

SOTSIAALTEADUSKOND
TÖÖSTUSPSÜHHOLOGIA INSTITUUT
TEADUS- JA ARENDUSTEGEVUSE AASTAARUANNE 2014

1. Struktuur

Tööstuspsühholoogia instituut, Department of Industrial Psychology, Mare Teichmann

- Hariduspoliitika õppetool, Chair of Personnel Development, Mario Martinez-Corcoles
- Psühholoogia õppetool, Chair of Psychology, Mare Teichmann
- TTÜ Eesti inseneripedagoogika keskus, Estonian Centre for Engineering Pedagogy, Tiia Rüütmann

2. Teadus- ja arendustegevuse (edaspidi T&A) iseloomustus

2.1. Struktuuriüksusesse kuuluvad uurimisgrupid

1. Tööelu kvaliteedi ja tööstressi uurimisgrupp, Quality of working life (QWL) and occupational stress, Mare Teichmann

- *uurimisgrupi teadustöö kirjeldus (inglise keeles)*

Valmistatakse ette uut tööelu kvaliteedi ja tööstressi projekti.

- *uurimisgrupi aruandeaastal saadud tähtsamad teadustulemused (inglise keeles)*

Invited Symposium: Occupational Stress and Quality of Life, International Applied Psychology Congress ICAP 2014 . Pariis.

- *uurimisgrupi kuni 5 olulisemat publikatsiooni aruandeaastal*

Teichmann, M. (2014). Occupational Stress and Quality of Life. International Applied Psychology Congress ICAP 2014 Pariis:, 2014.

Mart Murdvee: Mare Teichmann (2014). Quality of Life and Income. International Applied Psychology Congress ICAP 2014 . Pariis:, 2014.

1) Projekt: Uued töösuhted Euroopas (NEIRE II) // New European Industrial Relations (NEIRE II), Projekt on lõppenud. Mare Teichmann

- *uurimisgrupi teadustöö kirjeldus (inglise keeles)*

Worldwide, and also within the European Union, there is a strong debate on the conditions for a creative social dialogue in organizations. Labor relations among employers, trade unions and employees in Europe are rapidly changing. And with a shift from national and sectorial to more organizational negotiations, social dialogue in organizations becomes more and more important. New organizational conflicts in which employee representatives (ERs) play a central role are emerging and therefore their role is now confronted with new challenges in the framework of the European industrial relations. Improving cooperative and innovative social dialogue within organizations in the European Commission (EC) member states is one of the main objectives of EC policy, and high on the agenda (European Commission, 2012). In this vein, an important conclusion from a recent European action is that clarifying roles and expectations between employer and ERs is needed to develop a constructive dialogue within organizations. The aim of studies was to improve the quality of social dialogue as a tool for innovation, by exploring European employers' experiences and expectations on structures, roles, attitudes and competencies of ERs. Traditions within the European member states differ strongly; however, there is a common frame as well. Understanding and learning from a cross-cultural perspective to develop new forms of social dialogue is a red line through this handbook. This handbook (presented in two volumes) should be

of interest for employers, specially HR directors and managers involved in social dialogue, and equally of interest for employees' representatives, union leaders and policy makers as well as researchers and students in the field of employment relations, organizational psychology, business management, sociology, and politics among others. In the first part the focus was on describing the social dialogue system from an human resources management' (HRM) perspective in each of the participant countries. This handbook allows a deeper understanding about the context in each country as well as about the results from the interview and surveys. In next studies we take a cross-cultural approach. The analysis of these relations helps us to understand the antecedents and consequences from social dialogue in Europe. Overall, this handbook offers an up to date overview of experiences and expectations of employers in Europe on the structuring and dynamics of social dialogue. Additionally, we offer good practices for improvement of social dialogue at organizational level, as well as sectorial level in the 11 participating countries. Estonian NEIRE II study includes: (1) Historical context analysis of the labor movement in Estonia; (2) Conducting interviews with human resource managers; (3) Conducting e-survey with employers; (4) Analyzing and interpreting Estonian study results.

