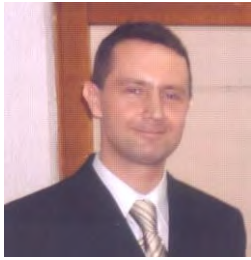


PERSONAL INFORMATION

Ivan Petric



📍 Faculty of Technology, University of Tuzla, Univerzitetska 8, 75000 Tuzla, Bosnia and Herzegovina

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✉ ivan.petric@untz.ba

Sex male | Date of birth 13.02.1970. | Nationality Bosnian & Herzegovian / Croatian

TITLE, POSITION

Full Professor, Department of Chemical Engineering

WORK EXPERIENCE

June 2018 - Present

Full Professor

Faculty of Technology, University of Tuzla

- Education
- Research

June 2012 – June 2018

Associate Professor

Faculty of Technology, University of Tuzla

- Education
- Research

June 2007 - June 2012

Assistant Professor

Faculty of Technology, University of Tuzla

- Education
- Research

May 2002 – May 2007

Senior Assistant

Faculty of Technology, University of Tuzla

- Education
- Research

May 1997 – May 2002

Assistant

Faculty of Technology, University of Tuzla

- Education
- Research

EDUCATION AND TRAINING

2002 – 2007

Doctor of Science in Process Engineering

Faculty of Technology, University of Tuzla

1998 – 2001

Master of Science in Process Engineering

Faculty of Technology, University of Tuzla

1990 – 1996

Bachelor of Science in Chemical Technology

Faculty of Technology, University of Tuzla

PERSONAL SKILLS

Mother tongue(s) Croatian / Bosnian / Serbian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B1	B1	B2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills

- good communication skills gained through the experience as research project manager
- experienced at giving presentations to large audiences.

Organisational / managerial skills

- project manager at several scientific-research projects
- Head of Study Department Chemical Engineering and Technologies

Computer skills

- proficient with Microsoft Office programmes, Outlook, Internet Explorer...
- competent with numerical software packages.

Driving licence

- B

ADDITIONAL INFORMATION

Selected research papers
published at indexed international
scientific journals

1. **Petric, I.**, Karić, E. (2019): Simulation of commercial fixed-bed reactor for maleic anhydride synthesis: Application of different kinetic models and industrial process data, *Reaction Kinetics, Mechanisms and Catalysis* 126(2), 1027-1054.
2. Karić E., **Petric I.**, Mustafić, N. (2017): Composting kinetics for mixture of poultry manure and wheat straw based on volatile solids content, *Journal of Engineering & Processing Management* 9(1), 36-41.
3. Mustafić, N., **Petric I.**, Karić E. (2017): Application of validated mathematical model of composting process for study the effect of air flow rate on process performance, *Journal of Engineering & Processing Management* 9(1), 62-68.
4. **Petric, I.**, Mustafić, N. (2016). Application of microbial kinetics to modeling the composting process. *Technologica Acta* 9(1), 5-14.
5. **Petric I.**, Karić, E. (2016). Development and validation of the mathematical model for synthesis of maleic anhydride from n-butane in a fixed bed reactor. *Bulletin of the Chemists and Technologists of Bosnia and Herzegovina*, 47(2), 49-58.
6. Papračanin, E., **Petric, I.** (2016): Mathematical modeling and simulation of the composting process in a pilot reactor. *Bulletin of the Chemists and Technologists of Bosnia and Herzegovina*, 47(2) 2016, 39-48.
7. **Petric, I.**, Karić, E. (2015). Comparison of first-order and nth-order kinetics of co-composting poultry manure with wheat straw. *Technologica Acta* 8(2) 2015, 17-23.
8. **Petric, I.**, Husanović, A. (2015): Comparison of different kinetic models for the chlorohydrin process using real data from an industrial tubular reactor. *The Canadian Journal of Chemical Engineering*, 93(1), 78-87.
9. **Petric, I.**, Avdihodžić, E., Ibrić, N. (2015): Numerical simulation of composting process for organic fraction of municipal solid waste and poultry manure. *Ecological Engineering*, 75, 242-249.
10. **Petric, I.**, Mustafić, N. (2015): Dynamic modeling the composting process of the mixture of poultry manure and wheat straw. *Journal of Environmental Management*, 161, 392-401.
11. **Petric, I.**, Helić, A., Avdihodžić Avdić, E. (2012): Evolution of process parameters and determination of kinetics for co-composting of organic fraction of municipal solid waste with poultry manure. *Bioresource Technology* 117, 107-116.
12. Selimbašić, V., Marić, S., **Petric, I.**, Dožić, A. (2012): Anaerobic batch fermentation of cattle manure: effect of ammonia. *Journal of Environmental Protection and Ecology* 13(1), 211-218.
13. **Petric, I.**, Šestan, A, Šestan, I. (2009): Influence of initial moisture content on the composting of poultry manure with wheat straw, *Biosystems Engineering* 104 (1), 125-134.
14. **Petric, I.**, Šestan, A, Šestan, I. (2009): Influence of wheat straw addition on composting of poultry manure, *Process Safety and Environmental Protection* 87(3), 206-212.
15. **Petric, I.** (2008): Aerobic Composting Poultry Manure and Wheat Straw-Kinetic and Reactor Model, *International Journal of Chemical Reactor Engineering* Volume 6, A95, 1-43.
16. **Petric, I.**, Selimbašić, V. (2008): Composting of poultry manure and wheat straw in a closed reactor: optimum mixture ratio and evolution of parameters, *Biodegradation* 19(1), 53-63.
17. **Petric, I.**, Selimbašić, V. (2008): Development and validation of mathematical model for aerobic composting process, *Chemical Engineering Journal* 139(2), 304-317.

