

PERSONAL INFORMATION

## Martin Ivanov Pushkarov



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✉ [m.pushkarov@mgu.bg](mailto:m.pushkarov@mgu.bg);

Gender Male | Date of birth 19/03/1992 | Nationality Bulgarian

EXPERIENCE

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- 11.11.2024 – until Assistant  
**„University of Mining and Geology “St. Ivan Rilski””, Sofia, 1700 “Prof. Boqn Kamenov” blv.**
- 01.02.2021 – 07.11.2024 Chief Assistant  
**„Technical college - Sofia“ to TU of Sofia , Sofia, 8 Kliment Ohridski Blvd.**  
▪ Conducting lectures and exercises on hydraulic drives, operation and machines.
- 01.10.2020 – 02.10.2022 Manager of investment projects, Mechanical part  
**„Minproekt“ EAD , Sofia, 14 Kliment Ohridski Blvd.**  
▪ Management of projects in the mechanical – constructive and technological part.
- 02.04.2020 – 01.10.2020 Mechanical engineer  
**„Minproekt“ EAD , Sofia, 14 Kliment Ohridski Blvd.**  
▪ Mechanical designer – structural and technological.
- 15.05.2019 – 12.02.2020 Mechanical engineer  
**„ET Multiengineering – Ivanka Angelova“, Sofia,**  
▪ Designing systems and facilities for the food and beverage industry.
- 14.01.2019 – 13.05.2019 Head of the Mechanical, Technological and Constructive Department  
**„Minproekt“ EAD , Sofia, 14 Kliment Ohridski Blvd.**  
▪ Head.
- 07.09.2015 – 14.01.2019 Mechanical engineer  
**„Minproekt“ EAD , Sofia, 14 Kliment Ohridski Blvd.**  
▪ Mechanical designer – structural and technological.

ОБРАЗОВАНИЕ И ОБУЧЕНИЕ

- 2017 – 2020 **Phd Student;**  
**Technical University of Sofia**, Faculty EMF, PhD program: „Fluid Mechanics“
  - Main subjects: Fluid Mechanics, Thermal Engineering, CHP and NPP, Wind energy systems, Renewable Energy sources, Water turbines, Volumetric hydraulic and pneumatics machine.
  
- 2017 – 2020 **Master – Open pit mineral development;**  
**University of mining and geology “ST. Ivan Rilski”**, Faculty MTF
  
- 2015 – 2017 **Master – Hydraulic and pneumatic equipment;**  
**Technical University of Sofia**, Faculty EMF,
  
- 2011 – 2015 **Bachelor – Hydraulic and pneumatic equipment;**  
**Technical University of Sofia**, Faculty EMF,
  
- 2006 – 2011 **Technical communications systems;**  
**Professional highschool of audio, video and telecommunication „A. S. POPOV” - Sofia**

PERSONAL SKILLS

Native language Bulgarian

Only language	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Participation in a conversation	Independent presentation	
English	A2	B1	A2	A2	A1

Communication skills Communication skills  
 ▪ Good communication skills, acquired on the job.

Organizational skills Organizational skills  
 ▪ leadership  
 ▪ good teamwork

Digital skills  
 ▪ Good command of Microsoft Office;  
 ▪ Good command of Autodesk Autocad;  
 ▪ Good command of SolidWorks;  
 ▪ Good command of Autodesk Inventor;  
 ▪ Good command of Autodesk Autocad Civil 3D;

