

**Dr Pavel Benka, redovni profesor**  
**Uža naučna oblast:** Geodezija  
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### **Obrazovanje**

- **Dipl. inž. (1990)** – Građevinski fakultet u Beogradu, smer - Geodezija
- **Magistar nauka (1997)** - Građevinski fakultet u Beogradu, smer – Premer i uređenje zemljišne teritorije
- **Doktor nauka (2012)** - Poljoprivredni fakultet u Novom Sadu, Doktorska disertacija: "Uređenje zemljišne teritorije na meliorisanom području"

### **Odabране publikacije**

1. Damjanović T., **Benka P.** (2011) Osnove uređenja i zaštite zemljišne teritorije i poseda u Srbiji, str 636, Poljoprivredni fakultet, Novi Sad
2. Grabić J., Bezdan A., **Benka P.**, Salvai A. (2011): SPREADING AND TRANSFORMATION OF NUTRIENTS IN THE REACH OF THE BECEJ-BOGOJEVO CANAL, SERBIA, Carpathian Journal of Earth and Environmental Sciences ISSN: 1842-4090, North University of Baia Mare, Faculty of Mineral Resources and Environment, Vol 6, No 1, pp277-284.
3. Belic M., Manojlovic M., Nesic Lj, Ceric V., Vasin J., **Benka P.**, Seremesic S. (2013): PEDO-ECOLOGICAL SIGNIFICANCE OF SOIL ORGANIC CARBON STOCK IN SOUTH-EASTERN PANNONIAN BASIN, Carpathian Journal of Earth and Environmental Sciences ISSN: 1842-4090, North University of Baia Mare, Faculty of Mineral Resources and Environment, Vol 8, No 1, pp171-178, 2013
4. Grabić J., **Benka P.**, Bezdan A., Josimov-Dundjerski J., Salvai A. (2016): Water Quality Management for Preserving Fish Populations within HS DTD, Serbia, Carpathian Journal of Earth and Environmental Sciences ISSN: 1842-4090, North University of Baia Mare, Faculty of Mineral Resources and Environment, Vol 11, No 1, pp 235-243.
5. **Benka P.**, Bezdan A, Grabić J., Gregorić G., Salvai A.: Application of geostatistical interpolation methods for drought indices mapping, Conterporary agriculture, Vol 59, No 3-4, Univerzitet u Novom Sadu - Poljoprivredni fakultet, str 363-370, Novi Sad, 2010, ISSN: 0350-1205, UDC: 63(497.1)(051)-"540.2", UDC: 517.518.85:551.577.38.
6. Kovačić I., Radomirović D., Zuković M., **Benka P.**, Nikolić M, (2018): Characterisation of tree vibrations based on the model of orthogonal oscillations, Scientific Reports ISSN: 2045-2322, No 8558, Vol.8, pp.1-11
7. Greksa A., Ljevnić-Mašić B., Grabić J., **Benka P.**, Radonić V., Blagojević B and Sekulić M. (2019): Potential of Urban Trees for Mitigating Heavy Metal Pollution in

the City of Novi Sad, Serbia. Environmental Monitoring and Assessment, ISSN: 0167-6369 (Print) 1573-2959 (Online), IF 1.959

8. Bezdan, A.; Blagojevic, B.; Vranešević, M.; **Benka, P.**; Savić, R.; Bezdan, J. (2019). Defining Spatial Priorities for Irrigation Development Using the Soil Conservation and Water Use Efficiency Criteria. *Agronomy*, 9(6), 324. <https://doi.org/10.3390/agronomy9060324> (ISSN 2073-4395; impact factor 2.259; category M21)
9. Srdjević B., Srdjević Z., **Benka P.**: Stochastic process of extreme rainless periods in Serbia. *Int J Climatol.* 41, E1119-E1136, 2021. (M21)
10. Zemunac R., Savić R., Blagojević B., **Benka P.**, Bezdan A., Salvai Andrea (2021). Assessment of surface and groundwater quality for irrigation purposes in the Danube-Tisa-Danube hydrosystem area (Serbia). *Environmental Monitoring and Assessment*, 193, 519(2021), 1-19. (<https://doi.org/10.1007/s10661-021-09294-6>)
11. Srdjević, B., Srdjević, Z., & Benka, P. (2022). Extreme rainless periods in Pannonian Basin. *International Journal of Climatology*, 1–23. <https://doi.org/10.1002/joc.7748>
12. Grabić, J., Benka, P., Ljevnaić-Mašić, B. et al. Spatial distribution assessment of invasive alien species *Amorpha fruticosa* L. by UAV-based remote sensing in the Special Nature Reserve Obedska Bara, Serbia. *Environ Monit Assess* **194**, 599 (2022). <https://doi.org/10.1007/s10661-022-10273-8>.

## Odabrani projekti

1. Održivi razvoj melioracija u Vojvodini, Republika Srbija, Ministarstvo za nauku i tehnološki razvoj, Realizacija: Poljoprivredni fakultet, Departman za uređenje voda, Novi Sad.ev.br. TR - 22006, 2007-2010, (Učesnik)
2. Tisa Catchment Area Development (TICAD), Programme: South East Europe SEE Transnational Cooperation Programme; Lead partner: VÁTI – Hungarian Nonprofit Limited Liability Company for Regional Development and Town Planning, Hungary; Duration: 2009-2012, (Učesnik)
3. Drought Management Centre for South East Europe (DMCSEE), Programme: South East Europe SEE Transnational Cooperation Programme; Lead partner: Agencija Republike Slovenije za okolje, Slovenia; Duration: 2009-2012, (Učesnik)
4. Danube Floodrisk, Programme: South East Europe SEE Transnational Cooperation Programme; Lead partner: Ministry of Environment, Romania; Duration: 2009-2012, (Učesnik)
5. **EN**vironmental **O**ptimization of **I**Rigation **M**anagement with the Combined **u**Se and **I**ntegration of High **P**recision **S**atellite Data, Advanced Modeling, Process Control and Business Innovation (**ENORASIS**), Grant Agreement 282949,

