

**EUROPEAN  
CURRICULUM VITAE  
FORMAT**



**PERSONAL INFORMATION**

Name

**BARBARA KARLEUŠA**

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Nationality

Croatian

Date and place of birth

02.05.1973., Rijeka / Croatia

**WORK EXPERIENCE**

- Dates (from – to)
- Name and address of employer
  - Type of business or sector
  - Occupation or position held
- Main activities and responsibilities

December 2012- today
Faculty of Civil Engineering University of Rijeka
Civil engineering education, management
Vice-dean for quality assurance and development
Responsible for the quality assurance at the Faculty, development of new study programmes and changes in existing study programmes

- Dates (from – to)
- Name and address of employer
  - Type of business or sector
  - Occupation or position held
- Main activities and responsibilities

October 2009 - November 2012
Faculty of Civil Engineering University of Rijeka
Civil engineering education, management
Vice-dean for teaching and students
Responsible for undergraduate and graduate university and vocational study programmes delivery and relations with students

- Dates (from – to)
- Name and address of employer
  - Type of business or sector
  - Occupation or position held
- Main activities and responsibilities

September 2007- September 2009
Faculty of Civil Engineering University of Rijeka
Civil engineering education, management
Head of specialist vocational study
Responsible for delivery of specialist vocational study programme

- Dates (from – to)
- Name and address of employer
  - Type of business or sector
  - Occupation or position held
- Main activities and responsibilities

September 2006 - today
Faculty of Civil Engineering University of Rijeka
Hydraulic engineering and water management
Head of hydraulic engineering department
Coordinating activities between members of the department and the management, teaching, research and professional activities

- Dates (from – to)
- Name and address of employer
  - Type of business or sector
  - Occupation or position held
- Main activities and responsibilities

December 2011 - today
Faculty of Civil Engineering University of Rijeka
Civil engineering, hydraulic engineering and water management
Associate professor
Teaching (lectures), research, professional work

- Dates (from – to)
- Name and address of employer
  - Type of business or sector
  - Occupation or position held
- Main activities and responsibilities

July 2006 – November 2011
Faculty of Civil Engineering University of Rijeka
Civil engineering, hydraulic engineering and water management
Assistant professor
Teaching (lectures), research, professional work

- Dates (from – to)
- Name and address of employer
  - Type of business or sector
  - Occupation or position held
- Main activities and responsibilities

July 1997 – June 2006
Faculty of Civil Engineering University of Rijeka
Civil engineering, hydraulic engineering and water management
Assistant, research fellow
Teaching (exercises and seminars) and research

## EDUCATION AND TRAINING

- Dates (from – to)
- Name and type of organization providing education and training
- Principal subjects/occupational skills covered
  - Title of qualification awarded
  - Level in national classification

2002 – 2005
Faculty of Civil Engineering University of Zagreb
PhD thesis: WATER MANAGEMENT IMPROVEMENT ON THE EXPERT SYSTEM BASIS
PhD Technical sciences – Civil Engineering – hydraulic engineering and water management
8.2.

- Dates (from – to)
- Name and type of organization providing education and training
- Principal subjects/occupational skills covered
  - Title of qualification awarded
  - Level in national classification

1998 – 2002
Faculty of Civil Engineering University of Zagreb
Master of science thesis: USE OF MULTICRITERIA OPTIMALIZATION IN WATER MANAGEMENT
M.Sc. Technical sciences – Civil Engineering - hydraulic engineering and water management
8.1.

- Dates (from – to)
- Name and type of organization providing education and training
- Principal subjects/occupational skills covered
  - Title of qualification awarded
  - Level in national classification

1991 - 1996
Faculty of Civil Engineering University of Rijeka
Master thesis: EARTHFILL DAM – CONCEPTUAL DESIGN
M. C. Eng.
7.1.

- Dates (from – to)
- Name and type of organization providing education and training
- Principal subjects/occupational skills covered
  - Title of qualification awarded
  - Level in national classification

March 2008
Jožef Stefan Institute - Slovenia
Course: Analysis of Environmental Data with Machine Learning Methods
Certificate
-

- Dates (from – to)
- Name and type of organization providing education and training
- Principal subjects/occupational skills covered
  - Title of qualification awarded
  - Level in national classification

2002 / 2003
Forum for Freedom in Education - Croatia
Course: Active learning and critical thinking in higher education
Certificate
-

**PERSONAL SKILLS  
AND COMPETENCIES**

*Acquired in the course of life and career  
but not necessarily covered by formal  
certificates and diplomas.*

MOTHER TONGUE

CROATIAN

OTHER LANGUAGES

- Reading skills
- Writing skills
- Verbal skills

English	Italian
fluent	fluent
fluent	fluent
fluent	fluent

**SOCIAL SKILLS  
AND COMPETENCIES**

Ability for managing activities in a group, the ability for teamwork, the ability of presentation of scientific, technical and educational content to the public, the ability to communicate with professional and non-professional public.