Published university textbooks

1. **Petric, I.** „Osnove hemijsko-inženjerske kinetike i reakcijskog inženjerstva“ („Fundamentals of Chemical-Engineering Kinetics and Reaction Engineering“), OFF-SET Tuzla, 2014
2. **Petric, I.** „Osnove bioreakcijskog inženjerstva“ („Fundamentals of Bioreaction Engineering“), IN SCAN Tuzla, 2018
3. **Petric, I.** „Uvod u hemijsko inženjerstvo“ („Introduction to Chemical Engineering“), IN SCAN Tuzla, 2018

Scientific-research projects

1. „Composting of efficient and useful treatment for management of solid biodegradable organic waste in Bosnia and Herzegovina“, financed by Federal Ministry of Education and Science (2003-2005)
2. „Application of reactor system for composting process (with forced aeration) of poultry manure and wheat straw“, financed by Ministry of Education, Science, Culture and Sport of Tuzla Canton (2007)
3. „Possibility for application of composting process of municipal solid waste with different additives in reactor system“, financed by Federal Ministry of Education and Science (2009-2011)
4. „Study of aerobic composting of municipal solid organic waste“, financed by Ministry of education, science, culture and sport of Tuzla Canton (2009-2010)
5. „Optimization of aerobic composting process of municipal solid waste“, financed by Ministry of Education, Science, Culture and Sport of Tuzla Canton (2012-2013)
6. „Optimization of kinetic and process parameters for composting process of organic fractions of municipal solid waste with different additives“, financed by Federal Ministry of Education and Science (2013-2014)
7. „Optimization of maleic anhydride synthesis from in-butane in industrial fixed-bed reactor“, financed by Federal Ministry of Education and Science (2017-2018)

