

## СПИСЪК НА НАУЧНИТЕ ТРУДОВЕ

на гл. ас. д-р инж. Теменужка Христова (Василева) Радойкова,

катедра: „Аналитична химия“, представени за участие в конкурс за доцент в ДВ  
бр. 64/ 05.08.2025г.

*Показател 4 от приложение 5а*

**Хабилитационен труд – научни публикации в издания, които са реферирани и  
индексирани в световноизвестни бази данни с научна информация  
(Web of Science, Scopus)**

1. S.Nenkova, V. Momchev, T. Vasileva, Structure prediction of alkaline activated hydrolysis lignin based on the study of its model compounds, Cellulose Chemistry and Technology, 41(1), 29-35, 2007. (Q2 SJR 0.383, IF 1.3 (2023))
2. T. Radoykova, S. Nenkova, K. Stanulov, Production of phenol compounds by alkaline treatment of poplar wood bark, Chemistry of Natural Compounds, 46(5), 807-808, 2010. (Q3, IF 0.8 (2023) SJR 0.251) DOI: 10.1007/s10600-010-9751-x
3. T. Radoykova, K. Stanulov, S. Nenkova, Lignin-derived methoxyphenols as antioxidant additives for gasoline, Oxidation communications, 34 (2), 463-468, 2011. (Q3, IF 0.489, SJR 0.211)
4. T. Radoykova, S.Nenkova, I. Valchev, Black liquor lignin products, isolation and characterization, J of Chem. Tech and Metallurgy, 48(5), 2013, 524-529. (SJR 0.146)
5. T. Radoykova, G. Radeva, S.Nenkova, Comparative kinetic analysis of poplar biomass alkaline hydrolysis, Cellulose Chem. Technol., 50(2), 269-274, 2016. (Q3, IF 0.908, SJR 0.33)
6. T. Hr. Radoykova, S. K. Nenkova, I. V. Valchev, Monomeric phenolic compounds from hydrolyzed waste lignocellulosic materials, Bulgarian Chemical Communications, 49(1), 40 – 45, 2017. (Q4, IF 0.242, SJR 0.156)
7. T. Radoykova, S. Nenkova, N. Georgieva, D. Todorova, T. Angelova, Improvement of operational properties of wood materials by modification through the penetration, 17th International Multidisciplinary Scientific GeoConference SGEM 2017, SGEM2017 Vienna GREEN Conference Proceedings, ISBN 978-619-7408-29-4 / ISSN 1314-2704, 27 - 29 November 2017, Vol. 17, Issue 63, 579-586 pp; DOI: 10.5593/sgem2017H/63/S26.073 (SJR 0.212)

8. T. Hr. Radoykova, S. V. Dimitrova, K. I. Aleksieva, S. K. Nenkova, I. V. Valchev, D. R. Mehandjiev, Comparative Mn<sup>2+</sup> adsorption on waste lignocellulosic materials, Journal of Environmental Protection and Ecology 16 (1), 23–32, 2015. (Q3 SJR 0.592, IF 0.81)

***Показател 7 от приложение 5а***

**Научни публикации (статии и доклади), публикувани в издания, които са реферирани и индексирани в световноизвестни бази данни с научна информация (Web of Science, Scopus), извън хабилитационния труд.**