**ORGANIZATIONAL SKILLS  
AND COMPETENCIES**

Ability to organize groups of people on a joint project, the capacity to lead a project that involves various stakeholders, the ability for organization and management of a department and Faculty.

**TECHNICAL SKILLS  
AND COMPETENCIES**

Using PC and professional software.

DRIVING LICENCE(S)

Yes

Signature:



## SCIENTIFIC ACTIVITY AND PROFESSIONAL WORK:

### Scientific projects:

1. Since 2009. active on Croatian-Japanese project: **Risk Identification and Land-Use Planning for Disaster Mitigation of Landslides and Floods in Croatia**, Working group 2 - Flash flood and debris flow working group. Financed by Japanese and Croatia Government.
2. 04.–10.2009. active on project Croatian-Japanese project: **Risk Identification and Land-Use Planning for Disaster Mitigation of Landslides and Floods in Croatia** financed by the Croatian National Science Foundation for Science, High Education and Technology.
3. Since 2007. active on project **Hydrology of sensitive water resources in karstic regions** (114-0982709-2549) co-financed by the Croatian Ministry of Science, Education and Sport.
4. 2010. and 2011. active on project **Systematizing Croatian Civil Engineering Terminology** financed by the Croatian National Science Foundation for Science, High Education and Technology.
5. 1997. - 2006. active on project **Scientific basis for irrigation development in Croatia** (114003) co-financed by the Croatian Ministry of Science, Technology and Informatics.

### Projects related to civil engineering education:

1. 2008. – 2012. managing the project from Croatian side **Specialistic course/Scuola di Alta Formazione per lo sviluppo sostenibile: Methods and techniques for EU Directives Application regarding EIA and SEA / Metodologie e tecniche nell'applicazione delle direttive Europee in materia di Valutazione ambientale dei grandi progetti e dei piani urbanistici** financed by Regione Veneto and Provincia di Belluno – Italy.
2. 06. 2008. - 06.2009. active on project **The learning outcomes in the education of civil engineers (IGI)**, financed by the Croatian National Science Foundation for Science, High Education and Technology.
3. 11.2004. – 09.2005. active on project **Monitoring and improving the quality of studies at the faculty of Civil Engineering University of Rijeka**, financed by the Croatian National Science Foundation for Science, High Education and Technology.

### Publications:

Scientific papers in journals (13)  
Non-scientific papers in other journals (2)  
Papers in the publishing process (1)  
Plenary/Keynote talks (4)  
Published invited lectures (1)  
Scientific conference papers with international peer-review (21)  
Other refereed conference papers (10)  
Abstracts in Book of abstracts (2)  
Author's books (1)  
Book chapters (4)  
Textbooks and scripts (1)

### Scientific papers in journals:

1. Deluka-Tibljaš, Aleksandra; Karleuša, Barbara; Dragičević, Nevena. Review of multicriteria-analysis methods application in decision making about transport infrastructure. // Građevinar : časopis Hrvatskog saveza građevinskih inženjera. 65 (2013) , 7; 619-631 (review article).
2. Dragičević, Nevena; Karleuša, Barbara; Lalić, Morana; Krpan, Ljudevit; Skala, Zoran. Water Management for Ensuring Self-Sufficiency of Islands. // Zbornik radova Građevinskog fakulteta Sveučilišta u Rijeci. XV (2012) ; 99-123 (review article).
3. Deluka-Tibljaš, Aleksandra; Karleuša, Barbara; Benac, Čedomir. AHP methodology application in garage-parking facility location selection. // Promet - Traffic & Transportation. 23 (2011) , 4; 303-313 (review article).
4. Deluka-Tibljaš, Aleksandra; Karleuša, Barbara; Štimac Grandić, Ivana. Definition of learning results during civil engineering studies at the University of Rijeka. // Građevinar : časopis Hrvatskog saveza građevinskih inženjera. 63 (2011) , 1; 1-10 (preliminary note).
5. Karleuša, Barbara; Arbanas, Željko; Rubinić, Josip. Sedimentation Processes in Ports Located on River Mouths. // Pomorski zbornik. 46 (2010) ; 39-50 (review article).
6. Karleuša, Barbara; Beraković, Boris; Rajčić, Vlatka. Expert system for checking efficiency of water management planning activities. // Građevinar : časopis Hrvatskog saveza građevinskih inženjera. 62 (2010) , 1; 1-11.
7. Dragičević, Nevena; Karleuša, Barbara; Klobučar, Nives; Cuculić, Zlatan; Sergo, Davor. Use of new technologies and materials in water supply and sewage house installations. // Zbornik radova Građevinskoga fakulteta Sveučilišta u Rijeci. 12 (2009) ; 11-34 (journal article).