ENORASIS is supported by the European Commission under the 7th Framework Programme for Research in Environment, Duration: 2012 – 2014, (Učesnik)

6. DriDanube - Drought Risk in Danube Region, INTERREG Danube Transnational Cooperation Programme, 2017-2019, (Učesnik)
7. WATERatRISK – Improvement of drought and excess water monitoring for supporting water management and mitigation of risks related to extreme weather conditions, INTERREG–IPA Cross-border Cooperation Programme Hungary– Serbia, 2017-2019, (Učesnik)
8. IDES - Improving water quality in the Danube river and its tributaries by integrative floodplain management based on Ecosystem Services; Interreg Danube Transnational Programme [https://www.interreg-danube.eu/approved-projects/ides\\_2020-2022](https://www.interreg-danube.eu/approved-projects/ides_2020-2022), (Učesnik)

### Akademске aktivnosti

- **Nastava** iz uže naučne oblasti geodezija (Geodetska merenja i mreže, Geodetski premer terena, Uređenje zemljишne teritorije, Geografski informacioni sistemi, Osnove daljinske detekcije) na osnovnim akademskim, master i doktorskim studijama
- **Mentor** za više diplomskih radova, članstvo u komisijama za odbranu doktorske disertacije, master i diplomskih radova

### Članstvo u udruženjima

### Ostale aktivnosti

- Upravnik Instituta za uređenje voda
- Rukovodilac Centra za GIS i daljinsku detekciju
- Predsedavanja u sekcijama na nacionalnim skupovima
- Govori, čita i piše engleski i slovački, služi se ruskim jezikom

**Full Professor Pavel Benka, Ph.D.**

**Field of research: Geodesy**

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### **Academic qualifications**

- **B.Sc.** (1990) - University of Belgrade, Faculty of Civil Engineering
- **M.Sc.** (1997) - University of Belgrade, Faculty of Civil Engineering
- **Ph.D.** (2012) - University of Novi Sad, Faculty of Agriculture

### **Selected publications**

1. Damjanović T., **Benka P.** (2011) Osnove uređenja i zaštite zemljišne teritorije i poseda u Srbiji, str 636, Poljoprivredni fakultet, Novi Sad
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10. Zemunac R., Savić R., Blagojević B., **Benka P.**, Bezdan A., Salvai Andrea (2021). Assessment of surface and groundwater quality for irrigation purposes in the Danube-Tisa-Danube hydrosystem area (Serbia). *Environmental Monitoring and Assessment*, 193, 519(2021), 1-19. (<https://doi.org/10.1007/s10661-021-09294-6>)
11. Srdjević, B., Srdjević, Z., & Benka, P. (2022). Extreme rainless periods in Pannonian Basin. *International Journal of Climatology*, 1–23. <https://doi.org/10.1002/joc.7748>
12. Grabić, J., Benka, P., Ljevnaić-Mašić, B. et al. Spatial distribution assessment of invasive alien species *Amorpha fruticosa* L. by UAV-based on remote sensing in the Special Nature Reserve Obedska Bara, Serbia. *Environ Monit Assess* **194**, 599 (2022). <https://doi.org/10.1007/s10661-022-10273-8>.

## Selected projects

1. Sustainable development of land reclamation in Vojvodina, Republic of Serbia, Ministry of Science and Technological Development, TR - 22006, 2007-2010, (Participant)
2. Tisa Catchment Area Development (TICAD), Programme: South East Europe SEE Transnational Cooperation Programme; Lead partner: VÁTI – Hungarian Nonprofit Limited Liability Company for Regional Development and Town Planning, Hungary; Duration: 2009-2012, (Participant)
3. Drought Management Centre for South East Europe (DMCSEE), Programme: South East Europe SEE Transnational Cooperation Programme; Lead partner: Agencija Republike Slovenije za okolje, Slovenia; Duration: 2009-2012, (Participant)
4. Danube Floodrisk, Programme: South East Europe SEE Transnational Cooperation Programme; Lead partner: Ministry of Environment, Romania; Duration: 2009-2012, (Participant)
5. **EN**vironmental Optimization of **I**Rigation Management with the Combined **u****S**e and **I**ntegration of High Precision **S**atellite Data, Advanced Modeling, Process

Control and Business Innovation (**ENORASIS**), Grant Agreement 282949,  
ENORASIS is supported by the European Commission under the 7th Framework  
Programme for Research in Environment, Duration: 2012 – 2014, (Participant)

6. DriDanube - Drought Risk in Danube Region, INTERREG Danube Transnational Cooperation Programme, 2017-2019, (Participant)
7. WATERatRISK – Improvement of drought and excess water monitoring for supporting water management and mitigation of risks related to extreme weather conditions, INTERREG–IPA Cross-border Cooperation Programme Hungary– Serbia, 2017-2019, (Participant)
8. IDES - Improving water quality in the Danube river and its tributaries by integrative floodplain management based on Ecosystem Services; Interreg Danube Transnational Programme [https://www.interreg-danube.eu/approved-projects/ides\\_2020-2022](https://www.interreg-danube.eu/approved-projects/ides_2020-2022), (Participant)

#### **Academic activities**

- Teaching at undergraduate, postgraduate and Ph.D. studies (Geodesy, Land consolidation, GIS)

#### **Memberships**

#### **Other activities**

- Head of Institute for Water Management
- Head of Centre for GIS and Remote Sensing
- Chairing in national meetings
- Language skills: English, Slovak and Russian