

## PERSONAL INFORMATION

## Hrvoje Krstić



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<http://bib.irb.hr/lista-radova?autor=278286>

Sex Male | Date of birth 27/05/1981 | Nationality Croatian

## WORK EXPERIENCE

26/01/2018–Present

**Associate Professor**

Faculty Of Civil Engineering Osijek, Department of organisation, technology and management, Osijek (Croatia)

*Teaching and researching in the field of building energy efficiency, building technology and facility management*

01/11/2012–26/01/2018

**Assistant Professor**

Faculty of Civil Engineering Osijek, Department of organization, technology and management, Osijek (Croatia)

*Teaching and researching in the field of building energy efficiency, building technology and facility management*

01/12/2011–31/10/2012

**Senior Teaching and Research Assistant**

Faculty of Civil Engineering Osijek, Department of organization, technology and management, Osijek (Croatia)

*Teaching and researching in the field of construction and facility management*

01/01/2006–30/11/2011

**Teaching and Research Assistant**

Faculty of Civil Engineering Osijek, Department of organization, technology and management, Osijek (Croatia)

*Teaching and researching in the field of construction and facility management*

## EDUCATION AND TRAINING

2014–Present

**Regular annual professional development programs for authorized persons to perform energy audits and energy certification of buildings and energy audits of public lighting system**

Faculty of Civil Engineering Osijek, Osijek (Croatia)

14/10/2013–25/11/2013

**Programme for Authorized persons to perform energy audits and energy certification of buildings with complex technical systems**

Faculty of Civil Engineering Osijek, Osijek (Croatia)

16/04/2013–17/04/2013

**Professional Training for Window and Door Measurement System and BlowerDoor**

BlowerDoor GmbH MessSysteme für Luftdichtheit, Energie und Umweltzentrum, Springe-Eldagsen (Germany)

- 13/04/2012–11/05/2012 **Programme for Authorized persons to perform energy audits and energy certification of buildings with simple technical systems**  
University of Applied Sciences of Slavonski Brod, Slavonski Brod (Croatia)
- 23/11/2011–27/04/2012 **Pedagogical-psychological and didactic-methodical education**  
Faculty of Teacher Education Osijek, Osijek (Croatia)
- 07/04/2006–23/11/2011 **Ph.D. in Civil Engineering**  
Faculty of Civil Engineering Osijek, Osijek (Croatia)  
*Thesis: Maintenance and Operation cost's prediction model based on the Facilities of the University of Josip Juraj Strossmayer in Osijek, University of Osijek, Faculty of Civil Engineering Osijek*
- 04/10/1999–03/11/2005 **Master of Civil engineering**  
Faculty of Civil Engineering Osijek, Osijek (Croatia)
- 1995–1999 **General-education secondary school**  
Matija Antun Reljković Highschool, Vinkovci (Croatia)

PERSONAL SKILLS

Mother tongue(s) Croatian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
German	B1	B1	A2	A2	B2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user  
Common European Framework of Reference for Languages

Communication skills Great communications skills through rich experience with teaching students for more than nine years.

Organisational / managerial skills Excellent coordination and administration of people, projects and budgets.

Administrator of Training Programme for persons who perform energy audits and energy certification of buildings at Faculty of Civil Engineering Osijek.

Job-related skills Teaching activities involve Building Maintenance, Tendering and Contracting, Construction regulations, Technology of building construction, Construction Planning and Control and Energy Efficient Buildings at the Faculty of Civil Engineering Osijek.

Teaching activities at the Postgraduate study programme of Civil Engineering at the course Modelling of building processes.

Reviewer of several scientific papers in journals Energy and Buildings, Building and Environment and e-GFOS and several papers at conferences International Virtual Research Conference and Technical Disciplines - RCITD 2016 and Congress of Croatian builders 2016.

A member of the Editorial board of the electronic journal of the Faculty of Civil Engineering Osijek, e-GFOS, since 2014.

A member of the Scientific Committee of Congress of Croatian builders 2016.

A member of the Scientific Committee of International Virtual Research Conference and Technical Disciplines - RCITD 2016.