8. Karleuša, Barbara; Žic, Elvis; Prpić, Silvija. State and Options of Waste Water Management in Small Settlements in Croatia. // *Zbornik radova Građevinskoga fakulteta Sveučilišta u Rijeci*. 11 (2008) ; 55-79 (journal article).
9. Tadić, Lidija; Ožanić, Nevenka; Tadić, Zdenko; Karleuša, Barbara; Đuroković, Zoran. Differences in Irrigation Plans in the Continental and Coastal Croatia. // *Hrvatske vode*. 15 (2007) , 60; 201-212 (review article).
10. Poletan Jugović, Tanja; Baričević, Hrvoje; Karleuša, Barbara. Multicriteria optimisation of the paneuropean corridor vb competitiveness. // *Promet - Traffic & Transportation*. 18 (2006) , 3; 189-195 (review article).
11. Karleuša, Barbara; Beraković, Boris; Ožanić, Nevenka. Use of ELECTRE TRI method to select an optimum irrigation alternative. // *Građevinar*. 57 (2005) , 1; 21-28 (preliminary note).
12. Benac, Čedomir; Rubinić, Josip; Karleuša, Barbara; Jardas, Branka; Oštrić, Maja. Changes of Hydrogeological Conditions Provoked by Construction in the Coastal Zone of Rijeka. // *RMZ-Material and Geoenvironment*. 50 (2003) , 1; 21-24 (journal article).
13. Karleuša, Barbara; Deluka-Tibljaš, Aleksandra; Benigar, Milivoj. Possibility for Implementation of Multicriteria Optimalisation in the Traffic Planning and Design. // *Suvremeni promet*. 23 (2003) , 1-2; 104-107 (preliminary note).

#### **Nonscientific papers in other journals:**

1. Karleuša, Barbara; Ožanić, Nevenka. Determination of priorities during realization of water management plans. // *Građevinar : časopis Hrvatskog saveza građevinskih inženjera*. 63 (2011) , 2; 151-161 (journal article).
2. Karleuša, Barbara; Tonšić, Nevena; Bukarica, Igor; Matijević, Ivana; Ferenac-Grubišić, Aleksandar; Tanjga, Alenka. Teaching the young. // *Hrvatska vodoprivreda*. 16 (2007.) , 173; 56-58.

#### **Papers in the publishing process:**

1. Karleuša, Barbara; Ožanić, Nevenka; Deluka-Tibljaš, Aleksandra. IMPROVING DECISION MAKING IN DEFINING PRIORITIES FOR IMPLEMENTATION OF IRRIGATION PLANS USING AHP METHODOLOGY. // *Tehnički vjesnik / Technical Gazette*. (2014) (accepted for publication).

#### **Plenary/Keynote talks:**

1. Ožanić, Nevenka; Karleuša Barbara. Hydrotechnic and high school education in civil engineering (Croatia) // *Okrugli stol: OBRAZOVANJE STRUČNJAKA U VODNOM GOSPODARSTVU - 5. Hrvatska konferencija o vodama - HRVATSKE VODE PRED IZAZOVOM KLIMATSKIH PROMJENA*. (plenary/keynote lecture,international peer-review,published,scientific).
2. Ožanić, Nevenka; Karleuša, Barbara. Irrigation in Karst areas // *Aktualni trenutak odvodnje i navodnjavanja u Hrvatskoj : Zbornik radova* / Holjević, Danko ; Šuštić, Diana ; Ožanić, Nevenka, editor(s). Zadar : Hrvatsko društvo za odvodnju i navodnjavanje i Hrvatsko hidrološko društvo, 2009. 45-61 (plenary/keynote lecture,domestic peer-review,published,scientific).
3. Deluka-Tibljaš, Aleksandra; Karleuša, Barbara; Bajšanski, Miljana. Quality Assurance Units at the Faculty/University Level - Best Practice // .(plenary/keynote lecture,ppt presentation,expert).
4. Ožanić, Nevenka; Deluka-Tibljaš, Aleksandra; Karleuša Barbara. Monitoring of Quality of Studying and Study Success at the Faculty of Civil Engineering University of Rijeka // *Zbornik sažetaka sa skupa Obrazovanje inženjera - Bolonjski proces 3 godine kasnije (Proceedings - Engineering education = The Bologna process 3 years later)* / Kniewald, Zlatko, editor(s). Zagreb : Denona d.o.o., Zagreb, 2007. 70-71 (plenary/keynote lecture,international peer-review,abstract,scientific).