1. Karić, E. Petric, I., (2019): Determination and application of improved kinetic parameters for simulation of maleic anhydride synthesis in industrial fixed-bed reactor. VI International Congress "Engineering, Environment and Materials in Processing Industry", March 11-13, Jahorina, Proceedings at CD
2. Papračanin, E., **Petric, I.**, (2017): Sensitivity analysis of the parameters for the mathematical model and statistical analysis of composting process. 5th Scientific symposium with international participation „Environmental resources, sustainable development and food production“ OPORPH November 16-17, 2017, Tuzla, Bosnia and Herzegovina (Oral presentation) Book of abstracts (ISSN 2566-3364)
3. Karić, E., **Petric, I.**, (2017): Process simulator of distillation column for separation of binary system. 5th Scientific symposium with international participation „Environmental resources, sustainable development and food production“ OPORPH November 16-17, 2017, Tuzla, Bosnia and Herzegovina (Poster presentation) Book of abstracts (ISSN 2566-3364)
4. Karić, E., **Petric, I.**, (2017): Mixed inductive-deductive strategy in modeling the composting kinetics. 5th Scientific symposium with international participation „Environmental resources, sustainable development and food production“ OPORPH November 16-17, 2017, Tuzla, Bosnia and Herzegovina (Poster presentation) Book of abstracts (ISSN 2566-3364)
5. Karić E., **Petric I.**, (2016): Uticaj ulaznih procesnih parametara na izvedbu industrijskog cijevnog reaktora sa nepokretnim slojem katalizatora (Effect of inlet process parameters on performance of industrial fixed-bed reactor), at the International Scientific Conference „XI Conference of Chemists, Technologists and Environmentalists of Republic of Srpska“, 17-18. Novembar, 2016, Teslić, Bosnia i Herzegovina (Poster presentation) Proceedings (ISBN 978-99938-54-67-8)
6. Mustafić, N., **Petric, I.** (2013): Application of microbial kinetics for modelling of composting process of poultry manure and wheat straw, 3. Scientific Symposium with International Participation, „Environmental resources, sustainable development and food production“, OPORPH-2013, November 14-15, 2013 Tuzla (Oral Presentation)
7. Karić, E., **Petric, I.** (2013): Kinetics of organic matter degradation for co-composting poultry manure with wheat straw with application of correction factors, 3. Scientific Symposium with International Participation, „Environmental resources, sustainable development and food production“, OPORPH-2013, November 14-15, 2013 Tuzla (Oral Presentation)
8. Elezović, S., **Petric, I.**, Avdić Avdihodžić, E., Ibrić, N., Topčagić, M. (2012): Modelling Of Aerobic Composting Process Based On Simplified Microbial Kinetics. International Conference on Green Technology & Ecosystems for Global Sustainable Development, 28-30 May 2012, Tuzla, Bosnia and Herzegovina. (Oral Presentation)
9. Topčagić, M. **Petric, I.**, Avdihodžić, E., Ibrić, N., Elezović, S. (2012): Effect of poultry manure addition on the process of aerobic composting of organic fraction of municipal solid waste, 2. Scientific Symposium with International Participation, „Environmental resources, sustainable development and food production“, OPORPH-2012, November 8-9, 2012, Tuzla, (Oral Presentation)
10. Helić A., **Petric, I.**, Avdihodžić Avdić, E. (2011): Kinetic models for degradation of organic fraction of municipal solid waste with different additives. *Zbornik radova Tehnološkog fakulteta u Leskovcu*, sveska 20, 52-60. Presented at 9th Symposium "Novel Technologies and Economic Development" with international participation, 21-22 October 2011, Leskovac, Serbia, Book of Abstracts, pp. 135, ISBN 978-86-82367-92-5)
11. Avdihodžić Avdić, E., **Petric, I.**, Ibrić, N. (2011): Verification of the mathematical model and optimization of the municipal solid waste composting process. *Zbornik radova Tehnološkog fakulteta u Leskovcu*, sveska 20, 61-70. Presented at 9th Symposium "Novel Technologies and Economic Development" with international participation, 21-22 October 2011, Leskovac, Serbia, Book of Abstracts, pp. 136, ISBN 978-86-82367-92-5)
12. Avdihodžić Avdić, E., **Petric, I.** (2011): Development of mathematical model and determination of parameters for composting of municipal solid waste. 24. Congress o process industry Processing 2011, 01-03.06.2011. godine, Fruška gora, Serbia, Proceedings, 1-10. (Oral Presentation)
13. **Petric, I.**, Šestan, A., Šestan, I. (2009): Effect of reactor size on composting of agricultural waste, Proceedings of 37th International Symposium "Actual Tasks on Agricultural Engineering" 10th-13th of February 2009 in Opatija, Croatia, pp. 279-289. (Oral Presentation)
14. **Petric, I.**, Šestan, A., Alibašić, I. (2008): Effect of initial moisture content on aerobic composting of poultry manure with wheat straw, Proceedings of 36th International Symposium "Actual Tasks on Agricultural Engineering" 11th-15th of February 2008 in Opatija, Croatia, pp. 393-404. (Oral Presentation)
15. **Petric, I.**, Bijedić M., Selimbašić, V. (2006): Optimum Ratio of Chicken Manure and Wheat Straw for Aerobic Composting Process, *Proceedings of the 34. International Symposium on Agricultural Engineering, Opatija, Croatia, 21.-25. February 2006*, pp. 307-318. (Oral Presentation)
16. **Petric, I.**, Bijedić M., Selimbašić, V. (2005): Mathematical Model and Dynamic Simulation of Aerobic Composting Process, *Proceedings of the 33. International Symposium on Agricultural Engineering, Opatija, Croatia, 21.-25. February 2005*, (Oral Presentation)
17. **Petric, I.**, Bijedić M., Selimbašić, V. (2004): Simulation model for Aerobic Composting Process and Its Preliminary Validation. Congress Proceedings of the 1st International and 18th Croatian Congress of Technologists for Post-Harvest Technology «ZRNKO '04», November 17th-18th, 2004, Stubičke Toplice, Croatia, pp. 174-187. (Oral Presentation)

