PERSONAL INFORMATION

Elvis Ahmetović, Full Professor in Chemical Engineering

University of Tuzla, Faculty of Technology, Univerzitetska 8, 75000 Tuzla, Bosnia and Herzegovina
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ResearcherID: http://www.researcherid.com/rid/C-3659-2013
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SCOPUS ID: http://www.scopus.com/authid/detail.url?authorId=36350581300
ResearchGate: https://www.researchgate.net/profile/Elvis_Ahmetovic
ORCID ID: https://orcid.org/0000-0003-1837-7183

Sex: Male | Date of birth: 05/07/1973 | Nationality: Bosnian

POSITIONS Full Professor in Chemical Engineering (University of Tuzla, Faculty of Technology, B&H)

OCCUPATIONAL FIELD Chemical Engineering. Process Systems Engineering. Analysis, Synthesis and Design of Chemical Processes. Process Integration. Mathematical Programming and Process Optimization. Green Engineering and Sustainable Development. Rational use of Water and Energy in Industry.

WORK EXPERIENCE

From 24/03/2017 - Full Professor in Chemical Engineering

University of Tuzla, Faculty of Technology, Department of Process Engineering, Univerzitetska 8, 75000 Tuzla, Bosnia and Herzegovina

- Teaching and Research in Process Engineering. Teaching Courses: Unit Operations, Chemical Process Design, Process Integration, and Rational Use of Energy/Energy Efficiency in Chemical Processes

Business or sector: Higher Education

From 28/05/2014 to 23/03/2017 Associate Professor in Chemical Engineering

University of Maribor, Faculty of Chemistry and Chemical Engineering, Smetanova 17, 2000 Maribor, Slovenia

- Teaching and Research in Chemical Engineering (Process Systems Engineering and Sustainable Development). Visiting Professor in framework of project "Internationalization – A Pillar of Development of the University of Maribor" (co-financed by European Social Fund and Ministry of Education, Science and Sport of the Republic of Slovenia) (01.10.2014-30.06.2015).

Business or sector: Higher Education

From 23/03/2011 to 23/03/2017 Associate Professor in Process Engineering

University of Tuzla, Faculty of Technology, Department of Process Engineering, Univerzitetska 8, 75000 Tuzla, Bosnia and Herzegovina

- Teaching and Research in Process Engineering. Teaching Courses: Unit Operations, Chemical Process Design, Process Integration, and Rational Use of Energy.

Business or sector: Higher Education

From 23/03/2006 to 23/03/2011 Assistant Professor in Process Engineering

University of Tuzla, Faculty of Technology, Department of Process Engineering, Univerzitetska 8, 75000 Tuzla, Bosnia and Herzegovina.

- Teaching and Research in Process Engineering. Teaching Courses: Unit Operations I and II, Thermal Processes in Process Engineering, Process Design I, Hydro-mechanical operations, Heat and Mass Transfer Operations, Rational Use of Energy, Chemical Process Design, Process Integration.

Business or sector: Higher Education

From 03/11/2007 to 14/09/2008
From 14/09/2009 to 23/11/2009 Vice Dean for Education

University of Tuzla, Faculty of Technology, Department of Process Engineering, Univerzitetska 8, 75000 Tuzla, Bosnia and Herzegovina.

- Faculty management activities, work with the chairs of departments and teaching staff in order to improve education and teaching process at the Faculty of Technology (University of Tuzla).

Business or sector: Higher Education

From 02/04/2004 to 23/03/2006 **Senior Teaching Assistant in Chemical Engineering**

University of Tuzla, Faculty of Technology, Department of Chemical and Food Engineering, Univerzitetska 8, 75000 Tuzla, Bosnia and Herzegovina.

- Teaching and Research in Chemical Engineering. Teaching Courses: Unit Operations, Analysis and Simulation of Processes, Rational Use of Energy.

Business or sector: Higher Education

From 12/03/1999 to 02/04/2004 **Teaching Assistant in Chemical Engineering**

University of Tuzla, Faculty of Technology, Department of Chemical Engineering, Univerzitetska 8, 75000 Tuzla, Bosnia and Herzegovina.

- Teaching and Research in Chemical Engineering. Teaching Courses: Chemical Engineering Calculations, Unit Operations, Thermodynamics and Thermotechnics.

Business or sector: Higher Education

EDUCATION AND TRAINING

University Education

02/09/2005 **Ph.D in Process Engineering**

University of Tuzla, Faculty of Technology, Department of Process Engineering, Univerzitetska 8, 75000 Tuzla, Bosnia and Herzegovina.