#### **Published invited lectures:**

1. Ožanić, Nevenka; Karleuša, Barbara; Dragičević, Nevena; Sušan, Ivana; Žic, Elvis; Ružić, Igor; Krvavica, Nino. Disaster Mitigation of Floods and Landslides in Croatia through Croatian-Japanese Collaboration // *Dani gospodarenja vodama 2013: Napredak kroz znanost* / Bekić, Damir, editor(s).Zagreb : Građevinski fakultet Sveučilišta u Zagrebu, 2013. 63-93 (invited talk,domestic peer-review,published,scientific).

#### **Scientific conference papers with international peer-review:**

1. Čosić-Flajsig, Gorana; Karleuša, Barbara; Kompare, Boris. Planning Wastewater Collection and Treatment in Agglomerations Below 2.000 PE in Protected Areas // *Thirteenth International Symposium on Water Management and Hydraulic Engineering, Proceedings*. Bratislava : Slovak University of Technology in Bratislava, 2013. 269-286 (lecture,international peer-review,published,scientific).
2. Dragičević, Nevena; Karleuša, Barbara; Ožanić, Nevenka. Flash Flood and Erosion Prevention, Protection and Mitigation measures in Sensitive and Protected Areas // *Proceedings of the Thirteenth International Symposium on Water Management and Hydraulic Engineering 2013* / Šoltész, Andrej ; Stanko, Štefan ; Škultetyova, Ivona, editor(s). Bratislava, Slovakia : Faculty of Civil Engineering STU in Bratislava, 2013. 553-565 (lecture,international peer-review,published,scientific).
3. Sušan, Ivana; Dragičević, Nevena; Karleuša, Barbara; Ožanić, Nevenka. GIS BASED MONITORING DATABASE FOR DUBRAČINA RIVER CATCHMENT AREA AS A TOOL FOR MITIGATION AND PREVENTION OF FLASH FLOOD AND EROSION // *Thirteenth International Symposium on WATER MANAGEMENT AND HYDRAULIC ENGINEERING (Proceedings)* / Šoltész, Andrej ; Baraková, Dana ; Orfánus, Martin ; Holubec, Michal, editor(s). Bratislava ; Slovakia : Department of Hydraulic Engineering, 2013. 637-652 (lecture,international peer-review,published,scientific).

