

Curriculum Vitae

First name(s) / Surname(s) **GOSPODINKA GICHEVA**

Address (business) Prof. Boyan Kamenov Str., Sudentski grad, 1700, Sofia

Mobile (optional)

E-mail g.gicheva@mgu.bg

Date of birth 15.09.1982

Positions (at moment) **Head Assistant Professor**

Dates **15.05.2024– till now**

Occupation or position held **Head Assistant Professor**

Name and address of employer University of Mining and Geology “St. Ivan Rilski”, Department of Mineral Processing and Recycling

Dates 14.04.2011 – till 15.05.2024

Occupation or position held **Head Assistant Professor**

Name and address of employer University of Mining and Geology “St. Ivan Rilski”, Department of Chemistry

Dates 1.03.2010 – 14.04.2011

Occupation or position held **Assistant Professor**

Name and address of employer University of Mining and Geology “St. Ivan Rilski”, Department of Chemistry

Education and training

Dates **01.02.2007 - 28.01.2010**

Title of qualification awarded **PhD degree**

Educational institution Sofia University “St. Kliment Ohridski”, Faculty of Chemistry and Pharmacy

Dates **01.11. 2005-09. 2006**

Title of qualification awarded **Master of Science degree (MSc)**

Educational institution Sofia University “St. Kliment Ohridski”, Faculty of Chemistry and Pharmacy

Dates **01.11. 2001-23.06.2005**

Title of qualification awarded Bachelor of Science degree (BSc)

Educational institution Sofia University “St. Kliment Ohridski”, Faculty of Chemistry and Pharmacy

Mother tongue(s) **Bulgarian**

Other language(s) **English, French**

Self-assessment

European level (*)

English

French

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Listening		Reading	
C2	Proficient level	C2	Proficient level	C2	Proficient level	C1	Proficient level	C2	Proficient level
B1	Working level	B1	Working level	B1	Working level	B1	Working level	B1	Working level

(*) [Common European Framework of Reference for Languages](http://europass.cedefop.europa.eu)

Professional information and

applications	QDs synthesis and application, polymer nanocomposites, photocatalysis, water treatment
Professional and Research interests (key words)	
Patents and Inventions	
Membership of professional and trade organization	Participant in the project COST Action D43 of EU (2007-2011) Participant in the project COST Action CM 1101 of EU (2012-2016) Member of the International Advisory Committee of the conference "International Conference on management and Recycling of Metallurgical Waste (MRMW-2020), 22-23 February 2020, IIT(BHU),Varanasi,INDIA/ "Management and Recycling of Metallurgical Waste (MRMW-2020)"
Publications	Appendix 1
Projects	Appendix 2
Participation in scientific sessions, conferences and congresses (for last 5 year)	G. Gicheva, N. Mintcheva, M. Panayotova, L. Djerahov, Investigation of kinetics of formation of silver nanoparticles with two different catalysts, Proc. Science and Society, 2019, 435-439. N. Mintcheva, G. Gicheva, M. Panayotova, L. Djerahov, "Preparation of silver nanoparticles and nanocomposite silver nanoparticles – zeolite by chemical reduction at room temperature", Proceedings Book& "5th International Conference on New Trends in Chemistry" April 22 – 24, 2019, Athens, Greece. N. Mintcheva, G. Gicheva, L. Djerahov, M. Panayotova, , "Functionalized clinoptilolite for removal of soluble dyes in aqueous solution", Proceedings Book& "5th International Conference on New Trends in Chemistry" April 22 – 24, 2019, Athens, Greece. G. Gicheva, N. Mintcheva, L. Djerahov, ZnO-based nanomaterials for organic pollutants removal from wastewater, Journal of Mining and Geological Sciences, 63, 2020, 41-46. G. Gicheva, N. Mintcheva, M. Panayotova, Nanosized ZnO and ZnO@zeolite composite prepared via sonication method Списание: Proceedings "INDUSTRY 4.0", 2021, vol. II ISSN (Print) - 2535-0153, ISSN (Online) - 2535-0161, 165-168. M. Panayotova, N. Mintcheva, G. Gicheva, L. Djerahov, N. Mirdzveli, "Modified clinoptilolite as a precursor for formation of silver nanoparticles-zeolite nanocomposites", International Multidisciplinary Scientific GeoConference SGEM, vol. 20, book 6.1, 2020, 77-84. DOI 10.5593/sgem2020/6.1/s24.011 N. Mintcheva, G. Gicheva, M. Panayotova, L. Djerahov 3rd Workshop on Size-Dependent Effect in Materials for Environmental Protection and Energy Application, Pomorie, Bulgaria, September 12-15, 2021
Specialization abroad (for last 5 year)	26.12.2020 – 26.06.2021 – Research Fellowship Program; Matsumae International Foundation „Developing of biosensors based on nanomaterials prepared via laser ablation in liquid“ G. Gicheva, Preparation of TiO ₂ decorated NPs and study of their photocatalytic properties for water treatment – Tokai University, Japan, 2021 – presentation. „Modern education and practice in Mining and Geomatics in Bulgaria“ – A. Kamburov, G. Gicheva, H. Vasilev, / section: “Bringing nanotechnology to mining industry – modern management practice”, 2022, Riga, Lithuania 27.11.2023 - 29.12.2023 - short-term specialization specified under the Science and Education for Smart Growth Operational Program (2014-2020) under project BG05M2OP001-2.016-0022, Modernization of higher education in sustainable use of natural resources in Bulgaria at University of Cordoba, Spain.