- Thesis: Process simulation for concentration and crystallization of food systems by water evaporation. Department of Process Engineering, Faculty of Technology, University of Tuzla.

25/06/2002 **M.Sc. in Chemical Engineering**

University of Tuzla, Faculty of Technology, Department of Chemical and Food Engineering , Univerzitetska 8, 75000 Tuzla, Bosnia and Herzegovina. A part of research was done at the Faculty of Chemistry and Chemical Engineering, University of Maribor, Slovenia.

- Thesis: Heat integration and retrofit of heat exchangers network using mathematical programming

14/07/1998 **B.Sc. in Chemical Engineering**

University of Tuzla, Faculty of Technology, Department of Chemical and Food Engineering , Univerzitetska 8, 75000 Tuzla, Bosnia and Herzegovina

- Thesis: Mathematical model of reactor balance equations in maleic-anhydride

Mobility and Training

From 07/05/2018 to 11/05/2018 **Erasmus+ staff mobility for teaching**

Pamukkale University, Faculty of Engineering, Department of Chemical Engineering, Çamlaraltı Mahallesi, Üniversite Cd. No:11, 20160 Pamukkale/Denizli, Turkey

- Teaching activities (lectures) on the topic Process optimisation: Introduction and applications in chemical engineering.

From 26/02/2018 to 02/03/2018 **Mobility within the project "Involvement of visiting foreign experts and university teachers in the pedagogical process as a pillar of quality development process of internationalisation of the University of Maribor" (the project is co-funded by the European Social Fund and the Ministry of Education, Science and Sport of the Republic of Slovenia)**

University of Maribor, Faculty of Chemistry and Chemical Engineering, Smetanova 17, SI-2000 Maribor, Slovenia.

- Teaching activities (lectures/exercises) on the topic Process optimisation, modelling in GAMS, problem solving within a field of study Chemical Engineering, subject Process Optimisation.

From 07/11/2017 to 08/11/2017

Mobility within the SCOPES (Scientific Co-operation between Eastern Europe and Switzerland) project

University of Maribor, Faculty of Chemistry and Chemical Engineering, Smetanova 17, SI-2000 Maribor, Slovenia.

- Mobility within the SCOPES research project entitled “Computer Aided Process Engineering applied to energy, water, and waste reduction during process design and operation”. Attending work meetings and dissemination of research results. Host research contact: Prof. Zdravko Kravanja.

From 14/06/2017 to 16/06/2017

Mobility within the SCOPES (Scientific Co-operation between Eastern Europe and Switzerland) project

University of Maribor, Faculty of Chemistry and Chemical Engineering, Smetanova 17, SI-2000 Maribor, Slovenia.

- Mobility within the SCOPES research project entitled “Computer Aided Process Engineering applied to energy, water, and waste reduction during process design and operation”. Attending work meetings and dissemination of research results. Host research contact: Prof. Zdravko Kravanja.

From 17/07/2016 to 23/07/2016

Mobility within the SCOPES (Scientific Co-operation between Eastern Europe and Switzerland) project

EPFL/Industrial Processes & Energy Systems Engineering Group (IPESE), Valais Wallis, 1951 Sion, Switzerland.

- Mobility within the SCOPES research project entitled “Computer Aided Process Engineering applied to energy, water, and waste reduction during process design and operation”. Attending work meetings and dissemination of research results. Host research contact: Prof. François Maréchal.

From 17/06/2016 to 30/06/2016

Erasmus+ staff mobility for training/teaching

Lappeenranta University of Technology, School of Business and Management, Lappeenranta, Finland

- Study and attending work meetings. Host research contact: Prof. Andrzej Kraslawski.

From 01/10/2014 to 30/06/2015

Mobility within the project "Internationalization – A Pillar of Development of the University of Maribor"

University of Maribor, Faculty of Chemistry and Chemical Engineering, Smetanova 17, 2000 Maribor, Slovenia

- Teaching and Research in Chemical Engineering (Process Systems Engineering and Sustainable Development). Visiting Professor in framework of project "Internationalization – A Pillar of Development of the University of Maribor" (co-financed by European Social Fund and Ministry of Education, Science and Sport of the Republic of Slovenia). Host contact: Prof. dr. Zdravko Kravanja

From 23/06/2011 to 30/06/2013

Teaching mobility within the CEEPUS project

University of Maribor, Faculty of Chemistry and Chemical Engineering, Smetanova 17, SI-2000 Maribor, Slovenia.