4. Karleuša, Barbara; Deluka-Tibljaš, Aleksandra; Ilić, Suzana; Dragičević, Nevena. Developing Awareness about Sustainable Development in Civil Engineering Studies // *Conference proceedings for EE2010 - Inspiring the next generation of engineers* / Engineering Subject Centre Staff, editor(s). Higher Education Academy - Engineering Subject Centre, 2010. (lecture,international peer-review,published,scientific).
5. Karleuša, Barbara; Deluka-Tibljaš, Aleksandra; Ožanić, Nevenka; Ilić, Suzana. The Role of Higher Education in Developing Awareness about Water Management // *WMHE 2009 Proceedings* / Popovska, Cvetanka ; Jovanovski, Milorad, editor(s).  
Skopje : Faculty of Civil Engineering, Ss. Cyril and Methodius University, Skopje, 2009. 607-614 (lecture,international peer-review,published,scientific).
6. Karleuša, Barbara; Magaš, Olga; Rubinić, Josip; Palinić, Nana. Rječina River Basin Restoration (Croatia) // *WMHE 2009 Proceedings* / Popovska, Cvetanka ; Jovanovski, Milorad, editor(s). Skopje : Faculty of Civil Engineering, Ss. Cyril and Methodius University, Skopje, 2009. 873-884 (lecture,international peer-review,published,scientific).
7. Ožanić, Nevenka; Karleuša, Barbara; Rubinić, Josip. DRAINAGE OF PRECIPITATION WATERS FROM URBAN CATCHMENT AREA ŠKURINJSKI POTOK – PROBLEMS AND SOLUTIONS // *Zbornik radova konferencije: Suvremene metode odvodnje oborinskih voda u urbanim sredinama na obalnim područjima - Proceedings of the Conference: Modern methods of storm water drainage in urban coastal areas* / Rubinić, Josip ; Zmaić, Bojan, editor(s). Rijeka : Hrvatsko društvo za zaštitu voda, Građevinski fakultet Sveučilišta u Rijeci, 2009. 234-246 (lecture,international peer-review,published,scientific).
8. Karleuša, Barbara; Deluka-Tibljaš, Aleksandra. GOOD PRACTICE IN COLLABORATION WITH EMPLOYERS // *Engineering Education 2008 Conference Proceedings*. Higher Education Academy - Engineering Subject Centre and the UK Centre for Materials Education, 2008. (lecture,international peer-review,published,scientific).
9. Karleuša, Barbara; Deluka-Tibljaš, Aleksandra; Rubinić, Josip. Specialisation Vocational Study in Civil Engineering as a Premise of LLL for the Sustainable Development // *Cjeloživotno učenje za održivi razvoj* / Uzelac, Vinka ; Vujičić, Lidija, editor(s). Rijeka : Učiteljski fakultet u Rijeci, 2008. 339-352 (lecture,international peer-review,published,scientific).
10. Ožanić, Nevenka; Karleuša, Barbara; Rubinić, Josip; Deluka Tibljaš, Aleksandra. Hydrometry and Higher Education in Civil Engineering // *Zbornik radova znanstvenog savjetovanja : Hidrološka mjerenja i obrada podataka = Conference proceedings : Measurement and data processing in hydrology* / Ožanić, Nevenka, editor(s).Rijeka : Građevinski fakultet Sveučilišta u Rijeci ; Hrvatsko hidrološko društvo, 2008. 383-405 (lecture,international peer-review,published,scientific).
11. Karleuša, Barbara; Preka, Ana; Štimac, Vedran; Ulčakar, Natko. The Problematic of Sewage System Reconstruction in Urban Areas // *10th International Symposium on Water Management and Hydraulic Engineering Proceedings* / Petraš, Josip, editor(s). Zagreb : University of Zagreb, Faculty of Civil Engineering, 2007. (lecture,international peer-review,published,scientific).
12. Matić, Boris; Boban, Nelita; Karleuša, Barbara; Milovanović, Duško. Water Supply Systems on Islands - Susak Island // *10th International Symposium on Water Management and Hydraulic Engineering Proceedings* / Petraš, Josip, editor(s).Zagreb : University of Zagreb, Faculty of Civil Engineering, 2007. (poster,international peer-review,published,scientific).
13. Poletan Jugović, Tanja; Jugović, Alen; Karleuša, Barbara. Solution Valuating in Transport Planning by Implementation of the Multicriteria Optimisation // *TRANSPORTATION AND GLOBALIZATION* / Zanne, Marinna ; Fabjan, Daša ; Jenček, Peter, editor(s). Portorož : Fakulteta za pomorstvo in promet, 2006. 32 (poster,international peer-review,published,scientific).
14. Karleuša, Barbara; Beraković, Boris. The Public Participation in the Water Resources Management on the Expert System Basis // *IX International Symposium on Water Management and Hydraulic Engineering : Proceedings* / Nachtnebel, H.P. ; Jugović, C.J., editor(s). Beč, Austrija : BOKU - University of Natural Resources and Applied Life Sciences, 2005. 35-42 (lecture,international peer-review,published,scientific).
15. Ožanić, Nevenka; Rubinić, Josip; Karleuša, Barbara; Holjević, Danko. Problems of High Water Appearances in Urban Areas // *IX. International Symposium on WATER MANAGEMENT AND HYDRAULIC ENGINEERING Proceedings* / Nachtnebel, H.P. ; Jugović, C.J., editor(s).Austrija : BOKU - University of Natural Resources and Applied Life Sciences, Beč, 2005. 395-402 (lecture,international peer-review,published,scientific).
16. Ožanić, Nevenka; Rubinić, Josip; Karleuša, Barbara; Holjević, Danko. The revitalisation of cultural hereditary buildings in water streams // *3rd ECRR International Conference on River Restoration in Europe : River restoration 2004 (RR 2004) : principles, processes, practices : proceedings* / Gereš, Dragutin, editor(s). Zagreb : Hrvatske vode, 2004. 263-271 (lecture,international peer-review,published,scientific).
17. Karleuša, Barbara; Benigar, Milivoj; Deluka-Tibljaš, Aleksandra. Use of AHP Multicriteria Optimisation Method for the Optimisation of Garage Facility DOK 3 in Rijeka // *11th International Symposium on Electronics in Traffic ISEP 2003, Proceedings* / Anžek, Mario, editor(s). Ljubljana : Electrotechnical Society of Slovenia, 2003. U6 (poster,international peer-review, published,scientific).
18. Karleuša, Barbara; Beraković, Boris; Ožanić, Nevenka. Multi-criteria Optimization Methods in Water Management // *Proceedings of the VIII. International Symposium on Water Management and Hydraulic Engineering* / Šoltesz, Andrej, editor(s). Bratislava : Faculty of Civil Engineering, Slovak University of Technology, 2003. 177-185 (lecture,international peer-review,published,scientific).
19. Karleuša, Barbara; Oštrić, Maja; Rubinić, Josip. Water-Management Elements in Regional Planning in Karst, Rječina Catchment Area : Case Study // *Znanstveno-stručni simpozij s međunarodnim sudjelovanjem Voda u kršu slivova Cetine, Neretve i Trebišnjice : Zbornik radova* / Goluža, Mato, editor(s).Mostar : Sveučilište u Mostaru, 2003. 85-94