PUBLICATIONS

2019-2024

1. M. Panayotova, N. Mintcheva, **G. Gicheva**, V. Panayotov, L. Djerahov, B. Ivanov. Xanthate removal from wastewater by using silver nanoparticles–zeolite composite. *Ecology & Safety* 13 (2019) 58-67. <https://www.scientific-publications.net/bg/article/1001859/>.
2. N. N. Mintcheva, **G. Gicheva**, M. I. Panayotova, W. Wunderlich, A. A. Kuchmizhak, S. A. Kulinich, Preparation and Photocatalytic Properties of CdS and ZnS Nanomaterials Derived from Metal Xanthate, *Materials*, 12, 3313, 10 pp., 2019.
3. O. T. Gemishev, M. I. Panayotova, N. Mintcheva, **G. Gicheva**, L. Djerahov, G. Tyuliev, A green approach for silver nanoparticles preparation by cell-free extract from *Trichoderma reesei* fungi and their characterization, *Materials Research Express* 6 (095040), 12 pp, 2019.
4. N. N. Mintcheva, **G. D. Gicheva**, L. Djerahov, M. I. Panayotova, Functionalized clinoptilolite for removal of soluble dyes in aqueous dyes in aqueous solution, *Proceedings of 5th International Conference on New Trends in Chemistry*, Athens, Greece, Ed. D. S. Dasdan, 26-29, 22 – 24.04.2019.
5. N. N. Mintcheva, **G. D. Gicheva**, L. Djerahov, M. I. Panayotova. Preparation of silver nanoparticles-zeolite nanocomposite and its potential applications as an antibacterial agent in water treatment. *Proceedings of 5th International Conference on New Trends in Chemistry*, Athens, Greece, April, 22 – 24 2019, Ed. D. S. Dasdan, 30-33. <http://icntconference.com/wp-content/uploads/2019/09/5th-International-Conference-on-New-Trends-in-Chemistry-PROCEEDINGS-BOOK-2019.pdf> (ISBN: 978-605-67476-4-9).
6. **G. Gicheva**, N. Mintcheva, M. Panayotova, L. Djerahov, Investigation of kinetics of formation of silver nanoparticles with two different catalysts, *Proc. Science and Society*, 2019, 435-439.
7. N. Mintcheva, **G. Gicheva**, M. Panayotova, S. A. Kulinich Room-temperature synthesis of zns nanoparticles using zinc xanthates as molecular precursors, *Materials*, 13(1). pii: E171, 2020.
8. Panayotova, M.; Mintcheva, N.; **Gicheva, G.**; Djerahov, L.; Mirdzveli, N. Modified Clinoptilolite as Precursor for Formation of Silver Nanoparticles-Zeolite Nanocomposites. In *Proceedings of 20th International Multidisciplinary Scientific GeoConference SGEM 2020*, Albena, Bulgaria, 18–24 August 2020; pp. 77–84. <https://doi.org/10.5593/sgem2020/6.1/s24.011> ; DOI: 10.5593/sgem2020/6.1/s24.011
9. **Gospodinka Gicheva**, Neli Mintcheva, Lyubomir Djerahov. ZnO-based nanomaterials for organic pollutants removal from wastewater. *Journal of Mining and Geological Sciences*, Volume 63 (2020) 41-46.
10. **Gospodinka Gicheva**, Neli Mintcheva, Marinela Panayotova. Nanosized ZnO and ZnO@zeolite composite prepared via sonication method. *Proceeding of VI International Scientific Conference- Industry-4*. 12(2)2021
