

**Prof. dr Nebojša Dedović, vanredni profesor**

**Uža naučna oblast:** Matematika

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### **Obrazovanje**

- **Diplomirani matematičar (1996)** – Prirodno-matematički fakultet u Novom Sadu, smer – Diplomirani matematičar
- **Magistar matematičkih nauka (2004)** - Prirodno-matematički fakultet u Novom Sadu, Magistarska teza: “Numerička verifikacija singularnih udarnih talasa”
- **Doktor matematičkih nauka (2014)** - Prirodno-matematički fakultet u Novom Sadu, Doktorska disertacija: “Delta udarni talasi i metod praćenja talasa”

### **Odabrane publikacije:**

1. Chaudhary Naveed Ishtiaq, Khan Zeshan Aslam, Zubair Syed, Raja Muhammad Asif Zahoor, **Dedovic Nebojsa**, Normalized fractional adaptive methods for nonlinear control autoregressive systems, Applied Mathematical Modelling, 66 (2019), 457-471.
2. N. Ishtiaq Chaudhary, M. Ahmed, Z. Aslam Khan, S. Zubair, M. Zahoor Raja, **N. Dedovic**, Design of normalized fractional adaptive algorithms for parameter estimation of control autoregressive autoregressive systems, Applied Mathematical Modelling, Elsevier, 55 (2017), 698-715.
3. Marko Kostić, D. Rakić, Lazar Savin, **Nebojša Dedović**, Mirko Simikić, Application of an original soil tillage resistance sensor in spatial prediction of selected soil properties, Computers and Electronics in Agriculture, 127 (2016), 615-624.
4. Mirko Simikić, **Nebojša Dedović**, Lazar Savin, Milan Tomić, Ondrej Ponjičan, Power Delivery Efficiency of Wheeled Tractor at Oblique Traction, Soil and Tillage Research, Elsevier, 41 (2014), 32-43.
5. Lazar Savin, Snežana Matić-Kekić, **Nebojša Dedović**, Mirko Simikić, Milan Tomić, Profit maximization algorithm including the loss of yield due to uncertain weather events during harvest, Biosystems Engineering, Elsevier, 123 (2014), 56 - 67.
6. **Dedović N**, Nedeljkov M. Delta shocks interactions and wave front tracking method, Journal of Mathematical Analysis and Applications, 403 (2013), 580-598.
7. **Dedović N**, Matić-Kekić S, Ponjičan O, Karadžić B. New approach to border line evaluations for whole sample of Williams pear (*Pyrus communis*), Computers and Electronics in Agriculture, 79 (2011), 94-101.
8. Kostić Marko, Rakić Dušan, Radomirović Dragi, Savin Lazar, **Dedović Nebojša**, Crnojević Vladimir, Ljubičić Nataša, Corn seeding process fault cause analysis based on a theoretical and experimental approach, Computers and Electornics in Agriculture, 151 (2018), 207-218.
9. Tomić Milan, Mičić Radoslav, Kiss Ferenc, **Dedović Nebojša**, Simikić Mirko, Economic and environmental performance of oil transesterification in supercritical methanol at different reaction conditions: Experimental study with a batch reactor, Energy Conversion and Management, 99 (2015), 8-19.
10. Lazović Goran, Šešum-Čavić Vesna, Mitrović Slobodanka, Radojević Slobodan, **Dedović Nebojša**, Chaudhary Naveed Ishtiaq, Safety Times for Multistage Assembly System, Mathematical problems in Engineering, Hindawi Ltd, 10 (2018), 10 pages.
11. Simikić M, **Dedović N**, Savin L, Tomić M, Silleli H, Ponjičan O. Influence of eccentric drawbar force on power delivery efficiency of a wheeled tractor. Turkish Journal of Agriculture and Forestry. Turkish Journal of Agricultural Forestry 36 (2012), 486-500.

12. Babić Lj, Matić-Kekić S, **Dedović N**, Babić M, Pavkov I. Surface area and volume modeling of the Williams pear (*Pyrus Communis*). *International Journal of Food Properties*, 15(4) (2012), 880-890.
13. Todor Janić, Saša Igić, **Nebojša Dedović**, Darijan Pavlović, Jan Turan, Aleksandar Sedlar, Thermal power of small scale manually fed boiler, *Thermal science*, Vinča, Institute of Nuclear Sciences, Belgrade, 19(1) (2015), 329-340.
14. Krajnović M, Matić-Kekić S, **Dedović N**, Pihler I, Simin V, Simikić M, Savin L. Reproduction and culling influence on the number of ewes and lambs in two types of breeding, *African Journal of Agricultural Research* 7(24) (2012), 3506- 3512.
15. **Dedović N**, Igić S, Janić T, Matić-Kekić S, Ponjičan O, Tomić M, Savin L. Biomass boiler efficiency - mathematical modeling, *Energies* 5(5) (2012), 1470-1489.
16. Ponjičan O, Bajkin A, Jaćimović G, Tomić M, Savin L, **Dedović N**, Simikić M. Tillage quality affecting physical characteristics, number of plants and carrot root yield under flat and ridge cultivation, *Journal of Food, Agriculture & Environment* 10(2) (2012), 304-311.
17. Ponjičan O, Bajkin A, Dimitrijević A, Savin L, Tomić M, Simikić M, **Dedović N**, Zoranović M. The effects of working parameters and tillage quality on rotary tiller specific work requirement. *African Journal of Agricultural Research* 6(31) (2011), 6513-6524.
18. Tomić M, Matić-Kekić S, Savin L, Desnica E, **Dedović N**, Simikić M, Ponjičan O, Ašonja A. Optimization of the locations of overhaul capacities for agricultural engineering in Serbia by applying integer programming, *African Journal of Agricultural Research* 6(14) (2011), 3346-3354.