(poster,international peer-review,published,scientific).

20. Ožanić, Nevenka; Deluka-Tibljajš, Aleksandra; Karleuša, Barbara. Croatian Experience in Exploitation of Hydrological Calculations in a Road Design Practise // VIII. International Symposium on Water Management and Hydraulic Engineering Proceedings : proceedings / Šoltesz, Andrej, editor(s). Bratislava : Faculty of Civil Engineering, Slovak University of Technology in Bratislava, 2003. 305-312 (lecture,international peer-review,published,scientific).

21. Beraković, Boris; Pletikapić, Zlatko; Mahmutović, Zdenko; Karleuša, Barbara. Project Construction and Environmental Impact Assessment Approach // Hydropower in the New Millenium / Honningsvag, Midttomme, Repp, Vaskinn, Westeren, editor(s). Bergen : A.A. Balkema, Swets & Zeitlinger, 2001. 173-179 (lecture,international peer-review,published,scientific).

#### **Other refereed conference papers:**

1. Dragičević, Nevena; Karleuša, Barbara; Ožanić, Nevenka. Public involvement in erosion and flash flood protection // Graditeljstvo-poluga znanja / Lakušić, Stjepan, editor(s). Cavtat : Hrvatski savez građevinskih inženjera, 2012. 775-784 (lecture,domestic peer-review,published,scientific).

2. Ožanić, Nevenka; Karleuša, Barbara; Jelenić, Gordan; Tićak, Sandra. DOCTORAL STUDIES QUALITY ASSURANCE AT UNIVERSITY OF RIJEKA WITH EMPHASIS ON STUDIES IN CIVIL ENGINEERING // Proceedings of the First EUCEET Association Conference - New Trends and Challenges in Civil Engineering Education / Dritsos, Stephanos, editor(s). Patras : University of Patras, 2011. 69-78 (lecture,international peer-review,published).

3. Travaš, Vanja; Ožanić, Nevenka; Karleuša, Barbara. The role of experimental hydraulics in teaching activities at the Faculty of civil engineering - University of Rijeka // 5. Hrvatska konferencija o vodama - Hrvatske vode pred izazovom klimatskih promjena / Biondić, Danko ; Holjević, Danko ; Tropan, Ljudevit, editor(s). Opatija : Hrvatske vode, 2011. 1160-1170 (lecture,domestic peer-review,published,scientific).

4. Klobučar, Nives; Ivegljija Čorak, Sanja; Karleuša, Barbara. Sewerage problematic in old coastal cities - Kaštel City case study // Odvodnja otpadnih voda u starim priobalnim gradovima Hrvatske - Zaštita kulturne baštine i okoliša. 2008. 45-53 (lecture,domestic peer-review,published,expert).

5. Deluka-Tibljajš, Aleksandra; Karleuša, Barbara; Ožanić, Nevenka. REFORMED STUDIES AND HYDROTECHNICAL ENGINEERING COURSES AT THE FACULTY OF CIVIL ENGINEERING - RIJEKA // HRVATSKE VODE I EUROPSKA UNIJA - IZAZOVI I MOGUĆNOSTI / Gereš, Dragutin, editor(s). Zagreb : Hrvatske vode, 2007. 905-912 (lecture,domestic peer-review,published,scientific).

6. Ivegljija Čorak, Sanja; Klobučar, Nives; Karleuša, Barbara; Labinac, Velimir. Storm-water disposal from road surfaces into water courses under conditions of restrictions // 4. hrvatska konferencija o vodama Hrvatske vode i Europska Unija - izazovi i mogućnosti : zbornik radova = 4th Croatian Conference on Waters Croatian water and European Union - chalenges and possibilities : proceedings / Gereš, Dragutin, editor(s). Zagreb : Hrvatske vode, 2007. 713-722 (poster,domestic peer-review,published,scientific).