- Realisation of the activities within the CEEPUS project entitled “PhD in Sustainable Chemistry and Chemical Engineering”. Guest lecture related to Synthesis of heat-integrated process networks and applications of developed optimization models to problems of different complexity. Host contact: Prof. dr. Zdravko Kravanja

From 01/09/2012 to 30/09/2012

EM2-STEM Mobility Program

Lappeenranta University of Technology, P.O.Box 20, 53851 Lappeenranta, Finland.

- The staff member mobility project related to the chemical engineering curriculum study, case-base reasoning and water and energy management in process plants. Host research contact: Prof. Andrzej Kraslawski.

From 03/10/2011 to 03/08/2012

JoinEU SEE Mobility Program. Postdoctoral Research in Process Systems Engineering

University of Maribor, Faculty of Chemistry and Chemical Engineering, Laboratory for Process Systems Engineering and Sustainable Development, Smetanova 17, 2000 Maribor, Slovenia.

- Postdoctoral research in Process Systems Engineering within the JoinEU SEE Program (Scholarship scheme for academic exchange between EU and Western Balkan countries). Research project: Sustainable water and energy management in process industry and Synthesis of heat-integrated process water networks. Advisor: Prof. Zdravko Kravanja.

From 18/07/2011 to 18/08/2011

DAAD Program, Postdoctoral Research in Process Systems Engineering

Institute for Applied Material Flow Management (IfaS), Environmental Campus Birkenfeld, PO Box 1380, 55761 Birkenfeld, Germany

- Postdoctoral research in Process Systems Engineering within the DAAD Program (Research Stays for University Academics and Scientists). Research project: Sustainable water and energy management in the process industries. Host research contact: Prof. Peter Heck.

From 12/09/2010 to 18/09/2010

Mobility within TEMPUS project

Katholieke Hogeschool Sint-Lieven, Gent, Belgium

- Study visit and training within the TEMPUS project: Creation of university-enterprise cooperation networks for education on sustainable technologies. Project ID: 158989-JPHES.

From 15/09/2008 to 14/09/2009

Fulbright Visiting Scholar - Postdoctoral Research in Process Systems Engineering

Carnegie Mellon University, Center for Advanced Process Decision-making, Department of Chemical Engineering, 5000 Forbes Avenue, Pittsburgh, PA 15213-3890 USA.

- Postdoctoral research in Process Systems Engineering within the Fulbright Visiting Scholar Program. Research Projects: Energy and Water Optimization of Bioprocess Systems; General Superstructure and Global Optimization for the Design of Integrated Process Water Networks. Advisor: Prof. Ignacio E. Grossmann, Rudolph R. and Florence Dean University Professor.

From 19/04/2009 to 21/04/2009

2009 Fulbright Visiting Scholar Conference

The Ritz-Carlton, 1150 22nd St NW, Washington, DC

- Attending plenary panels and sessions related to Access and Equity in Higher Education; Participations in discussions.

From 01 to 20/12/2003
01 to 24/12/2002

Mobility within bilateral project between Slovenia and Bosna and Herzegovina

University of Maribor, Faculty of Chemistry and Chemical Engineering, Smetanova 17, 2000 Maribor, Slovenia.

- Postgraduate research and realization of the research activities within the bilateral project between Slovenia and Bosnia and Herzegovina. Project: Computer Aided Process Optimization. Advisor: Prof. Zdravko Kravanja.

From 11/06 to 11/07/2001
02/10 to 11/11/2000

Postgraduate research in Chemical Engineering

University of Maribor, Faculty of Chemistry and Chemical Engineering, Smetanova 17, 2000 Maribor, Slovenia.

- Postgraduate research and work on master thesis: Heat integration and retrofit of heat exchanger network using mathematical programming. Advisor: Prof. Zdravko Kravanja.

From 07 to 18/05/2001

Postgraduate training in Chemical Engineering

University Rovira and Virgili, Tarragona, Department of Chemical Engineering, Spain

- Postgraduate training within the international collaboration between Spain and Bosnia and Herzegovina.