Selected papers presented at international scientific conferences

Mentorship at doctoral dissertations

1. Edisa Avdihodžić Avdić, „Optimizacija kinetičkih i procesnih parametara za proces kompostiranja komunalnog krutog otpada“ („Optimization of kinetic and process parameters for composting process of municipal solid waste“), University of Tuzla, Faculty of Technology, 2016

Mentorship at master's thesis

1. Azra Helić, „Kinetički modeli za proces aerobnog kompostiranja organske frakcije komunalnog krutog otpada sa različitim dodacima“ („Kinetic models for aerobic composting process of organic fraction of municipal solid waste“), University of Tuzla, Faculty of Technology, 2015
2. Ervin Karić, „Modeliranje sinteze anhidrida maleinske kiseline iz n-butana u industrijskom cijevnom reaktoru sa nepokretnim slojem katalizatora“ („Modeling of maleic anhydride synthesis in industrial fixed-bed reactor“), University of Tuzla, Faculty of Technology, 2016
3. Edisa Avdihodžić Avdić, „Laboratorijska i numerička simulacija procesa kompostiranja komunalnog krutog otpada sa prisilnom aeracijom u reaktoru“ („Laboratory and numerical simulation of composting process of municipal solid waste with forced aeration in reactor“), University of Tuzla, Faculty of Technology, 2011

Reviews at international indexed scientific journals

1. Waste Management
2. Biodegradation
3. Chemical Engineering Journal
4. Journal of Environmental Management
5. Frontiers of Environmental Science & Engineering in China
6. Environmental Technology
7. Science of the Total Environment
8. Biosystems Engineering
9. Environmental Engineering and Management Journal
10. African Journal of Biotechnology
11. Chemical and Biochemical Engineering Quarterly
12. Chemosphere
13. Journal of Agricultural Science and Technology
14. International Journal of Recycling of Organic Waste in Agriculture
15. The Korean Journal of Chemical Engineering
16. Environmental Engineering Research
17. Compost Science & Utilization
18. International Food Research Journal
19. International Journal of Heat and Mass Transfer
20. Journal of the Air & Waste Management Association
21. Environmental Science and Pollution Research
22. Arabian Journal for Science and Engineering
23. Glasnik hemičara, tehnologa i ekologa Republike Srpske
24. Waste and Biomass Valorization

Study visits

1. 08/10-06/11/2000, University of Ljubljana, Slovenia, Faculty of Chemistry and Chemical Technology, Department of Chemical Engineering
2. 13/01-10/03/2001, University of Lleida, Spain, Faculty of Agricultural Engineering
3. 06/05-20/05/2001, University of Rovira i Virgili, Tarragona, Spain, Department of Chemical Engineering
4. 13/10-09/11/2002, University of Lleida, Spain, Faculty of Agricultural Engineering, Laboratory of Environmental Engineering
5. 11/10-01/11/2003, University of Lleida, Spain, Faculty of Agricultural Engineering, Laboratory of Environmental Engineering
6. 18/01-21/02/2004, University of Lleida, Spain, Faculty of Agricultural Engineering, Laboratory of Environmental Engineering

Honours and awards

- Top Reviewer 2012, international indexed scientific journal “Waste Management” (Elsevier)