7. Karleuša, Barbara; Beraković, Boris; Ožanić, Nevenka. Expert systems in water management // 4. hrvatska konferencija o vodama Hrvatske vode i Europska Unija - izazovi i mogućnosti : zbornik radova = 4th Croatian Conference on Waters Croatian water and European Union - chalenges and possibilities : proceedings / Gereš, Dragutin, editor(s). Zagreb : Hrvatske vode, 2007. 937-945 (poster,domestic peer-review,published,scientific).

8. Ožanić, Nevenka; Karleuša, Barbara; Rubinić, Josip; Holjević, Danko. SPECIFIC QUALITIES OF PLANNING THE IRRIGATION IN LITTORAL REGIONS ON PRIMORSKO-GORANSKA COUNTY // HRVATSKE VODE I EUROPSKA UNIJA - IZAZOVI I MOGUĆNOSTI / Gereš, Dragutin, editor(s). Zagreb : Hrvatske vode, 2007. 607-616 (lecture,domestic peer-review,published,scientific).

9. Deluka-Tibljajš, Aleksandra; Karleuša, Barbara; Ožanić, Nevenka. DRAINAGE OF ROADS AS PRECONDITION OF ROAD DURABILITY // Hrvatske vode u 21. stoljeću / Gereš, Dragutin, editor(s). Osijek : Hrvatske vode, 2003. 1007-1014 (lecture,domestic peer-review,published,scientific).

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#### **Abstracts in Book of abstracts:**

1. Sušanj, Ivana; Dragičević, Nevena; Karleuša, Barbara; Ožanić, Nevenka. GIS BASED MONITORING DATABASE FOR DUBRAČINA RIVER CATCHMENT AREA AS A TOOL FOR MITIGATION AND PREVENTION OF FLASH FLOOD AND EROSION // Prvi skup mladih istraživača iz područja građevinarstva, arhitekture, geodezije i elektrotehnike: ZAJEDNIČKI TEMELJI (Zbornik sažetaka) / Divić, Vladimir ; Trogrić, Boris ; Gotovac, Hrvoje, editor(s). Split : Fakultet građevinarstva, arhitekture i geodezije, 2013. 47-48 (lecture,domestic peer-review,abstract,scientific).

#### **Author's books:**

1. Ožanić, Nevenka; Karleuša, Barbara; Vidaković Šutić, Renata. Croatian Hydrological Society 1992-2012 Monography. Rijeka : Hrvatsko hidrološko društvo, 2012 (monograph).

#### **Book chapters:**

1. Karleuša, Barbara. Contemporary methods for irrigation system management // Knj. 3 : Vodnogospodarski aspekti razvoja navodnjavanja u priobalju i krškom zaleđu Hrvatske / Ožanić, Nevenka ; Benac, Čedomir ; Deluka-Tibljajš,

Aleksandra ; Vrkljan Ivan, editor(s). Rijeka : Građevinski fakultet, 2007. Str. 287-320.

2. Ožanić, Nevenka; Deluka-Tibljaš, Aleksandra; Barbara, Karleuša. Monitoring of quality of studying and study success at the Faculty of Civil Engineering - University of Rijeka // Annual 2007 of the Croatian Academy of Engineering / Kniewald, Zlatko, editor(s). Zagreb : Denona d.o.o., 2007. Str. 129-145.

3. Karleuša, Barbara. Preparing the basis for multicriteria analysis in irrigation and drainage systems planning // Priručnik za hidrotehničke melioracije, III kolo, knjiga 2, Elementi planiranja sustava za navodnjavanje / Ožanić, Nevenka, editor(s). Rijeka : Liber, 2005. Str. 11-32.

4. Karleuša, Barbara. Use of multicriteria optimalization for selecting reservoirs configuration for irrigation in Istra // Priručnik za hidrotehničke melioracije, Suvremeni pristupi i metode planiranja i upravljanja hidromelioracijskim sustavima / Ožanić, Nevenka, editor(s). Rijeka : Građevinski Fakultet Sveučilišta u Rijeci, 2003. Str. 269-335.

#### **Textbooks and scripts:**

1. Žic, Elvis; Ožanić, Nevenka; Karleuša, Barbara. Script of solved tasks for Hydromechanics with a theoretical basis / Žic, Elvis ; Ožanić, Nevenka ; Karleuša, Barbara, editor(s). Rijeka : Građevinski fakultet Sveučilišta u Rijeci, 2010.