1. P. S. Vassileva, T. Hr. Radoykova, A. K. Detcheva, I. A. Avramova, K. I. Aleksieva, S. K. Nenkova, I. V. Valchev & D. R. Mehandjiev, Adsorption of Ag<sup>+</sup> ions on hydrolyzed lignocellulosic materials based on willow, paulownia, wheat straw and maize stalks, Int. J. Environ. Sci. Technol. 13(5), 1319–1328, 2016. (Q2, IF 2,3 (2016), SJR 0.592)
2. P. S. Vassileva, A. K. Detcheva, T. Hr. Radoykova, I. A. Avramova, K. I. Aleksieva, S. K. Nenkova, I. V. Valchev and D. R. Mehandjiev, Studies On Ag<sup>+</sup> Adsorption Using Two New Lignocellulosic Materials Based On Populus Alba L. And Robinia Pseudoacacia L., Cellulose Chem. Technol., 52(7-8), 633-643, 2018. (Q3, IF 0.964, SJR 0.277)
3. I. A. Avramova, T. Hr. Radoykova, I. V. Valchev, D. R. Mehandjiev, X-ray photoelectron spectroscopy investigations of lignocellulosic materials, Bulgarian Chemical Communications, 50 (3), 411 – 416, 2018. (Q4, IF 0.42, SJR 0.137)
4. T. Hr. Radoykova, T. G. Angelova, P. S. Vassileva, N. V. Georgieva, A. K. Detcheva, K. I. Aleksieva, I. V. Valchev, S. K. Nenkova and D. R. Mehandjiev, Investigation Of Antibacterial Activity Of Waste Lignocellulosic Materials Doped With Silver, Cellulose Chem. Technol., 53 (5-6), 427-433, 2019. (Q3, IF 1.073, SJR 0.273)
5. I. Mihailova, T. Radoykova, G. Ivanov, D. Stoyanova, D. Mehandjiev, Slag-based materials as catalysts in oxidation reactions, J Chem Technol Met, 49(4), 391-401, 2014. (SJR 0.205)
6. I. K. Mihailova, T. H. Radoykova, G. M. Ivanov, P. V. Vassileva, D. R. Mehandjiev, Blast furnace slag-based materials for catalytic applications, Compt. rend. Acad. bulg. Sci., 68 (5), 595-600, 2015. (Q3, IF 0.321, SJR 0.205)

7. I. K. Mihailova, T. H. Radoykova, D. R. Mehandjiev, Synthesis of Materials with A High Specific Surface Area From Blast Furnace Slag, *Compt. rend. Acad. bulg. Sci.* 69(4), 431-438, 2016. (Q3 SJR 0.209 IF 0.321,)
8. Radoykova T., Surleva A., Ilieva D., Angelova L., Chernev G., Characterization of mine tailings and fly ash from Bulgaria as raw materials for geopolymerisation, has been finally accepted for publication in *Archives of Metallurgy and Materials*, (2025), 70(1), pp. 445–452 , SJR 0.235, IF 0.7, Q3, DOI: <https://doi.org/10.24425/amm.2025.152564>
9. Radoykova T., Surleva A., Ilieva D., Angelova L., Testing of geopolymer raw materials: Validation of methods and practical aspects, *Arch. Metall. Mater.* 70 (2025), 1, 165-169. DOI: <https://doi.org/10.24425/amm.2025.152530>, SJR 0.235, IF 0.7, Q3
10. D. Ch. Vladov, L. P. Raicheva, R. N. Nikolov, T. Hr. Radoykova and S. K. Nenkova, Preparation Of Efficient Carbonaceous Material (Active Carbon) From Hydrolysed Lignin Through Direct Activation With Phosphoric Acid, *Cellulose Chem. Technol.*, 53 (7-8), 731-738, 2019. (Q3, IF 1.073, SJR 0.273)
11. V. Toteva , T. Radoykova, Ch. Tzvetkova, L. Raicheva, S. Nenkova, R. Nickolov, Application of waste-derived activated carbon as a sorbent for Re ions recovery from acidic aqueous solution, *Bulgarian Chemical Communications*, 53(3), 287 – 293, 2021. DOI:10.34049/bcc.53.3.5333 (Q4, IF 0.39, SJR 0.168) [http://bcc.bas.bg/BCC\\_Volumes/Volume\\_53\\_Number\\_3\\_2021/bcc-53-3-2021.pdf](http://bcc.bas.bg/BCC_Volumes/Volume_53_Number_3_2021/bcc-53-3-2021.pdf)
12. I. Naydenova, T. Radoykova, T. Petrova, O.Sandov, I.Valchev, Utilization Perspectives of Lignin Biochar from Industrial Biomass Residue. *Molecules* 2023, 28(12). <https://doi.org/10.3390/molecules28124842> Q2 (2022) SJR 0.704, IF 4.9 (2022)
13. A. Mechshanova, V. Polyakov, T. Radoykova, The study of the natural substances obtained from the poplar buds and their use for protection against the action of ionizing radiation, *ScienceRise: Pharmaceutical Science* 3(43)2023. DOI: 10.15587/2519-4852.2023.271837 (Q3 SJR 0.16 IF 0.82)
14. Anna Mechshanova, Vladilen Polyakov, Temenuzhka Radoykova, Obtaining Balsamic Poplar Bud Essential Oil by The Barothermal Method and Studying the Effect of its Aqueous Emulsions on Seed Germination and Growth of Tomato Plants, *Cellulose Chem. Technol.*, 57 (9-10), 953-962, 2023. DOI: 10.35812/CelluloseChemTechnol.2023.57.84, SJR 0.257 IF 1.467 Q3