PERSONAL SKILLS

Mother tongue(s): Bosnian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
	Upper Intermediate Level of English, B2				

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills

Excellent written and oral communication skills gained through:
- Teaching and research experience and dissemination of knowledge at university
- Presentation of research results at international conferences and publication in high impact journals
- Work in international research teams

Organisational/managerial skills

Excellent organisational and management skills.
- Vice dean for education at Faculty of Technology, University of Tuzla
- Team leader and coordinator of several research projects (Bilateral projects between Bosnia and Herzegovina and Slovenia, CEEPUS project, etc.
- Team leader of Tuzla research group in the international project SCOPES (Scientific Co-operation between Eastern Europe and Switzerland), 2014-2017)
- Advisor of bachelor, master and doctoral thesis

Job-related skills

Excellent team work skills. Excellent ability to adapt to multicultural environments, and establish and maintain good working relations with people of different national and cultural backgrounds. These skills were gained through my study visits in several mobility programmes (Fulbright Visiting Scholar Program, JoinEU-SEE Program, EM2-STEM Program, DAAD Program, CEEPUS Program) and work in several international and domestic research projects.

Computer skills

Excellent computer skills related to computer-aided tools for simulation, modelling and optimization of chemical processes. These skills were gained through training, work and research in the field of process systems engineering. Excellent skills related to command of Microsoft Office tools (Word, Excel, PowerPoint, etc.).

Driving licence

Driving licence categories:
- B, C, CE

ADDITIONAL INFORMATION

Selected journal papers in last 8 years

Ahmetović, E., Ibrić, N., Kravanja, Z., Grossmann, I. E., Maréchal, F., Čuček, L., Kermani, M. (2018). Simultaneous optimisation and heat integration of evaporation systems including mechanical vapour recompression and background process. Energy (Accepted paper).

Ibrić, N., Ahmetović, E., Kravanja, Z., Maréchal, F., & Kermani, M. (2017). Simultaneous synthesis of non-isothermal water networks integrated with process streams. Energy, 141, 2587-2612.

Ibrić, N., Ahmetović, E., Kravanja, Z., Maréchal, F., & Kermani, M. (2017). Synthesis of single and interplant non-isothermal water networks. Journal of Environmental Management, 203, 1095-1117.

Ibrić, N., Ahmetović, E., & Kravanja, Z. (2016). Mathematical programming synthesis of non-isothermal water networks by using a compact/reduced superstructure and an MINLP model. Clean Technologies and Environmental Policy, 1-35.

Ahmetović, E., Ibrić, N., Kravanja, Z., & Grossmann, I. E. (2015). Water and energy integration: A comprehensive literature review of non-isothermal water network synthesis. *Computers & Chemical Engineering*, 82, pp. 144-171.

Ahmetović, E., Ibrić, N., Kravanja, Z. Optimal design for heat-integrated water-using and wastewater treatment networks. Applied Energy, 2014, 135, 791-808.

Ibrić, N., Ahmetović, E., Kravanja, Z.. Simultaneous optimization of water and energy within integrated water networks. Applied Thermal Engineering, 2014, 70 (2),1097–1122.

Ahmetović, E., Kravanja, Z., Simultaneous optimization of heat-integrated water networks involving process-to-process streams for heat integration. Applied Thermal Engineering, 2014, 62 (1) 302–317.

Ibrić, N., Ahmetović, E., Kravanja, Z. Two-step mathematical programming synthesis of pinched and threshold heat-integrated water networks. Journal of Cleaner Production, 2014, 77, 116-139.

Ahmetović, E., Kravanja, Z., Simultaneous synthesis of process water and heat exchanger networks. Energy. 2013, 57: 236-250.

Suljkanović, M., Jotanović, M., Ahmetović, E., Tadić, G., Ibrić, N., Formalized methodology for the separation of three component electrolytic systems. Partial separation of the system, Chemical Industry. 2013, 67, 4, 569-583.

Ibrić, N., Ahmetović, E., Suljkanović, M., Optimization model for the design of distributed wastewater treatment networks. Chemical Industry. 2012, 66 (2) 263–275.

Ahmetović, E., Grossmann, I. E., Global superstructure optimization for the design of integrated process water networks. The AIChE Journal. 2011, 57, 2: 434-457. Top cited AIChE Journal paper from 2011.

Martin M., Ahmetović, E., Grossmann, I. E., Optimization of Water Consumption in Second Generation Bioethanol Plants. Ind. Eng. Chem. Res. 2011, 50, 3705–3721

Ahmetović, E., Martin, M., Grossmann, I. E., Optimization of energy and water consumption in corn-based ethanol plants. Ind. Eng. Chem. Res. 2010, 49 (17), pp 7972–7982.

Selected conferences, and conference proceedings papers in last 8 years

Ahmetović, E., Ibrić, N., Kravanja, (2017). Recent Developments in Synthesis of Multiple-Effect Evaporation Plants. The SPIL Scientific Conference: Energy, Water, Emissions & Waste in Industry and Cities. December 6-7, 2017, Brno, Czech Republic.