Member of the Technical Committee HZN/TO 551 (Construction) and HZN/TO 163 (Thermal insulation).

Mentor for two master's theses, mentor or co-mentor of 19 graduate and 6 undergraduate thesis.

Professional activities are involved with construction design, construction control, energy audits and energy certification of buildings, so far made over 50 energy certificates of residential and public buildings.

OTHER: Ability and a desire to learn; Organizational effectiveness; Ability to get along with others; Continuing personal development; Innovative problem solving; Positive Attitude; Flexibility/Adaptability; Driving License;

**Digital skills** Excellent computer skills, ability to work in AutoCAD, Microsoft Office (Word, Excel, PowerPoint and MS Project), KI Expert, AX3000, Statistica, SAS8.1 and Primavera Project Management

## ADDITIONAL INFORMATION

**Scientific Personal Identification Number** 278 286\*  
\* Registration number assigned to each person after the registration in the Register of the Ministry of Science, Education and Sports

**Publications** Krstić, Hrvoje; Marenjak, Saša. Maintenance and operation costs model for university buildings // *Technical Gazette*. **24** (2017) , 1; 193-200

Krstić, Hrvoje; Ištoka Otković, Irena; Piotr, Kosiński; Wójcik, Robert. Validation of Neural Network Model for Predicting Airtightness of Residential and Non-residential Units in Poland. // *Energy &*

Buildings. 133C (2016) ; 423-432.

Krstić, Hrvoje; Ištoka Otković, Irena; Todorović, Goran. Validation of a model for predicting airtightness of residential units. // Energy Procedia, Proceedings of the 6th IBPC. 6th International Building Physics Conference, IBPC 2015. Torino, Italy. 78 (2015) ; 1525-1530

Krstić, Hrvoje; Koški, Željko; Zečević, Dario. Evaluating the airtightness of residential buildings by using predictive models. // Elektronički časopis Građevinskog fakulteta Osijek (e-GFOS). 11 (2015) ; 62-70

Krstić, Hrvoje; Koški, Željko; Ištoka Otković, Irena; Španić, Martina. Application of Neural Networks in Predicting Airtightness of Residential Units. // Energy and buildings. 84 (2014) ; 160-168

Krstić, Hrvoje; Koški, Željko; Tomljanović, Matija. Influence of window type on the airtightness of residential units. // Elektronički časopis Građevinskog fakulteta Osijek (e-GFOS). 9 (2014) ; 34-40

Krstić, Hrvoje; Marenjak, Saša. Analiza troškova održavanja i uporabe građevina. // Građevinar. 64 (2012) , 4; 293-1-303-10

Bognar, Branka; Marenjak, Saša; Krstić, Hrvoje. Analiza stvarnih i planiranih troškova održavanja i uporabe građevina. // Elektronički časopis Građevinskog fakulteta Osijek. 3 (2011)

Marenjak, Saša; Krstić Hrvoje. Sensitivity analysis of facilities life cycle costs. // Tehnički Vjesnik - Technical Gazette. 17 (2010) , 4; 481-487

Krstić, Hrvoje; Sigmund, Vladimir. Utvrđivanje lokacije oštećenja na konstrukciji dinamičkim mjerenjem. // Tehnički Vjesnik - Technical Gazette. 15 (2008) , 1; 17-24

**Book Chapter** Krstić, Hrvoje; Lukić, Ivan; Teni, Mihaela; Ištoka Otković, Irena; Koški, Željko; Radonjanin, Vlastimir; Malešev, Mirjana. Utjecaj zrakopropusnosti na energetske učinkovitost zgrada // Izazovi u graditeljstvu 4 / Lakušić, Stjepan (ur.). Zagreb : Hrvatski savez građevinskih inženjera, 2017. Str. 262-297.