**Appendix № 1 – Publication**

1. ***Modelling of water turbine for utilization of wave energy***; Velichkova, Rositsa; Simova, Iskra; Pushkarov, Martin; Denev, Ivan - *AIP Conference Proceedings* Volume 3125, Issue 17 August 2024 Article number 0200073rd International Conference on Key Enabling Technologies, KEYTECH 2023 Istanbul 28 August 2023 through 30 August 2023 Code 201515;
2. ***Construction and Testing of a Hydraulic Flow Meter in a Hydraulic System***; Pushkarov, Martin; Velichkova, Rositsa; Simova, Iskra; *AIP Conference Proceedings Open Access* Volume 3063, Issue 121 February 2024 Article number 0600032nd International Conference on Electronics, Engineering Physics, and Earth Science, EEPES 2023 Hybrid, Kavala 21 June 2023 through 23 June 2023 Code 197493;
3. ***A Sustainable Approach to Improve Soil Health. A Case Study for Western Bulgaria***; Velichkova, Rositsa; Simova, Iskra; Pushkarov, Martin; Stanilov, Aleksandar; *2024 33rd International Scientific Conference Electronics, ET 2024 - Proceedings* 2024 33rd International Scientific Conference Electronics, ET 2024 Sozopol 17 September 2024 through 19 September 2024 Code 203593;
4. ***Experimental Investigation of Air Turbine for Utilization of Wave Energy***; Pushkarov, Martin; Simova, Iskra; Velichkova, Rositsa; Ivanova, Violeta; Alexandrov, Angel; *Engineering Proceedings Open Access* Volume 70, Issue 12024 Article number 47;
5. ***Experimental Investigation of Production of Hydrochar from Straw***; Velichkova, Rositsa; Simova, Iskra; Pushkarov, Martin; Denev, Ivan; Markov, Detelin; Ivanov, Ivan; Angelova, Radostina; *2024 9th International Conference on Energy Efficiency and Agricultural Engineering, EE and AE 2024 - Proceedings* 2024 9th International Conference on Energy Efficiency and Agricultural Engineering, EE and AE 2024 Ruse 27 June 2024 through 29 June 2024 Code 201234;
6. ***Numerical Study of the Torque and Power of a Hydraulic Turbine with Oscillating Blades***; Velichkova, Rositsa; Iliev, Rosen; Pichurov, George; Markov, Detelin; Simova, Iskra; Pushkarov, Martin; Tsalov, Tsvetan; *Energies Open Access* Volume 16, Issue 18 September 2023 Article number 6744;
7. ***Experimental investigation of water turbine with oscillating blades***; Velichkova, Rositsa; Pushkarov, Martin; Simova, Iskra; Markov, Detelin; Denev, Ivan; Angelova, Radostina; *E3S Web of Conferences Open Access* Volume 40424 July 2023 Article number 010082023 International Conference on Electronics, Engineering Physics and Earth Science, EEPES 2023 Kavala 21 June 2023 through 23 June 2023 Code 191166;
8. ***Harnessing the Energy of Moving Water to Generate Electricity in Bulgaria***; Velichkova, Rositsa; Pushkarov, Martin; Simova, Iskra; Stanilov, Alexander; Ivanov, Vladislav; Pavlova, Yoana; Alexandrov, Angel; *Green Energy and Technology* Pages 129 – 164 2023;
9. ***Exploring the Potential of Straw Biochar for Environmentally Friendly Fertilizers***; Velichkova, Rositsa; Pushkarov, Martin; Angelova, Radostina A.; Sandov, Ognyan; Markov, Detelin; Simova, Iskra; Stankov, Peter; *Sustainability (Switzerland) Open Access* Volume 14, Issue 10 May-2 2022 Article number 6323;
10. ***Possibility for Using Biochar for Sustainable Agriculture: a Case Study in Bulgaria***; Velichkova, Rositsa; Zheng, Wandong; Markov, Detelin; Simova, Iskra; Ivanov, Ivan; Denev, Ivan; Pushkarov, Martin; *IOP Conference Series: Earth and Environmental Science Open Access* Volume 1006, Issue 11 April 2022 Article number 0120042021 12th International Conference on Environmental Science and Technology, ICEST 2021 Virtual, Online 24 September 2021 through 26 September 2021 Code 178312;
11. ***Modelling of a Test-rig for the River Energy Utilization***; Velichkova, Rositsa; Ivanov, Vladislav; Stanilov, Aleksandar; Pushkarov, Martin; Alexandrov, Angel; Simova, Iskra; 2022 International Conference on Communications, Information, Electronic and Energy Systems, CIEES 2022 - Proceedings 2022 3rd International

Conference on Communications, Information, Electronic and Energy Systems, CIEES 2022 Virtual, Online 24 November 2022 through 26 November 2022 Code 185703;

