



COST ACTION GREENERING – DATA COLLECTION

First name, Family Name: Marija Miladinović

Type (Academic or Industrial): Academic

Country: Serbia

Leadership position in the COST: Participant

Working Group in which you are involved: WG4 and WG3

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Laboratory/Company: University of Niš, Faculty of Technology, Department of Chemical Engineering, Chemical Engineering Laboratory (Leskovac, Serbia)

Laboratory/Company info (limited to 400 characters): Chemical Engineering Laboratory within Department of Chemical Engineering is a part of Faculty of Technology and serves for development of students' skills in understanding of unit operations and basic or complex reaction systems. Laboratory is also used for scientific research related to conversion of industry and energy crops into value-added products. Personnel: 3 professors, 1 Associate professor, 3 Research Associates and 2 PhD students.

Link to the home page of the Laboratory/Company: <http://www.tf.ni.ac.rs/>

Fields of expertise:

- Conversion of industrial and energy crops into value-added products
- Homogeneous and heterogeneous catalysis
- Optimization, kinetic modeling and simulation
- Biofuel technology

5 Main publications or patents:

- **Miladinović M.R.**, Zdujić M.V., Veljović Dj.N., Krstić J.B., Banković-Ilić I.B., Veljković V.B., Stamenković O.S., Valorization of walnut shell ash as a catalyst for biodiesel production, *Renewable Energy* 147 (2020) 1033-1043. DOI: 10.1016/j.renene.2019.09.056, ISSN: 0960-1481.
- Marinković D.M., **Miladinović M.R.**, Avramović J.M., Krstić I.B., Stanković M.V., Stamenković O.S., Jovanović D.M., Veljković V.B., Kinetic modeling and optimization of sunflower oil methanolysis catalyzed by spherically-shaped CaO/ γ -Al₂O₃ catalyst, *Energy Conversion and Management* 163 (2018) 122–133. DOI:10.1016/j.enconman.2018.02.048; ISSN: 0196-8904.
- Liu H., Lukić I., **Miladinović M.R.**, Veljković V.B., Zdujić M., Zhu X., Zhang Y., Skala D.U., Continuous biodiesel production under subcritical condition of methanol – Design of pilot plant and packed bed reactor with MnCO₃/Na-silicate catalyst, *Energy Conversion and Management* 168 (2018) 494–504. DOI:10.1016/j.enconman.2018.05.028; ISSN: 0196-8904.



- **Miladinović M.R.**, Stamenković O.S., Banković P.T., Milutinović-Nikolić A.D., Jovanović D.M., Veljković V.B., Modeling and optimization of sunflower oil methanolysis over quicklime bits in a packed bed tubular reactor using the response surface methodology, *Energy Conversion and Management* 130 (2016) 25–33. DOI: 10.1016/j.enconman.2016.10.020, 2016. ISSN: 0196-8904.
- **Miladinović M. R.**, Krstić J. B., Tasić M. B., Stamenković O. S., Veljković V. B., A kinetic study of quicklime-catalyzed sunflower oil methanolysis, *Chemical Engineering Research and Design* 92 (2014) 1740-1752. DOI: 10.1016/j.cherd.2013.11.023, ISSN:0263-8762.

Collaborations:

Institute of Technical Sciences of the Serbian Academy of Sciences and Arts, Belgrade, Serbia; Institute of Chemistry, Technology and Metallurgy, Belgrade, Serbia; Institute of Field and Vegetable crops, Novi Sad, Serbia; Faculty of Technology and Metallurgy, Belgrade, Serbia; State Key Laboratory of Biogeology and Environmental Geology and School of Environmental Studies, China University of Geosciences, Wuhan.

Facilities:

- Tubular Reactor (single-tube),
- Segmented Flow Tubular reactor,
- Continuous Reciprocating Plate Reactor (lab and pilot scale),
- Continuous Stirred Tank Reactor,
- Continuous Liquid-Liquid Extraction Unit,
- Soxhlet extractor,
- HPLC chromatograph Agilent Technologies 1100 Series,
- UV-VIS spectrophotometer JENWAY 6305,
- Vacuum evaporator, Heidolph Instruments,
- Rotational viscometer Visco Basic Plus,
- Conductivity meter ProLine B250,
- Furnace Carbolite Type CWF,
- Oil cold pressing Press, SPU-20.