– *uurimisgrupi aruandeaastal saadud tähtsamad teadustulemused (inglise keeles)*

Historical context of the labour movement in Estonia was studied. When to compare the Estonian unions' membership rate with other EU countries' unions membership rates, we must admit that the Estonian employees are not highly represented by the union. Unions represent only 8.1% of the Estonian workforce. In the other words, the overwhelming majority of employees (91.9%) are not represented by the unions (OECD Statistics; Fulton, 2011). Moreover, like in many EU countries, there exists the continuing downward trend of union membership in Estonia. Due to Estonian trade unions' history, and low reputation from Soviet period both the employees and employers assessing works councils as more democratic and innovative than the unions. Figures also make clear that works councils enjoy the higher popularity in Estonian enterprises than unions (Statistics Estonia, 2011). Comparably, in 6% of the Estonian organizations have the unions, and twice as many organizations (13.3%) have works council. The 2009 Statistics Estonia survey shows that 32.7% of employees in organizations' employing five or more employees are covered by collective agreements. At the start of 2011 there were only around 195 agreements (Fulton, 2011). However, still the majority of employees are not represented at all - not in unions and nor in the works councils. For the majority of employees in Estonia, working conditions, and in particular pay, are fixed in direct discussions between the employer and the individual worker.

We summarized the most relevant indicators pointed out by the employers in the interviews regarding the profile of the ERs. In order to better understand these opinions we start by giving an overview on the structure of the industrial relations system in Estonia: (1) Working environment specialist is an engineer competent in the sphere of working environment or any other specialist in an enterprise who has received training concerning working environment and whom the employer has authorized to perform occupational health and safety duties. A working environment specialist is full-time employee and is paid as any other employee for his/her work. Generally a working environment specialist works under the supervision of HR manager. (2) A working environment representative is a representative elected by employees in occupational health and safety issues, and his or her term of authority is up to four years. In an enterprise, which employs 10 employees or more, the employees shall elect one working environment representative from among themselves. If an enterprise employs less than 10 employees, the employer is required to consult with the employees in matters of occupational health and safety. A working environment representative is an ordinary employee, who performs his/her functions besides his/her ordinary work and is not to be paid for work as a representative. (3) A working environment council is a body for co-operation between an employer and the employees' representatives, which resolves occupational health and safety issues in the enterprise. In an enterprise with at least 50 employees, a working environment council shall be set up at the initiative of the employer and it shall comprise an equal number of

representatives designated by the employer and representatives elected by the employees. The council shall comprise at least four members and the term of their authority shall be up to four years. The main employers' concerns regarding the ERs' role in Estonia are:

1. Need for professionalism.
2. Attitudes of the employee representatives.
3. Low mutual trust.
4. Lack of competencies.
5. Low prestige.
6. Regarding the EU policies, there are no differences among the sectors, there is a general lack of knowledge on these policies among all of them.

Empirical study results suggest that compared to the European average results the Estonian employees' representatives (ERs) enjoy significantly higher empowerment by management ($p < .01$), managers' need for control is lower ($p < .01$), benevolence of ERs is higher ($p < .01$), and integrity of ERs is higher ($p < .01$). One important result of survey suggests that industrial relations in terms of trust are also higher in Estonia than the EU average (there is no statistical significance). Estonian employers' representatives (HR managers) evaluate the competencies of the ERs quite highly i.e. competencies of ERs ($p < .01$) as well diversity in competencies and attitudes of ERs ($p < .01$), and ability of ERs ($p < .05$) are assessed significantly higher in Estonia than average in Europe. According to the survey Estonian results hint that the conflict management is principally towards cooperative conflict management by ERs ($p < .05$) and competitive conflict management by ERs is significantly lower ($p < .05$) than average in European survey. Estonian ERs task conflict is also significantly lower ($p < .01$) as well as relationship conflict that is lower but not significantly lower. Conflict management efficacy, and characteristics and quality of agreements in Estonia are assessed exactly on the same level than European average. Impact by ERs on organizational issues is slightly higher in Estonia (in subscale 1 it is not significant, in subscale 2 it is significant difference $p < .10$).

– *uurimisgrupi kuni 5 olulisemat publikatsiooni aruandeaastal*

Eds. M. Euwema, L. Munduate, P. Elgoibar, E. Pender and A.B. García (2014). Promoting constructive and creative social dialogue in organizations: How to move from conflict to cooperation? Springer (in press)

In: Chapter 5: *Miguel Martinez- Lucio, Valeria Pulignano, Giovanni Passarelli and Mare Teichmann*, ERs as old boys' networks: Who are ERs representing?

In: Chapter 11: *Barbara Kozusznik, Merle Lohmus and Ana Passos*, Looking for engaged, smart and pragmatic people.