12. **Numerical Modelling of an Air Turbine for a Hybrid System for Sea Wave Energy Utilization;** Velichkova, Rositsa; Markov, Detelin; Simova, Iskra; Pushkarov, Martin; Angelova, Radostina; Denev, Ivan; 2022 *International Conference on Communications, Information, Electronic and Energy Systems, CIEES 2022 - Proceedings* 2022 3rd International Conference on Communications, Information, Electronic and Energy Systems, CIEES 2022 Virtual, Online 24 November 2022 through 26 November 2022 Code 185703;
13. **Determination of Operating Parameters of Hybrid System for Wave Energy Utilization;** Velichkova, Rositsa; Markov, Detelin; Simova, Iskra; Pushkarov, Martin; Angelova, Radostina; Denev, Ivan; *International Conference on Electrical, Computer, Communications and Mechatronics Engineering, ICECCME 2022* 2022 International Conference on Electrical, Computer, Communications and Mechatronics Engineering, ICECCME 2022 Male 16 November 2022 through 18 November 2022 Code 185686;
14. **Production of Biochar From Wheat Straw With Muffle Furnace and Flow Reactor;** Velichkova, Rositsa; Simova, Iskra; Pushkarov, Martin; Denev, Ivan; Markov, Detelin; Ivanov, Ivan; Angelova, Radostina; 2022 *8th International Conference on Energy Efficiency and Agricultural Engineering, EE and AE 2022 - Proceedings* 2022 8th International Conference on Energy Efficiency and Agricultural Engineering, EE and AE 2022 Ruse 30 June 2022 through 2 July 2022 Code 181234;
15. **Hydraulic power take off system for wave energy utilization;** Velichkova R.; Pushkarov M.; Angelova R.A.; Simova I.; Markov D.; Denev I.; Stankov P.; *IOP Conference Series: Materials Science and Engineering Open Access* Volume 1032, Issue 120 January 2021 Article number 0120302020 International Scientific Conference of Communications, Information, Electronic and Energy Systems, CIEES 2020 Borovets 26 November 2020 through 29 November 2020 Code 167136;
16. **Integrated System for Wave Energy Harvesting;** Velichkova, Rositsa; Stankov, Peter; Simova, Iskra; Markov, Detelin; Angelova, Radostina A.; Pushkarov, Martin; Denev, Ivan; *Proceedings of the 2021 6th International Symposium on Environment-Friendly Energies and Applications, EFEA 2021* 24 March 2021 Article number 9406234 Code 168555;
17. **Experimental investigation of acid mining water;** Pushkarov, Martin; Velichkova, Rositsa; *E3S Web of Conferences Open Access* Volume 207 18 November 2020 Article number 0201625th Scientific Conference on Power Engineering and Power Machines, PEPM 2020 Sozopol 19 September 2020 through 21 September 2020 Code 165402;
18. **Contamination of soils by heavy metals and their influence on the environment in Bulgaria;** D. Markov, I. Simova, T. Petrova, R. Velichkova; Pushkarov, Martin; Proc. of Int. Conf. on Innovations in Science and Education, pp. 982-987, ISBN ISBN 978-80-907722-1-2;
19. **Modeling of test-rig for purification of mining water;** R. Velichkova, I. Sashova; Pushkarov, Martin; *Scientific Journal, Mechanics, Transport, Communication*, issue 1, pp. IX7-IX11, ISBN ISSN 1312-3823;
20. **Experimental investigation of mining water;** R. Velichkova; M. Pushkarov; *E3S Web of Conferences* 207, 0 (2020) PEPM'2020, pp. 1-9 2016 <https://doi.org/10.1051/e3sconf/202020702016> ISSN:2267-1242;
21. **Bench for testing hydraulic components;** Pushkarov, Martin - 2023; Bulgarian edition for engineering design, pp. 45-52; , 2022, ISSN 1313-7530;
22. **LABORATORY TESTING OF A HYDRAULIC MOTOR OPERATING WITH CYCLIC LOADING;** PUSHKAROV, M. I., 2024; *Mechanics of Machines*, pp. 39-45;

23. ***CONSTRUCTING AND IMPLEMENTING 3D PRINTED ELEMENTS IN LABORATORY CONDITIONS;***  
Pushkarov, M. I, Stanilov, A. S, 2023; Bulgarian edition for engineering design, pp. 45-50;