results

3) Set-theoretic Model of the Functional Structure of Remote Laboratory for Learning / M. A. Poliakov, T.Y. Larionova // System Technologies. Regional interuniversity collection of scientific papers. – Issue 3 (98), 2015 Dnepropetrovsk. – pp.48-56.

4) Techniques and tools for virtual and remote experiments/ T. Kozik., P. Arras, G. Tabunshchyk // Proceedings of the VII International Scientific Conference «Current problems and achievements in the field of radio, telecommunications and information technology» (17-19 September, 2014). Zaporizhzhya, 2014 PP. 112-113.

5) Iterative Pattern for the Embedding of Remote Laboratories in the Educational Process / P. Arras, K. Henke , G.Tabunshchyk, D. V.Merode // 12th International Conference on Remote Engineering and Virtual Instrumentation (REV 2015) 25-28 February 2015, Bangkok, Thailand, PP. 52-55 (DOI 978-1-4799-7838-0/15)

6) New technologies in education in the sphere of embedded systems / G. Tabunshchyk, A. Parkhomenko // IInternet Educaion-Science, 19th Int. Conference, IOH–2014, October 14–17, 2014. – Vinnitsa, 2014. – C.248-250

7) Internet Security of Remote experiments// T. Kozík, M. Šimon, P. Kuna, P. Arras, G. Tabunshchyk, /Conference proceedings of the International scientific – practical conference E – Kazan 2015. Kazan 21-23. April 2015.

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Publications of project results

8) Internet-based Technologies for Embedded Systems Design / A. Parkhomenko, O. Gladkova, E. Ivanov, A. Sokolyanskii, S. Kurson // Proceedings of XIII International Conference «The Experience of Designing and application of CAD Systems in Microelectronics (CADSM 2015)», (24 – 27 February, 2015, Polyana, Ukraine) Lviv: Lviv Polytechnic, 2015.- pp. 167-171.

9) Interactive remote lab for hardware and software platforms research / A. Parhomenko, O.Gladkova // Proceedings of International Scientific Conference "Internet-Education-Science-2014" "IES-2014" (14 - 17 October 2014, Vinnitsa), 2014 . - pp. 248-250.

10) Research of features of remote labs creation and application for solving problems of embedded systems design / A.V. Parkhomenko, O.N. Gladkova, E.V. Ivanov // Current problems and achievements in the field of radio, telecommunications and information technology: Proceedings of VII International Scientific Conference (17-19 September 2014, Zaporizhzhya). - Zaporizhzhya: ZNTU, 2014.- pp.205-207

11) Development and Application of Remote Laboratory for Embedded Systems Design / A. Parkhomenko, O. Gladkova, E. Ivanov, A. Sokolyanskii, S. Kurson //Proceedings of XI International Conference on Remote Engineering and Virtual Instru-mentation (REV2015) (25-28 February, 2015, Bangkok, Thailand) Bangkok: Burapha University - pp. 69-73.

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Sustainability: development of ZNTU Remote Lab

RELDES – **RE**mote **L**aboratory for **E**mbedded **S**ystems **D**esign

http://youtu.be/u2anq--UYFg

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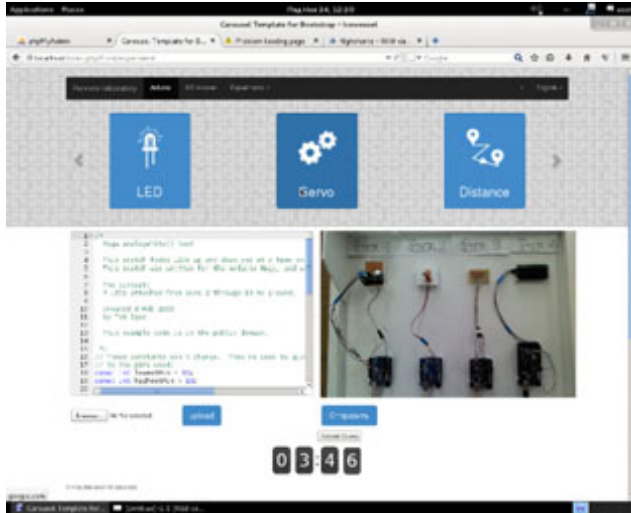
Sustainability: Bachelors and Masters Diploma works by ZNTU students

December 2014
1) Eugene Ivanov (CST-719) «Research and design of embedded systems remote lab» (supervisor A. Parkhomenko)

May 2015
1) Alexander Kordiy (CST-411) «Development of plugin for ZNTU MOODLE system» (supervisor A. Parkhomenko)

2) Alexander Holoviznin (CSTz-410) «Development of web-pages for ZNTU distance learning system» (supervisor A. Parkhomenko)

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Open questions by *P08* (ZNTU)

1) Preparation to Conference in Bilbao (no Call with Conference sections, no requirements for Proceedings of the conference, deadlines for abstracts etc.)
2) Problems with GOLDI Software.
3) Problems with ZNTU network for organization of RL uninterrupted working.
4) The organization of new training programs for companies and enterprises

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