Ahmetović, E., Suljkanović, M., Kravanja, Z., Maréchal, F., Ibrić, N., Kermani, M., Bogataj, M., & Čuček, L. (2017). Simultaneous Optimisation of Multiple-Effect Evaporation Systems and Heat Exchanger Network. The 20th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction. August 21-24, 2017, Tianjin, China. Chemical Engineering Transactions, 61, 1399-1404.

Ahmetović, E., Suljkanović, M., Kravanja, Z., Maréchal, F., Ibrić, N., Mustafić, N., Kermani, M., & Bogataj, M. (2016). Analysis, Synthesis and Optimization of Multiple-Effect Evaporation Systems Using Mathematical Programming. In 2016 AIChE Annual Meeting. November 13-18, 2016, San Francisco, CA.

Ahmetović, E., Kravanja, Z., Maréchal, F., Ibrić, N., Kermani, M. Applications of Pinch Analysis and Mathematical Programming Methods for Synthesizing Non-Isothermal Water Networks, AIChE 2015 Annual meeting, November 8-13, 2015, Salt Lake City, UT (U.S).

Ahmetović, E., Ibrić, N., Kravanja, Z., Grossmann, I. E. Recent developments in synthesis of non-isothermal water networks, The 10th Conference on Sustainable Development of Energy, Water and Environment Systems – SDEWES Conference, September 27 - October 2, 2015, Dubrovnik, Croatia.

Ibrić, N., Ahmetović, E., Kravanja, Z. A compact superstructure for the synthesis of non-isothermal process water networks, The 10th Conference on Sustainable Development of Energy, Water and Environment Systems – SDEWES Conference, September 27 - October 2, 2015, Dubrovnik, Croatia.

Pintarič, N., Kravanja, Z., Ibrić, N., Ahmetović, E., Grossmann, I. E. (2014). Designing Optimal Water Networks for the Appropriate Economic Criteria. The 17th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction (PRES 214), August 23-27, 2014, Prague, CZ. Chemical Engineering Transactions, Vol. 39, 1021-1026. Keynote Lecture

Ibrić, N., Ahmetović, E., Kravanja, Z. (2014). Synthesis of Water, Wastewater Treatment, and Heat-Exchanger Networks. The 24th European Symposium on Computer Aided Process Engineering – ESCAPE 24, June 15-18, 2014, Budapest, Hungary. Computer Aided Chemical Engineering, Vol. 33, 2014, 1843–1848

Ahmetović, E., Kravanja, Z., Ibrić, N. (2013). Simultaneous Optimization Model for the Synthesis of Heat-Integrated Process Water Networks. SDEWES 2013-The 8th Conference on Sustainable Development of Energy, Water and Environment Systems, September 22-27, 2013, Dubrovnik, Croatia (Paper published in Conference Proceeding). Keynote Lecture

Ibrić N., Ahmetović E., Kravanja Z. (2013), A two-step solution strategy for the synthesis of pinched and threshold heat-integrated process water networks. PRES 2013-16th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction, September 29-October 2, 2013, Rhodes, Greece. In Chemical Engineering Transactions, Volume 35, pp 43-48.

Ibrić, N., Ahmetović, E., Kravanja, Z. (2013). Synthesis of heat-integrated water networks including wastewater regeneration, Slovenian Chemical Days, Maribor, Slovenia. (Paper published in Conference Proceeding).

Ahmetović, E., Ibrić, N., Kravanja, Z. (2013). Sustainable Water, Wastewater, and Energy Management in the Process Industries. International Scientific Conference. Proceedings of „10th Conference of Chemists, Technologists and Environmentalists of RS“, 150-165. Banja Luka, B&H. Invited Session Lecture.

Ahmetović, E., Kravanja, Z. (2012). Effects of the Different Stages of Superstructure Development On the Efficiencies and Designs of Heat-Integrated Process-Water Networks. The AIChE 2012 Annual meeting, October 28-November 2, 2012, Pittsburgh PA, USA.

Ahmetović, E., Kravanja, Z. (2012). Solution Strategies for the Synthesis of Heat-Integrated Process Water Networks. PRES 2012-15th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction, August 25-29, 2012, Prague, CZ. In Chemical Engineering Transactions, Volume 29, pp 1015-1020. Keynote Lecture

Ahmetović, E., Kravanja, Z. (2012). Simultaneous Optimization Model for the Synthesis of Heat-Integrated Process Water Networks. SDEWES 2012-The 7th Conference on Sustainable Development of Energy, Water and Environment Systems, July 1-7, 2012, Ohrid, Macedonia (Paper published in conference proceedings). Best Paper Award

Ibrić, N., Ahmetović, E., Kravanja, Z. (2012). A sequential approach for the synthesis of heat-integrated water networks. The 18th Slovenian Chemical Days 2012, September 12-14, Portorož, Slovenia. (Paper published in conference proceedings).