Eds. M. Euwema, L. Munduate, P. Elgoibar, E. Pender and A.B. García (2014). Employers' ideas on how to promote constructive and creative social dialogue in organizations: Developments in 11 European countries, *M. Teichmann, M. Lõhmus*, Chapter: Employee Representatives in Estonia. How are they perceived and what are the expectations by employers in Estonia? Springer (in press)

Teichmann, M.; Lõhmus, M. (2015). Employee Representatives in Estonia. How are they Perceived and what are the Expectations by Employers? Euwema, M.; Munduate, L.; Elgoibar, P.; Pender, E.; Belen Garcia, A. (Eds.). Promoting Social Dialogue in European Organizations: Human Resource Management and Constructive Conflict Management (53 - 67). Springer (in press)

Lõhmus, M., Teichmann, M. (2014). Developing social dialogue in new EC member states: a showcase from Estonia. 28th International Congress of Applied Psychology. Paris, France 8-13 July 2014. <https://b-com.mci-group.com/Abstract/Statistics/AbstractStatisticsViewPage.aspx?AbstractID=188802>

2) Projekt: Human Factors and Safety in Paratroopers, Mario Martinez-Corcoles

– *teadustöö kirjeldus (inglise keeles)*

Started: October, 2014 Phase 1: Literature Review, project proposal, and research design (COMPLETED) Phase 2: Data Collection (IN PROCESS) Phase 3: Data analyses Phase 4: Outputs, Reports and Publications

Abstract: Mishaps or minor errors in paratroopers can lead to fatal consequences, such as the recently reported accident in Fort Bragg, (North Carolina), where a parachutist of the US Army died. There are many factors that made jumps especially dangerous in Military forces, including jumping at night, carrying a full combat load or jumping in higher winds or higher temperatures. Injuries and fatalities occurring under a fully functional parachute usually happen because the paratrooper performed unsafe maneuvers or made an error in judgment while flying their canopy, typically resulting in a high speed impact with the ground. Following previous literature in safety science, unsafe behaviors are often triggered by factors such as safety climate, leadership, procedures formalization, workload, time pressure, etc.

The aim of the present research project is to assess the most crucial human factors in paratroopers and explore their impact on safety performance. If causes of safety performance are empirically determined, safety and performance improvements (especially by means of additional training in important human areas) can be done. The measures are composed by a battery of previous validated self-questionnaires, which will be filled out electronically. The sample will be composed of 130-190 participants from the Paratrooper brigade of Hellenic Armed Forces (Greece).

– *aruandeaastal saavutatud tähtsamad teadustulemused (inglise keeles)*

Project Started: October, 2014

Currently the project is on the Phase 2 (Data Collection).

Outcomes expected: The outcomes or research production expected from this project are:

-1 Master Thesis -2 Scientific publications in peer-reviewed journals -1 Congress communication

– *uurimisgrupi kuni 5 olulisemat publikatsiooni aruandeaastal*

Martínez-Córcoles, M., Gracia, F., Tomás, I., Peiró, JM. (2014). Strengthening safety compliance in nuclear power operations. A role-based approach. Risk Analysis 34(7), 1257-1269.

3) Projekt: Psühhosotsiaalsed faktorid töö; Psychosocial factors at work, Mare Teichmann

– teadustöö kirjeldus (inglise keeles)

Projects of RKAS¹:

Projekt Virtual Workplaces//Virtuaalsed töökohad (28.04.2014 - 30.04.2015)

Research shows that the virtual workplace has a number of advantages: saving staff time, reduce travel costs, and office costs, and eliminate organizational experts, i.e., the use of the hassle out of the organization can be used as external consultants without incurring travel, accommodation and time consuming. Virtual workplaces allow employees to increase operational efficiency, increase employee job satisfaction, and better enable employees' work -life balance. The main drawback is the virtual job: staff shortages or lack of real communication between workers feeling of isolation (as opposed to inclusion), the emergence of communication errors (mainly due to the lack of non -verbal communication), team synergy decline and managers of virtual lack of preparedness to manage. Wayne F. Cascio (University of Colorado, USA, 2012) indicates that many executives are concerned about how to manage employees who are physically separated from the driver - "" How can I control them if I can not see them ? "" and ""If I do not see the staff , how do I know they're working ? "" are the questions that many leaders of virtual workplaces for submitting. Virtual workplaces present new challenges for the two leaders - staff performance evaluation, and communication management (Cascio , 1996 ; Igarria et al . , 1998 , Bailey & Kurland , 2002; Arling , 2004; Knoell , 2008 ; Korobanicová , 2012) . As a result, there is a need to demonstrate: First paragraph where a high proportion of officers is working now, and what kind of virtual work virtual