15. Mechshanova A., Polyakov V., Surleva A., Radoykova T., Obtaining of balsamic poplar extract as biostimulant for agricultural plants, *Journal of Chemical Technology and Metallurgy*, 59, 2, 2024, 269-278, SJR 0.196
16. S. K. Nenkova, M. M. Dragnevskia, S. D. Lekova, S. B. Parvanov, T. Hr. Radoikova, Nanocomposite wood fibrous materials for electromagnetic wave protection, 14th International Symposium Materials, Methods & Technologies (MMT), June 11 – 15, 2012, Sunny Beach, Bulgaria, *Journal of International Scientific Publications: Materials, Methods & Technologies*, 6(2), 370-380, 2012. (ISSN 1313-2339)
17. S. Nenkova, T. Radoykova, K. Stanulov, Preparation and antioxidant properties of biomass low molecular phenolic compounds, (Review), *J Univ Chem Technol Met (Sofia)*, 46(2), 109-120, 2011.
18. T. Hr. Radoykova, S. V. Dimitrova, K. I. Aleksieva, S. K. Nenkova, I. V. Valchev, D. R. Mehandjiev, Adsorption properties of waste lignocellulosic materials produced in reprocessing of wheat straw and maize stalks biomass, 15th International Symposium Materials, Methods & Technologies (MMT), June 10 – 14, 2013, Sunny Beach, Bulgaria, *Journal of International Scientific Publications: Materials, Methods & Technologies*, 7 (2), 190-201, 2013. (ISSN 1313-2339)
19. S. Petrin, I. Valchev, T. Radoykova, S. Nenkova, Application of peroxides for bioethanol production from lignocellulosic materials, *Proceeding 9th International Conference on Polysaccharides-Glycoscience*, 06 - 08 November 2013, Prague, Czech Republic, p. 178-180, 2013. (Web of Science ISBN: 978-80-86238-58-6) <https://www.webofscience.com/wos/woscc/full-record/WOS:000341216900044>
20. T. Radoykova, T. Dizhbite, G. Dobelev, S. Nenkova, I. Valchev, Characterization of hydrolysed lignocellulosic materials for energy utilization, *Proceeding 9th International Conference on Polysaccharides-Glycoscience*, 06 - 08 November 2013, Prague, Czech Republic, p. 200-204 (Web of Science), ISBN: 978-80-86238-58-6 <https://www.webofscience.com/wos/woscc/full-record/WOS:000341216900050>

## **СПИСЪК НА УЧЕБНИТЕ ПОМАГАЛА**

**на гл. ас. д-р инж. Теменужка Христова Радойкова,**

катедра: „Аналитична химия“, представени за участие в конкурс за доцент в ДВ

бр. 64/ 05.08.2025г.

- 1. “Компютърни методи за обработка на данни от химичния анализ” проф. Стела Георгиева и гл. ас. Теменужка Радойкова ISBN 978-954-465-176-3**