Ahmetović, E., Ibrić, N. (2011). Synthesis and design of environmentally sustainable processes. International Scientific Conference „Renewable energy sources and sustainable development“, Paneuropean University APEIRON, Banja Luka. (Paper published in conference proceedings).

Ahmetović, E., Grossmann, I. E. (2010). Optimization of water consumption in process industry. " The 16th Slovenian Chemical Days", 23-24 September, 2010, Maribor, Slovenia. (Paper published in conference proceedings).

Ahmetović, E., Grossmann, I. E. (2010). Strategies for the global optimization of integrated process water networks. "European Symposium on Computer Aided Process Engineering (ESCAPE-20), June 6-9, 2010, Ischia, Naples, Italy. Printed in Computer-Aided Chemical Engineering 28, 901-906, Elsevier.

Martin M., Ahmetović, E., Grossmann, I. E. (2010). Optimization of water consumption in Bioethanol plants. The AIChE 2010 Annual meeting, November 7-12, 2010, Salt Lake City, UT (USA).

CMU-IBM Cyber-Infrastructure for MINLP collaborative site

Ahmetović, E., Grossmann, I. E., (2010). Integrated Process Water Networks Design Problem, Available from Cyber-Infrastructure for MINLP [A collaboration of CMU and IBM Research] at http://www.minlp.org/library/problem/index.php?i=101.

Chair and Co-Chair at Conferences

Section: Energy Saving Technology (Chair). The 20th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction. August 21-24, 2017, Tianjin, China.

Section: Energy 1 (Chair). The 10th Conference on Sustainable Development of Energy, Water and Environment Systems – SDEWES Conference, September 27-October 2, 2015, Dubrovnik, Croatia.

Section: Energy efficiency in residential sector (Chair). The 8th Conference on Sustainable Development of Energy, Water and Environment Systems – SDEWES Conference, September 22-27, 2013, Dubrovnik, Croatia.

Section: Sustainable Biofuel Production (Co-chair). 16th Conference Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction. 29 September - 2 October, 2013, Rhodes, Greece.

Member of Poster Evaluation Committee. The 10th Conference on Sustainable Development of Energy, Water and Environment Systems – SDEWES Conference, September 27-October 2, 2015, Dubrovnik, Croatia.

BOOKS & MONOGRAPHIES & BOOK CHAPTERS

Ahmetović, E., Grossmann, I.E. , Kravanja, Z., Ibrić, N. (2017). “Water Optimization in Process Industries”, 487-512 (in book: Sustainable Utilization of Natural Resources (eds. P. Mondal and A.K. Dalai).

Ahmetović, E. (2016). Selected Chapters of Chemical-Process Engineering. University of Tuzla, Faculty of Technology, Tuzla.

Suljkanović, M., Ahmetović, E. (2016). Concentration and Crystallization of Electrolyte Systems, Design and Exploitation Analysis, C.P.A, Tojšići.

Ahmetović, E. (2010). Heat Transfer Operations in Process Engineering, OFF-SET, Tuzla.

Suljkanović, M., Ahmetović, E. (2007). Analysis and simulation of chemical processes-situation approach, IHI. Tuzla.

Suljkanović, M., Ahmetović, E. (2006). Computer simulation of industrial crystallization processes-electrolyte systems. IHI. Tuzla (Monography).

ADVISOR OF THESES

Doctoral thesis

Ibrić, N. (2014). Synthesis and Optimisation of Process Water Networks. Doctoral dissertation. Faculty of Technology, University of Tuzla. (Advisor: Elvis Ahmetović, Associate Professor).

Master thesis

Mustafić, N. (2014). Synthesis and Optimisation of Heat Exchanger Networks. Master thesis. Faculty of Technology, University of Tuzla. (Advisor: Elvis Ahmetović,, Associate Professor).

Mujkić, Z. (2014). Synthesis and Optimisation of Heat Exchanger Networks. Master thesis. Faculty of Technology, University of Tuzla. (Advisor: Elvis Ahmetović,, Associate Professor).