¹ RKAS – Riigi Kinnisvara Aktiaselts (State Real Estate Ltd.)

jobs are used, Second, workers' psychological well-being (psychological well-being), the use of virtual workplaces and thereby increase productivity, Third, managers' readiness for virtual jobs design and the management.

4) Projekt: Productivity and learning performance aspects related to indoor and psycho-social environment in offices and schools //Töövijakuse ja õpitulemuslikkusega seotud töökeskkonna füüsilised ja psühhosotsiaalsed aspektid büroodes ja koolides, 1.09.2013 - 31.12.2014 (Jarek Kurnitski; Mare Teichmann; TTÜ Ehitiste projekteerimise instituudi, Keskkonnatehnika instituudi ja Tööstuspsühholoogia instituudi koostööprojekt)

- aruandeaastal saavutatud tähtsamad teadustulemused (inglise keeles)

Evidence based quantitative relations between productivity and learning performance, and indoor environmental and psycho-social parameters are reported. Indoor climate is measured in 12 school and office buildings and about 30 page guide is prepared.

5) Militaarpsühholoogia TTÜ Kaitse- ja julgeolekuuringute keskus, KM, NATO, Merle Parmak

- teadustöö kirjeldus (inglise keeles)

Preparation and contribution to NATO Advanced Research Workshop (ARW) Program Resiliency: Enhancing Coping with Crisis and Terrorism with the topic of "National resilience in multinational communities"

- aruandeaastal saavutatud tähtsamad teadustulemused (inglise keeles)

The International Applied Military Psychology Symposium The Power of Multidisciplinary, TTÜ, 16-19 June 2014 (IAMPS) <http://www.iamps.org/>

- uurimisgrupi kuni 5 olulisemat publikatsiooni aruandeaastal

Parmak, Merle (2014). An Interactionistic Approach to Military Selection. In: Psihologia Militara: INFO-PSIHO 2014: Psychology as a Multiplier for the Military Operational Capacity, 24th April 2014, Bucharest. (Eds.)C. Dobre. Editura Universtitatii Nationale de Aparare "Carol I", 2014, 158 - 162.

2. Insenerihariduse uurimisgrupp; Engineering Education, Tiia Rüütmann

1) Conceptual framework for increasing society's commitment in ICT: approaches in general and higher education for motivating ICT-related career choices and improving competences for applying and developing ICT, Raivo Sell.

- teadustöö kirjeldus (inglise keeles)

The general aim of the project is to assess the approach and implemented solutions for the development of essential competences in the field of ICT and for motivation of the career planning in the field. According to the results of the research, mini-experiments and meta-analysis of the relevant scientific literature a conception of the action plan will be developed for the assurance of the sustainability of the field of ICT at general schools and universities. The following groups will be observed in the research - pupils of general schools, university students of ICT specialities (in comparison with other specialities) and students who have discontinued their studies. The research will be carried out in cooperation with University of Tartu, Tallinn University of Technology and the Estonian Information Technology College. As the representatives of enterprisers, Association of Information Technology and Telecommunications is roped in along with foreign scientific consulting partners.

- aruandeaastal saavutatud tähtsamad teadustulemused (inglise keeles)

Additional sets of questionnaires for the survey and research of first year students have been designed. Research in three stages of students at Tallinn University of Technology, University of Tartu and IT College has been carried out. The results are being analysed and scientific articles based on the results of the research are in progress.

- uurimisgrupi kuni 5 olulisemat publikatsiooni aruandeaastal

Mironova, O.; Amitan, I.; Vendelin, J.; Saar, M.; Rütmann, T. (2014). Strategies for the Individualization of an Informatics Course . *In: Annals of Computer Science and Information Systems: Federated Conference on Computer Science and Information Systems, September 7–10, 2014. Warsaw, Poland.* IEEE, 2014, 835 - 840.

Siiman, L. A.; Pedaste, M.; Tõnisson, E.; Sell, R.; Jaakkola, T.; Alimisis, D. (2014). A Review of Interventions to Recruit and Retain ICT Students. *International Journal of Modern Education and Computer Science*, 6(3), 45 - 54.