11. Gautam, P., Behera, C.K., Sinha, I., **Gicheva, G.**, Singh, K.K, High added-value materials recovery using electronic scrap-transforming waste to valuable products, 2021, *Journal of Cleaner Production* 330(234):129836; DOI: 10.1016/j.jclepro.2021.129836
12. N. Mintcheva, M. I. Panayotova, **G. Gicheva**, O. T. Gemishev, G. Tyuliev, Effect of Exchangeable Ions in Natural and Modified Zeolites on Ag Content, Ag Nanoparticle Formation and Their Antibacterial Activity; 2021, *Materials* 14(15):4153; DOI: 10.3390/ma14154153
13. **G. Gicheva**, N. Mintcheva, M. Panayotova, Nanosized ZnO and ZnO@zeolite composite prepared via sonication method Списание: *Proceedings "INDUSTRY 4.0"*, 2021, vol. II ISSN (Print) - 2535-0153, ISSN (Online) - 2535-0161, 165-168
14. Mintcheva, N.; **Gicheva, G.**; Panayotova, M. Reduction of Heavy Hydrocarbons from Oilfield Produced Water. *Pollutants* 2022, 2, 234–251. <https://doi.org/10.3390/pollutants2020016>.
15. Orlin Gemishev, Marinela Panayotova, **Gospodinka Gicheva**, Neli Mintcheva, Green Synthesis of Stable Spherical Monodisperse Silver Nanoparticles Using a Cell-Free Extract of *Trichoderma reesei*, 2022, *Materials* 15(2):481, DOI: 10.3390/ma15020481
16. **G. Gicheva**, A. Chanachev, S. A. Kulinich, Bringing space technology to mining – biosensors for health monitoring in real time as a modern management practice, *Sustainable extraction and processing of raw materials journal*, 2022, vol. 3, DOI: 10.5281/zenodo.7007033/ DOI: 10.58903/c16182117/ DOI: 10.58903/c16182117cCVS
17. **G. Gicheva**, A. Chanachev, N. Mintcheva, Assessment of zeolite use for removal of petroleum compounds from wastewater, *Sustainable extraction and processing of raw materials journal*, 2024, vol. 5, DOI: 10.58903/dv69110145

PROJECTS
2019-2024

1. „Functional composite nanomaterials obtained from natural resources for environment protection” DN-17/20 from 2017 (2017-2021) - leader
2. „Developing of biosensors based on nanomaterials prepared via laser ablation in liquid“ - Research Fellowship Program; Matsumae International Foundation, 2020 - ръководител
3. „Study and analysis of the possibilities for the utilization of the lithological varieties of the open pit mine "Maritsa-Iztok" 2019 г. – participant
4. Framework of project BG05M2OP001-2.016-0010 “Modernization, digitalization, and internationalization of education in the professional area "Architecture, construction, and geodesy" in the University of Mining and Geology "St. Ivan Rilski". – 2022.
5. Short-term specialization specified under the Science and Education for Smart Growth Operational Program (2014-2020) under project BG05M2OP001-2.016-0022, Modernization of higher education in sustainable use of natural resources in Bulgaria at University of Cordoba, Spain - 27.11.2023 - 29.12.2023