#### **Odabrani projekti:**

- Unapređenje energetske i ekološke efikasnosti traktora i mobilnih sistema. TR-20078, 2008 - 2010. (Učesnik).
- Unapređenje kvaliteta traktora i mobilnih sistema u cilju povećanja konkurentnosti, očuvanja zemljišta i životne sredine. TR-31046, 2011 - 2019. (Učesnik)

#### **Akadske aktivnosti:**

- **Nastava** iz uže naučne oblasti Matematika na osnovnim, master i doktorskim studijama.

#### **Ostale aktivnosti:**

- Govori, čita i piše engleski jezik (viši srednji nivo)
- Govori, čita i piše norveški jezik (početni nivo)

**Associate Professor Nebojša Dedović, Ph.D.**

**Field of research:** Mathematics

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**Academic qualifications**

- **B.Sc. (1996)** – University of Novi Sad, Faculty of Sciences
- **M.Sc. (2004)** - University of Novi Sad, Faculty of Sciences
- **Ph.D. (2014)** - University of Novi Sad, Faculty of Sciences

**Selected publications:**

1. Chaudhary Naveed Ishtiaq, Khan Zeshan Aslam, Zubair Syed, Raja Muhammad Asif Zahoor, **Dedovic Nebojsa**, Normalized fractional adaptive methods for nonlinear control autoregressive systems, *Applied Mathematical Modelling*, 66 (2019), 457-471.
2. N. Ishtiaq Chaudhary, M. Ahmed, Z. Aslam Khan, S. Zubair, M. Zahoor Raja, **N. Dedovic**, Design of normalized fractional adaptive algorithms for parameter estimation of control autoregressive autoregressive systems, *Applied Mathematical Modelling*, Elsevier, 55 (2017), 698-715.
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5. Lazar Savin, Snežana Matić-Kekić, **Nebojša Dedović**, Mirko Simikić, Milan Tomić, Profit maximization algorithm including the loss of yield due to uncertain weather events during harvest, *Biosystems Engineering*, Elsevier, 123 (2014), 56 - 67.
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9. Tomić Milan, Mičić Radoslav, Kiss Ferenc, **Dedović Nebojša**, Simikić Mirko, Economic and environmental performance of oil transesterification in supercritical methanol at different reaction conditions: Experimental study with a batch reactor, *Energy Conversion and Management*, 99 (2015), 8-19.
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12. Babić Lj, Matić-Kekić S, **Dedović N**, Babić M, Pavkov I. Surface area and volume modeling of the Williams pear (*Pyrus Communis*). *International Journal of Food Properties*, 15(4) (2012), 880-890.

13. Todor Janić, Saša Igić, **Nebojša Dedović**, Darijan Pavlović, Jan Turan, Aleksandar Sedlar, Thermal power of small scale manually fed boiler, Thermal science, Vinča, Institute of Nuclear Sciences, Belgrade, 19(1) (2015), 329-340.
14. Krajinović M, Matić-Kekić S, **Dedović N**, Pihler I, Simin V, Simikić M, Savin L. Reproduction and culling influence on the number of ewes and lambs in two types of breeding, African Journal of Agricultural Research 7(24) (2012), 3506- 3512.
15. **Dedović N**, Igić S, Janić T, Matić-Kekić S, Ponjičan O, Tomić M, Savin L. Biomass boiler efficiency - mathematical modeling, Energies 5(5) (2012), 1470-1489.
16. Ponjičan O, Bajkin A, Jaćimović G, Tomić M, Savin L, **Dedović N**, Simikić M. Tillage quality affecting physical characteristics, number of plants and carrot root yield under flat and ridge cultivation, Journal of Food, Agriculture & Environment 10(2) (2012), 304-311.
17. Ponjičan O, Bajkin A, Dimitrijević A, Savin L, Tomić M, Simikić M, **Dedović N**, Zoranović M. The effects of working parameters and tillage quality on rotary tiller specific work requirement. African Journal of Agricultural Research 6(31) (2011), 6513-6524.
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**Selected projects:**

- Improvement of ecological and energy efficient tractors and mobile systems. TR-20078, 2008 - 2010. (Participant).
- Improvement of quality of tractors and mobile systems for better competitiveness and preservation of soil and environment. TR-31046, 2011 - 2019. (Participant).

**Academic activities**

- Teaching at undergraduate, postgraduate and Ph.D. studies (Mathematics)

**Other activities:**

- Language skills: English (upper intermediate level), Norwegian (beginner level)