3) The Eduko Development Programme for Education Sciences and Teacher Training, Tiia Rütmann

– teadustöö kirjeldus (inglise keeles)

Curriculum development for initial and continuing teacher education. Research on evaluation of the quality of teacher education. Development and design of the pedagogical teaching practice. Development of methodology for teaching STEM (Science, Technology, Engineering, Mathematics).

– aruandeaastal saavutatud tähtsamad teadustulemused (inglise keeles)

In cooperation with Tallinn University the joint curriculum for Vocational/Technical teacher education has been designed and approved by universities' councils. An additional specialisation module for technical teacher education for students of Tallinn University of technology has been designed and approved. Learner-centered guided in-service program for technical teacher continuing education has been implemented. A model of a flexible teacher education program for general school teachers and university staff has been implemented. An on-line self-evaluation model questionnaire for engineering educators has been piloted. Workshops for technical teachers at general and vocational schools have been carried out.

– uurimisgrupi kuni 5 olulisemat publikatsiooni aruandeaastal

Sell, Raivo; Rütmann, Tiia; Seiler, Sven. (2014). Inductive Teaching and Learning in Engineering Pedagogy on the Example of Remote Labs. *International Journal of Engineering Pedagogy*, 4(4), 12 - 15.

Rütmann, T.; Kipper, H. (2014). Design, Implementation and Analysis of Learner-Centered Guided In-Service Programme for Technical Teacher Education. *International Journal of Engineering Pedagogy*, 2, 4 - 9.

Rütmann, T. (2014). Optional STEM Courses for Secondary Schools Designed and Implemented for Enhancement of K-12 Technology Education in Order to Excite Students' Interest in Technology and Engineering Education . *In: Proceedings of 2014 International Conference on Interactive Collaborative Learning (ICL): World Engineering Education Forum, Dubai UAE, 3.-6.12.2014. (Toim.) Sebastian Schreiter.* Dubai, UAE:, 2014, 144 - 150.

Rütmann, T.; Kipper, H. (2014). Analysis of the Program for Continuing Education of Technical Teachers on the Basis of Graduates' Feedback Results . *In: Proceedings of 2014 International Conference on Interactive Collaborative Learning (ICL): World Engineering Education Forum, Dubai UAE, 3.-6.12.2014. (Toim.) S. Schreiter.* Dubai UAE:, 2014, 7 - 12.

Sell, R.; Rütmann, T. (2014). The International Cooperation on Remote Laboratories Conducted with Engineering Didactics. *In: Remote Engineering and Virtual Instrumentation: 11th International Conference on Remote Engineering and Virtual Instrumentation (REV), Polytechnic of Porto (ISEP), Porto, Portugal, 26.-28.02.2014. (Toim.) M. C. Felgueiras.* Porto, Portugal: IEEE, 2014, 187 - 190.

2.2 Loetelu struktuuriüksuse töötajate rahvusvahelistest tunnustustest.

- *Denise Marie-Thérèse Rousseau* - TUT award the degree of Doctor Honoris Causa to Denise Marie-Thérèse Rousseau. On 17 September, on Tallinn University of Technology's (TUT) 96th anniversary, the degree of Doctor Honoris Causa was awarded to Professor of USA Carnegie Mellon University Denise Marie-Thérèse Rousseau.
- *Sirje Orvet* - Sotsiaalteaduskonna tööstuspsühholoogia instituudi üliõpilaste ja õppetöö koordinaator Sirje Orvet sai haridus- ja teadusministeeriumi tänukirja „Aasta kutsehariduse sõbra finalist“. Tänukirja anti üle aasta õpetaja auhinnagala „Eestimaa õpib ja tänab“ 4. oktoobril.
- Sirje Orvet on pälvinud ka Valgetähe neljanda klassi ordeni sekretäritöö ja asjaajamiskultuuri edendamise eest (2006). Orvet on lisaks ka Eesti Juhi Abi Ühingu asutaja ja auliige ja SA Kutsekoja Äriteeninduse ja Muu Äritegevuse kutsenõukogu nõukogu aseesimees.
- *Merle Parmak* – pälvis IMTA² Harry Greeri auhinna. mis on väärikaima erialane tunnustus rahvusvahelise militaarpsühholoogide kogukonna poolt. Harry Greeri auhind antakse välja kord aastas inimesele, kes on IMTA juhtkomitee hinnangul silmapaistvalt panustanud militaarpsühholoogia arendusse ja ühingu eesmärkide realiseerimisse.