**Conferences** Krstić, Hrvoje; Teni, Mihaela. Analysis of energy performance and buildings characteristics obtained from Croatian energy management information system. // 3rd International Conference on Architecture, Materials and Construction (ICAMC 2017). (2017)

Krstić, Hrvoje; Teni, Mihaela; Koški, Željko. Primjena infracrvene termografije u zgradarstvu // PROCEEDINGS OF 8th INTERNATIONAL NATURAL GAS, HEAT AND WATER CONFERENCE / Pero RAOS, glavni urednik Tomislav GALETA Dražan KOZAK Marija RAOS Josip STOJŠIĆ Zlatko TONKOVIĆ (ur.). Slavonski Brod : Strojarski fakultet u Slavonskom Brodu, 2017. 401-410

Krstić, Hrvoje; Radonjanin, Vlastimir; Teni, Mihaela; Lukić, Ivan. Development of predictive model for energy efficiency of buildings related to airtightness // International Symposium on researching and application of contemporary achievements in civil engineering in the field of materials and structures / Jevtić, D. ; Folić, R. (ur.). Vršac : Društvo za ispitivanje i istraživanje materijala i konstrukcija Srbije, 2017. 505-514

Krstić, Hrvoje; Teni, Mihaela. A review of methods for buildings energy performance modelling. // Journal IOP Material Science and Engineering. World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium, WMCAUS 2017, Praha (2017) - accepted for publication

Teni, Mihaela; Krstić, Hrvoje. Optimization of external walls thermal insulation technologies considering costs and time of execution. // International scientific conference People, Buildings and Environment (PBE2016) : conference proceeding. (2016)

Krstić, Hrvoje; Teni, Mihaela. Analiza osjetljivosti jednostavnog perioda povrata investicije na promjene zrakopropusnosti zgrada // Sabor hrvatskih graditelja 2016, EU I HRVATSKO GRADITELJSTVO, ZBORNIK RADOVA / Stjepan Lakušić (ur.). Cavtat, 2016. 371-382 (predavanje,domaća recenzija,objavljeni rad,znanstveni).

Koški, Željko; Ištoka Otković, Irena; Krstić, Hrvoje. Airtightness investigation of residential units building envelope in city of Osijek // Proceedings, International Scientific Conference 13 iNDiS 2015 "Planning, Design, Construction and Renewal in the Civil Engineering" / Radonjanin, Vlastimir ; Lađinović, Đorđe ; Folić, Radomir (ur.).Novi Sad. Serbia, 2015. 580-588

Krstić, Hrvoje; Teni, Mihaela; Šandrk Nukić, Ivana. Sensitivity analysis of cost-effective recommendations for improving building energy efficiency // 12th International conference organization, technology and management in construction (OTMC 2015) / Cerić, Anita ; Korytarova, Jana ; Radujković, Mladen ; Vukomanović, Mladen ; Završki, Ivica (ur.).Zagreb : Croatian Association for Construction Management and University of Zagreb, Faculty of Civil Engineering, 2015. 434-442

Šandrk Nukić, Ivana; Krstić, Hrvoje; Holmik, Dražen. The Impact of Organizational Culture on the Efficiency of Higher Education Institutions // 12th International conference organization, technology and management in construction (OTMC 2015) : conference proceedings / Cerić, Anita ; Korytarova, Jana ; Radujković, Mladen ; Vukomanović, Mladen ; Završki, Ivica (ur.).Zagreb : Croatian Association for Construction Management and University of Zagreb, Faculty of Civil Engineering, 2015. 16-29

Netinger, Ivanka; Krstić, Hrvoje; Mrmoš Stevan. Mehaničke, požarne i zvučno-izolacijske karakteristike lakoagregatnih mikrobetona // International Symposium on researching and application of contemporary achievements in civil engineering in the field of materials and structures / Prof.dr.sc. Zoran Grdić, dipl.inž.građ. (ur.).Beograd : Društvo za ispitivanje i istraživanje materijala i konstrukcija Srbije, 2014. 603-613

Ištoka Otković, Irena; Krstić, Hrvoje; Zagvozda Martina. The Comparison between the Risk Perception of Drivers and Statistic Indicators of Traffic Safety in the Analysis of Effects of Reconstruction of Selected Urban Intersections // Sustainable and safe road design from a human behaviour point of view - Challenges for interdisciplinary work in road safety.Maribor, 2013.