Ibrić, N. (2010). Development of optimization model for the design of integrated process water networks in process industry. Master thesis. Faculty of Technology, University of Tuzla. (Advisor: Elvis Ahmetović, Assistant Professor)

Bachelor thesis

Piro, N. (2018). Application of Pinch Technology for Heat Integration. Bachelor thesis. Faculty of Technology, University of Tuzla. (Advisor: Elvis Ahmetović, Full Professor).

Porić, A. (2017). Systematic Methods for Water Integration in the Process Industry. Bachelor thesis. Faculty of Technology, University of Tuzla. (Advisor: Elvis Ahmetović, Full Professor).

Okanović, M. (2016). Application of Computers for Solving Heat Transfer Operation Problems, Bachelor thesis. Faculty of Technology, University of Tuzla. (Advisor: Elvis Ahmetović, Associate Professor).

Aljić, A. (2016). Conceptual Design of Multiple-Effect Evaporation. Bachelor thesis. Faculty of Technology, University of Tuzla. (Advisor: Elvis Ahmetović, Associate Professor).

Mujanović, M. (2014). Heat Exchanger Network Synthesis. Bachelor thesis. Faculty of Technology, University of Tuzla. (Advisor: Elvis Ahmetović, Associate Professor).

Đonlić, D. (2014). Water reuse and recycling within process industries. Bachelor thesis. Faculty of Technology, University of Tuzla. (Advisor: Elvis Ahmetović, Associate Professor).

Čikarić, E. (2008). Simulation of classical multiple-effect evaporation and evaporation with thermal vapour recompression. Bachelor thesis. Faculty of Technology, University of Tuzla. (Advisor: Elvis Ahmetović, Assistant Professor)

RESEARCH PROJECTS

International Projects

From 2014-2017

Computer Aided Process Engineering applied to energy, water, and waste reduction during process design and operation. Scientific-research project between Switzerland (EPFL, Industrial Process and Energy Systems Engineering), Bosnia and Herzegovina (University of Tuzla, Faculty of Technology) and Slovenia (University of Maribor, Faculty of Chemistry and Chemical Engineering) funded within the scientific co-operation between Eastern Europe and Switzerland (SCOPES) for the period 2014-2017.

From 2014 to 2015

Synthesis of sustainable water, wastewater and energy networks within the process industries

Scientific and technological collaboration between Bosnia and Herzegovina (University of Tuzla) and Slovenia (University of Maribor).

From 2011 to 2012

Sustainable water and energy management in process industry - Synthesis of heat-integrated process water networks.

University of Maribor, Faculty of Chemistry and Chemical Engineering, Laboratory for Process Systems Engineering and Sustainable Development, Smetanova 17, 2000 Maribor, Slovenia.

From 2010 to 2011

Development and Application of an Optimization Model for the Reduction of Water Consumption in Process Industry.

Scientific and technological collaboration between Bosnia and Herzegovina (University of Tuzla) and Slovenia (University of Maribor).

From 2008 to 2009

Energy and Water Optimization of Bioprocess Systems. Global Optimization for the Design of Integrated Process Water Networks.

Carnegie Mellon University, Center for Advanced Process Decision-making, Department of Chemical Engineering, 5000 Forbes Avenue, Pittsburgh, PA 15213-3890 USA. (Fulbright Visiting Scholar Program)

From 2002 to 2003

Computer Aided Process Optimization.

Scientific and technological collaboration between Bosnia and Herzegovina (University of Tuzla) and Slovenia (University of Maribor).

Projects in Bosnia and Herzegovina

2016

Simulation and Optimisation of Evaporation/Crystalisation Separation Processes. Faculty of Technology, University of Tuzla. Project supported by Federal Ministry of Education and Science, Bosnia and Herzegovina

2011

Automated Synthesis and Design of Sustainable Processes. Faculty of Technology, University of Tuzla. Project supported by Federal Ministry of Education and Science, Bosnia and Herzegovina

2010

Efficient Use of Water and Energy in Process Industry.

Faculty of Technology, University of Tuzla. Project supported by Ministry of education, science, culture and sport of the Tuzla Canton.

2007

Simulation of Salt Production by Vacuum-Evaporation in Solana d.d. Tuzla.

Institute for Chemical Engineering, Tuzla

2006

Design of distillation column condensation system.

Project between GIKIL Lukavac and Faculty of Technology, University of Tuzla.

2005

Simulation and Verification of De-sorption Column Functionality for Ammonium Waters in GIKIL from an Old Plant of Ammonia Combustion.

Project between GIKIL Lukavac and Faculty of Technology, University of Tuzla.