#### **Dissertation:**

1. Karleuša, Barbara. Water management improvement on the expert system basis / doctoral thesis. Zagreb : Građevinski fakultet, 22.11. 2005., 302 pages. Mentor: Beraković, Boris.

#### **Master thesis:**

1. Karleuša, Barbara. Use of multicriteria optimalization in water management / Master (science) thesis. Zagreb : Građevinski fakultet, 08.04. 2002., 226 pages. Mentor: Beraković, Boris.

#### **Member of Editorial Boards:**

1. Journal - Hrvatske vode/Croatian Waters
2. Proceedings of the Faculty of Civil Engineering University of Rijeka, book XVI, 2013, Editor in Chief
3. Proceedings of the Faculty of Civil Engineering University of Rijeka, book XIII, 2010
4. Proceedings of the Faculty of Civil Engineering University of Rijeka, book XII, 2009
5. Proceedings of the Faculty of Civil Engineering University of Rijeka, book XI, 2008

#### **Member of International Peer Review Comities:**

1. 3rd Workshop of the Monitoring and Analyses for Disaster Mitigation Of Landslides, Debris Flow And Floods, 7-9, March 2013. Zagreb
2. 10th International Symposium on Water Management and Hydraulic Engineering 2007 (WMHE 2007), Šibenik, 04.-09.09.2007.
3. Conference - Modern methods of Storm Water Drainage in Urban Coastal Areas, Rijeka, 19. - 21.03.2009.
4. Measurement and data processing in hydrology / Hidrološka mjerenja i obrada podataka, Nacionalni park Plitvička jezera, 26. – 28.11.2008.

#### **Member of:**

1. Croatian Hydrological Society – general secretary
2. Croatian Chamber of Civil Engineers - member of the Committee for International Cooperation and Disciplinary Judge
3. Croatian Society for the Protection of Water
4. Croatian Society for Drainage and Irrigation
5. Education & Training Standing Committee of European Council of Civil Engineers (ECCE) - Vice-chairman
6. Member of the University of Rijeka Committee for Accreditation of Study Programmes
7. Board for Quality Assurance and Improvement at the Faculty of Civil Engineering University of Rijeka – Chairman
8. Member of the Thematic Working Group for defining working obligations for high education teachers for the creation of Strategy of education, science and technology – during 2013

#### **Active in professional projects and studies:**

1. Irrigation plan for Primorsko-goranska Region, Primorsko-goranska županija, 2006.
2. Analysis of the situation and possibilities for protection of urban areas from Umag Creek high waters – Study, Croatian Waters, 2004.
3. Conceptual project for Škurinje Creek, Town of Rijeka, 2002.
4. Spatial plan of the construction area sports and recreation R2, Community of Kostrena, 2004.
5. Spatial plan of the construction area for business purposes K1 – area Žegoti, Town of Kastav, 2003.
6. many other projects from conceptual design to projects for building permits, studies, etc.

**Member of Committees for technical inspection of the many hydraulic structures and systems in Istrian Region.**

**Active in development of software Hydra and Canalis for Studio Ars.**



## TEACHING ACTIVITY:

### Courses:

#### **Faculty of Civil Engineering University of Rijeka (only for the period 2005 – today):**

Postgraduate doctoral study in Civil Engineering:

- *New Approaches to Water Management*

University Graduate Study Programme in Civil Engineering:

- *Drainage and Wastewater Treatment*
- *Water management*
- *Hydraulic Structures*

University Undergraduate Study Programme in Civil Engineering:

- *Introduction to Hydraulic Engineering*
- *Urban Water Systems*

Specialist Graduate Vocational Study Programme in Civil Engineering:

- *Introduction to Drinking and Waste Water Treatment*
- *Hydraulic Structures in Urban Areas*

Undergraduate Vocational Study Programme in Civil Engineering:

- *Water supply and Sewerage Systems*

Specialist course for sustainable development/Scuola di Alta Formazione per lo sviluppo sostenibile: Methods and techniques for EU Directives application regarding EIA and SEA / Metodologie e tecniche nell'applicazione delle direttive Europee in materia di Valutazione ambientale dei grandi progetti e dei piani urbanistici:

- *Analisi multicriteriale dei progetti / Multicriteria Analysis of Projects*

#### **School of Medicine University of Rijeka - University Graduate Study Programme in Sanitary Engineering (only for the period 2005 – today)::**

- *Sanitary Hydraulic Engineering*

**Mentor to 87 graduate and undergraduate students on Final Thesis/Project.**