Dr Zoran Štirbanović

Associate Professor

Basic information:

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Education:

2005
BSc in Mining, Mineral Processing
University of Belgrade, Technical faculty in Bor,
Department for Mineral and Recycling Technologies

2009
MSc in Mining, Mineral and recycling technologies
University of Belgrade, Technical faculty in Bor,
Department for Mineral and Recycling Technologies

2015
PhD in Mining, System Engineering
University of Belgrade, Faculty of Mining and Geology,
Department for Applied Computing and System Engineering

Work experience:

2007 – 2009
Teaching Associate
University of Belgrade, Technical faculty in Bor,
Department for Mineral and Recycling Technologies

2009 – 2015
Teaching Assistant
University of Belgrade, Technical faculty in Bor,
Department for Mineral and Recycling Technologies,

2015 – 2020
Assistant professor
University of Belgrade, Technical faculty in Bor,
Department for Mineral and Recycling Technologies

2020 –
Associate professor
University of Belgrade, Technical faculty in Bor,
Department for Mineral and Recycling Technologies

Engagement on subjects (Teaching courses) :

Testing mineral and secondary raw materials – UAS, modules MP and RTSD

Alternative and renewable energy sources – UAS, module RTSD

Mineral processing technologies II– UAS, module MP

Reagents in mineral processing – UAS, module MP

Safety and health at work in mineral processing and recycling technologies – UAS, modules MP and RTSD

Professional practice – UAS, modules MP and RTSD

Technologies of processing metallic mineral raw materials – MAS, module MP

Recycling of non-metallic waste – MAS, module RTSD

Thermal treatment of waste – MAS, module RTSD

Theory of elementary physical - chemical processes in flotation – DAS, Mining Engineering

Microscopic examinations in preparation and concentration processes – DAS, Mining Engineering

Multi-criteria decision making in preparation and concentration processes – DAS, Mining Engineering

Areas of interest:

Physical - chemical processes in flotation, Methods for testing mineral and secondary raw materials, Alternative and renewable energy sources, Mineral and recycling technologies

Projects:

TR 33023: " Development of technology for processing copper and precious metals ores by flotation in order to achieve better technological results ", Ministry of education, science and technological development of Republic of Serbia.

TR 33007: " Implementation of modern technical, technological and ecological solutions in the existing production systems of the Copper Mines Bor and the Copper Mine Majdanpek ", Ministry of education, science and technological development of Republic of Serbia

The most important references:

- **Štirbanović, Z.**, Urošević, D., Đorđević, M., Sokolović, J., Aksić, N., Živadinović, N., Milutinović, S. (2022) Application of Thionocarbamates in Copper Slag Flotation, Metals 12, no. 5: 832.
- Dimović, S., Jelić, I., Šljivić-Ivanović, M., **Štirbanović, Z.**, Gardić, V., Marković, R., Savić, A., Zakić, D. (2022) Application of Copper Mining Waste in Radionuclide and Heavy Metal Immobilization, Clean – Soil, Air, Water 2021, 50, 2000419.
- **Štirbanović, Z.**, Gardić, V., Stanujkić, D., Marković, R., Sokolović, J., Stevanović, Z. (2021) Comparative MCDM Analysis for AMD Treatment Method Selection. Water Resources

Management, 35 (11), pp. 3737-3753.

- Sokolović, J., Stanujkić, D., **Štirbanović, Z.** (2021) Selection of process for aluminium separation from waste cables by TOPSIS and WASPAS methods, Minerals Engineering, 173, 107186.
- **Štirbanović, Z.**, Sokolović, J., Marković, I., Đorđievski, S. (2020). The effect of degree of liberation on copper recovery from copper-pyrite ore by flotation. Separation Science and Technology, 55(17), 3260-3273. doi:10.1080/01496395.2019.1676260
- **Štirbanović, Z.**, Stanujkić, D., Miljanović, I., Milanović, D. (2019) Application of MCDM methods for flotation machine selection, Miner. Eng., 137, pp. 140-146.
- **Štirbanović, Z.**, Miljanović, I., Marković, Z. (2013) Application of Rough Set Theory for Choosing Optimal Location for Flotation Tailings Dump, Arch. Min. Sci., Vol. 58 No 3, 2013, pp. 893–900.
- **Štirbanović, Z.**, Markovic, Z. (2011) The effect of copper bearing particles liberation on copper recovery from smelter slag by flotation, Separation Science and Technology, 46(16), pp. 2496-2500.
- Marković, Z., **Štirbanović, Z.**, Milanovic, D., Markovic, M. (2012) Kinetics study on oxidized copper ore flotation from copper mine Veliki Krivelj, Proceedings of XXVI International Mineral Processing Congress (IMPC 2012), New Delhi, India, ISBN: 81-901714-3-7, September 24-28, 2012, pp. 3280-3286
- Popović G., Stanujkić D., Karabašević D., **Štirbanović Z.** (2020) Model for ore deposits selection by using the fuzzy TOPSIS method, Journal of Mining and Metallurgy A: Mining, 56(1), pp. 59-71.
- Sokolović J., Stanojlović R., Andrić Lj., **Štirbanović Z.**, Ćirić N. (2019) Flotation studies of copper ore Majdanpek to enhance copper recovery and concentrate grade with different collectors. Journal of Mining and Metallurgy A: Mining, 55(1), pp.53-65.
- Stanojlović, R., **Štirbanović, Z.**, Sokolović, J. (2008) Wastefree technology for processing smelter slag from Bor Copper Mine, Journal of Mining and Metallurgy, Section A: Mining,Vol 44, No. 1 , 2008, pp. 44-50.
- **Zoran Štirbanović**, Zoran Marković, Proceedings of the XI International Symposium on Recycling Technologies and Sustainable Development, November 2016, Bor, Serbia, ISBN 978-86-6305-051-8.
- Rodoljub Stanojlović, **Zoran Štirbanović**, Proceedings of the 3rd Symposium "Recycling technologies and sustainable development", October 2008, Sokobanja, Serbia, ISBN 978-86-80987-61-3.
- Rodoljub Stanojlović, **Zoran Štirbanović**, Proceedings of the 2nd Symposium "Recycling technologies and sustainable development", October 2007, Sokobanja, Serbia, ISBN 978-86-80987-53-8.

Textbooks, books and monographs:

- Rudolf Tomanec**, Zoran Štirbanović**, Practicum in testing mineral and secondary raw materials, Publisher: Technical Faculty in Bor, 2020, ISBN 978-86-6305-107-2.

Other activities:

- President of Organizing Committee of XI International Symposium on Recycling Technologies and Sustainable Development, November 2016, Bor, Serbia.
- President of Organizing Committee of 2nd, 4th, 5th and 6th Student Symposium “Recycling Technologies and Sustainable Development”.
- Member of Scientific Committee of XI and XII International Symposium on Recycling Technologies and Sustainable Development.
- Member of Organizing Committees of several national and international conferences: International October Conference on Mining and Metallurgy; International Scientific and Professional Meeting "Ecological Truth"; Symposium on Recycling Technologies and Sustainable Development; International Serbian Symposium on Mineral Processing etc.

Scholarships/Rewards

- Professional visit to University of Technology of Troyes, France as a holder of a scholarship for short research visit to France, granted by French Embassy in Belgrade and French Institute in Serbia (07-22 November 2019)