Coordinator of the CEEPUS project 2012-2018

Coordinator of the CEEPUS (Central European Exchange Program for University Studies) project "'PhD in Chemistry and Chemical Engineering" at the the Faculty of Technology, University of Tuzla.

Selected Guest & Invited Lectures & Seminars

Seminar/Workshop organized within the 22th Summer University of Tuzla: Application of computer aided process engineering for reducing water/energy consumption and waste generation in technological processes. Tuzla, Bosnia and Herzegovina, July 4, 2017. Seminar held within the SCOPES (Scientific Co-operation between Eastern Europe and Switzerland) research project.

Plenary lecture: Water and heat integration in the process industry, 5tf Environmental Resources, Sustainable Development and Food Production-OPORPH 2017, November 16-17, Tuzla, Bosnia and Herzegovina

CEEPUS Lecture: Synthesis of Heat-Integrated Water Networks. Faculty of Chemistry and Chemical Engineering, University of Maribor, Maribor, Slovenia, June 2013.

Invited Session Lecture: Sustainable Water, Wastewater, and Energy Management in the Process Industries. „10th Conference of Chemists, Technologists and Environmentalists of RS". November 15 - 16, 2013, Banja Luka.

Guest Lecture: Process Integration: Water and Energy Optimization in Process Industry, Lappeenranta University of Technology, Lappeenranta, Finland, September 21, 2012.

Invited Lecture: Water Network Synthesis in Process Industry. IX Meeting of Young Chemical Engineers, "New Technologies & Knowledge Transfer, University of Zagreb, Croatia, February 16-17, 2012.

Seminar: "Fulbright Visiting Scholar Program 2008-2009" organized on the occasion of the 50th anniversary of the Faculty of Technology in Tuzla. October 23.10.2009.

Process Systems Engineering Seminar: General superstructure and global optimization for the design of integrated process water networks. Carnegie Mellon University, Department of Chemical Engineering. Pittsburgh, PA, USA. August 28, 2009.

Guest Lecture: Unit operations in food industry. Thermal properties of food. Heat-exchangers, Evaporation. Agriculture-Food Faculty. University of Sarajevo. May, 2005.

Honours & Awards & Scholarships & Grants

Erasmus + mobility for teaching, 2018
Erasmus + mobility for teaching/training, 2016
SCOPES research project grant, 2014-2017
Federal Ministry of Education and Science research project grant, 2016/2017
Best paper award, SDEWES 2012 Conference.
The EM2-STEM Scholarship, 2012.
The JoinEU SEE Scholarship, 2011/2012
DAAD Scholarship, 2011.
The Fulbright Visiting Scholar Program Scholarship, 2008/2009
Award of Rector of the University of Tuzla for excellent work results at the Faculty of Technology, 2007
Award of Cantonal Ministry of Education, Science, Culture and Sport for PhD study, 2005
Scholarship for postgraduate training (Collaboration between University of Rovira and Virgili, Spain, and University of Tuzla, Bosnia and Herzegovina), 2001
Scholarships for postgraduate training. Ministry of Science and Technology of Slovenia, 2000/2001
Postgraduate Student Grants (Supported by Austrian Federal Chancellery), 2000.

Reviewer for Journals

AIChE Journal
Chemical Engineering Research and Design
Computers and Chemical Engineering
Chemical Engineering Science
Industrial & Engineering Chemistry Research
Chemical Engineering Transactions
Applied Energy
Energy
Journal of Cleaner Production
Journal of Environmental Management
Latin American Applied Research - An International Journal
Journal of Sustainable Development of Energy, Water and Environment Systems
Chemical and Biochemical Engineering Quarterly
Croatian Journal of Food Science and Technology
Thermal Science

Book Reviewer

Introduction to Software for Chemical Engineers (2014). Editor: Mariano Martín Martín. Boca Raton, Florida, CRC Press.

Memberships

Member of International scientific committee of the 26th European Symposium on Computer-Aided Process Engineering (ESCAPE26), 2015-2016

Member of Scientific Advisory Board, Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES), 2012 – present

Member of Steering Committee of University Sport Society, University of Tuzla, 2016 – present

Member of American Institute of Chemical Engineers (AIChE), 2009 – present

Senior Member of American Institute of Chemical Engineers (AIChE), 2016 – present

Member of Croatian Society of Chemical Engineering (HDKI), 2002 – present

Mentors and Advisors

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ANNEXES

More information about my educational and research work can be found at the following web page: www.tf.untz.ba/elvis.ahmetovic/ or can be supplied on request.