Krstić, Hrvoje; Marenjak, Saša. Analiza troškova uporabe građevina Sveučilišta J.J. Strossmayera u Osijeku // Sabor hrvatskih graditelja 2012 ; Graditeljstvo- poluga razvoja.2012. 373-379

Krstić, Hrvoje; Marenjak, Saša. Life cycle cost prediction models for university facilities in Osijek // Research Conference on Information Technology / Peter Ivanyi Habil (ur.).Pecs, Hungary, 2011. C83-C83

Čulo, Ksenija; Krstić, Hrvoje. Cost efficiency comparison of classic and solar house // Quality, environment, health protection and safety management development trends.2008.

Čulo, Ksenija; Skendrović, Vladimir; Krstić, Hrvoje. Incorporating environmental costs and benefits into a project economic analysis // Organization, Technology and Management in Construction / Radujković, Mladen ; Milinarić, Vjehan (ur.).Zagreb : Croatian Association for Organization in Construction, 2008. 558-566

Krstić, Hrvoje; Čulo, Ksenija. Cost benefit analysis of energy efficient family houses // Eco-Architecture 2008., Algarve, Portugal, 23-25.6.2008.

Marenjak, Saša; Krstić, Hrvoje; Černoga, Margareta. Most likely time for construction of sports hall in Varazdin // Organization, Technology and Management in Construction / Radujković, Mladen ; Milinarić, Vjeran (ur.).Zagreb : Croatian Association for Organization in Construction, 2008.

#### Other / Presentations

Dolaček-Alduk, Zlata; Stober, Dina; Krstić, Hrvoje; Dimter, Sanja; Klaić, Zvonimir; Glavaš, Hrvoje. Energetska učinkovitost urbanih cjelina // 9. Dani ovlaštenih inženjera - Program Skupa i sažeci predavanja.2014. 86-87

Fülöp, László;Koški Željko; Ištoka Otković, Irena; Krstić, Hrvoje; Magyar, Zoltán; Španić, Martina; Scientific brochure, Air tightness investigation of rooms from the point of view of energy and comfort, European project titled Air tightness investigation of rooms from the point of view of energy and comfort in the frame of Hungary-Croatia IPACross-border Cooperation Program 2007-2013, Osijek, 2013.

Krstić, Hrvoje. Testing air-change rate with Blower-Door and with CO2 tracer gas, 2013, Mid-term Conference Airtightness,Osijek, April 29, 2013.

Krstić, Hrvoje. Airtightness measurements with blower door equipment - Croatian experience, 2013, Closing Conference Airtightness, Pecs, June 28, 2013.

#### Projects

Project Leader of project titled Innovative simulation model for determination of heat losses in buildings due to infiltration, 2017 - 2018, funded by Josip Juraj Strossmayer University Of Osijek.

Participant of project titled Methodological Framework for Efficient Energy Management by Intelligent Data Analytics, 2017 – 2020, funded by Croatian Science Foundation under Grant No. IP-2016-06-8350

Project Leader of Croatian - Serbian scientific project titled Development of predictive model for energy efficiency of buildings related to airtightness, 2016 - 2017, financed by Ministry of Science, Education and Sport.

Project Leader of project titled Evaluation of experimental Methods for the Determination of the heat transfer Coefficient in Steady state Conditions, 2016 - 2020, financed by Faculty of Civil Engineering Osijek.

Participant of project titled Razvoj i primjena Hrvatskog kvalifikacijskog okvira u području visokog obrazovanja građevinskih inženjera, 2015 -2016, financed by European social Fund (ESF).

Participant of project titled COST 1404, Towards the next generation of standards for service life of cement-based materials and structures, working group WG2-Modelling of CBMS and the behaviour of structures, 2014-present.

Participant of European project titled Air tightness investigation of rooms from the point of view of

energy and comfort in the frame of Hungary-Croatia IPACross-border Cooperation Program 2007-2013 (Air Tightness, HUHR/1001/2.1.3/0009).

**Honours and awards** Scholarship (1999-2005) from Company *Cestorad d.d.* Vinkovci, Croatia

**Memberships** Croatian Association for Organization in Construction, since 2006.  
Faculty of Civil Engineering Osijek Alumni, since 2008.