2.3 Loetelu struktuuriüksuse töötajatest, kes on välisakadeemiade või muude oluliste T&A- ga seotud välisorganisatsioonide liikmed.

Mare Teichmann

- President of Estonian Work and Organizational Psychology Association (EWOPA) that is Constituent of EAWOP³;
- Member of EAWOP;
- Estonian (and Baltic) representative in ENOP⁴;
- ENOP Web-page Editor (<http://www.enop.ee/>);
- ENOP Work and Organizational Psychology Development Commission Member, European Curriculum of W/O Psychology: Reference Model and Minimum Standards;
- Member of the International Advisory Board (IAB) for EAWOP Congress 2015;
- Member of Scientific Committee for EAWOP Congress 2015;
- EFPA⁵ Standing Committee on Work and Organizational Psychology, EAWOP Executive Committee has selected five members as the founding members for EFPA Standing Committee;
- WHO Quality of Life Centers, chairperson of WHO Estonian Quality Centre.

Tiiu Rüütman

- Member of IEEE, member of IEEE EDUCON Steering Committee;
- Member of IGIP⁶ Executive Committee;
- President of IGIP International Monitoring Committee;
- Member of IGIP www.igip.org ;
- Member of Delta Kappa Gamma – International Society for Key Women Educators.

Raivo Sell

- Member of IGIP.

² IMTA - International Military Testing Association

³ EAWOP – European Association of Work and Organizational Psychology

⁴ ENOP – European Network of Work and Organizational Psychology Professors

⁵ EFPA – European Federation of Psychologists' Associations

⁶ IGIP – International Society for Engineering Education and modern engineering pedagogy

Hants Kipper

- Member of IGIP;
- Member of IGIP International Monitoring Committee.

Mart Murdvee

- Founding member of Union of Estonian Psychologists;
- Member of Estonian Work and Organizational Psychology Association (EWOPA).

Liina Randmann

- EAWOP Liaison of Estonian Work and Organizational Psychology Association (EWOPA), Constituent of EAWOP;
- Member of EAWOP.

Velli Parts

- Member of Estonian Work and Organizational Psychology Association (EWOPA), Constituent of EAWOP;
- Member of EAWOP.

Merle Lõhmus

- Member of Estonian Work and Organizational Psychology Association (EWOPA), Constituent of EAWOP;
- Member of EAWOP.

Merle Parmak

- Member of Union of Estonian Psychologists.

2.4 Soovi korral esitatakse aruandeaastal saadud T&A-ga seotud tunnustused (va punktis 2.3 toodud tunnustused), ülevaade teaduskorralduslikust tegevusest, teadlasmobiilsusest ning hinnang oma teadustulemustele.

Mare Teichmann

- Korraldas: Invited Symposium ‘Occupational Stress and Quality of Life (QoL)’, IAAP⁷ 28th Congress of Applied Psychology 2014;
- Akadeemilise tööstressi artikkel ‘Academics’ occupational stressors’ refereeriti:
- *Medical News Today* (<http://www.medicalnewstoday.com/releases/270831.php>)
- *Medical News Today weekly newsletter* - 8 January 2014.
- Korraldab: ENOP Symposium, Changing Industrial Relations in Europe, March 2015, Paris.

Tiia Rüütmann

- Chair of the conference/korraldab konverentsi: IEEE EDUCON 2015 Global Conference on Engineering Education “Engineering Education Towards Excellence and Innovation”
<http://www.educon-conference.org/educon2015/>
- *The TAT’14 Best Paper Award* (“Talking about Teaching 2014” SPEE Track Session @ IGIP International Conference on Engineering Pedagogy 2014) Tiia Rüütmann & Hants

⁷ IAAP - International Association of Applied Psychology

Kipper “Analysis of the Program for Continuing Education of Technical Teachers on the Basis of Graduates’ Feedback Results” , December 3-6, 2014, Dubai.

Raivo Sell

- Industry Relations Chair/ Korraldab konverentsi IEEE EDUCON 2015 Global Conference on Engineering Education “Engineering Education Towards Excellence and Innovation”
<http://www.educon-conference.org/educon2015/>