

PERSONAL INFORMATION



Darko Bajić

 2A/III, Aerodromska, Podgorica, 81000, Montenegro
 +382 20 245 003  +382 69 052 879
 darko@ucg.ac.me
 <https://www.ucg.ac.me/radnik/140276-darko-bajic>

Sex Male | Date of birth 09/01/1967 | Nationality Montenegrin

WORK EXPERIENCE

- 16/10/2017 – today **Full professor**
University of Montenegro - Faculty of Mechanical Engineering, Podgorica (Montenegro)
- 29/03/2012 – 15/10/2017 **Associate professor**
University of Montenegro - Faculty of Mechanical Engineering, Podgorica (Montenegro)
- 27/03/2007 – 28/03/2012 **Assistant professor**
University of Montenegro - Faculty of Mechanical Engineering, Podgorica (Montenegro)
- 11/01/1993 – 26/03/2006 **Assistant**
University of Montenegro - Faculty of Mechanical Engineering, Podgorica (Montenegro)
- 06/05/1992 – 10/01/1993 **Mechanical Engineer**
Tobacco Company, Podgorica (Montenegro)
- 01/11/1991 – 05/05/1992 **Mechanical Engineer**
Electronic Industry "1.December", Pljevlja (Montenegro)

EDUCATION AND TRAINING

- 2000 - 09/2003 **Doctor of Technical Sciences**
University of Montenegro, Faculty of Metallurgy and Technology, Podgorica (Montenegro)
Department of Physical metallurgy
- 1992 – 07/1997 **Masters of Mechanical Engineering**
University of Montenegro, Faculty of Mechanical Engineering, Podgorica (Montenegro)
- 1986 – 10/1991 **Mechanical Engineer**
University of Montenegro, Faculty of Mechanical Engineering, Podgorica (Montenegro)
Department of Production engineering

PERSONAL SKILLS

Mother tongue(s) Montenegrin

Other language(s)

| | UNDERSTANDING | | SPEAKING | | WRITING |
|---------|---------------|---------|--------------------|-------------------|---------|
| | Listening | Reading | Spoken interaction | Spoken production | |
| Russian | C2 | C2 | C2 | C2 | C2 |
| English | B1 | B2 | B1 | B1 | B1 |

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user

Communication skills

As the manager of the several bilateral projects, I organized and coordinated project activities, performed administrative tasks and managed the available budget

Organisational / managerial skills

I gained an extraordinary experience in organization working as a vice-dean for teaching, a manager / responsible person for the realization of the studying program Mechanical Engineering - Department in Pljevlja (Montenegro).

Job-related skills

Good command of quality control process:

- President of the Commission for Quality Assurance and Improvement at the Faculty of Mechanical Engineering.
- Head of PhD and Masters at the Faculty of Mechanical Engineering (2011-2013).
- The President of the Doctoral Studies Commission at Faculty of Mechanical Engineering (2013-2018).

Digital skills

| SELF-ASSESSMENT | | | | |
|------------------------|-----------------|------------------|------------------|------------------|
| Information processing | Communication | Content creation | Safety | Problem solving |
| Proficient user | Proficient user | Proficient user | Independent user | Independent user |

Levels: Basic user - Independent user - Proficient user

Example:

- good command of Office suite (word processor, spread sheet, presentation software)
- good command of graphic software (AutoCAD, Inventor)
- working in software for numerical calculations (Matlab)

Other skills

Experimental measurements

- Measurement of deformations, residual stress.
- Material testing:
 - destructive testing (tensile, pressure, bending, HB, HV, HRB and HRC hardness, Scharpy impact strength)
 - nondestructive testing (penetrants, magnetic particles).

Work on devices:

- Devices for WIG (TIG), MMA, MIG/MAG and FSW welding.

ADDITIONAL INFORMATION

Publications
Presentations
Projects
Conferences
Seminars
Honours and awards
Memberships
References
Citations
Courses
Certifications

Monography:

1. Grubiša L., Bajić D., Vuherer T. (2018): Influence of Activating Flux on the Mechanical Properties of the Plasma Welded Joint of Austenitic Steel, Procedia Structural Integrity, Volume 13, pp. 430-437, Publishing Elsevier, Edited by A. Sedmak, Z. Radaković, M. Rakin, ISSN: 2452-3216.
2. Karabegović I., Pašić S., Bajić D., at all (2013): New technologies in welding processes - development and implementation, Faculty of Mechanical Engineering, University of "Džemal Bijedić", Mostar (Bosnia and Herzegovina), ISBN 978-9958-058-00-4, COBISS.BH-ID 20775942.
3. Milosavljević A., Petronic S3., Polić-Radovanović S., Bajić D., Dinulović M., Bekrić D. (2012): Welding and surface treatment of heat resistant materials, Faculty of Mechanical Engineering, University of Belgrade, Belgrade (Serbia), ISBN 978-86-7083-768-3, COBISS.SR-ID 195568652.

Papers (Publish in International Journals from the SCI/SCIE, SCOPUS):

1. Ćulačić S., Bajić D., Maneski T. (2025) Formation and development of residual stresses in the pipeline branch of a hydro-power plant, Journal of Mechanical Science and Technology, vol. 39, No. 5, pp. 2599-2607, doi: 10.1007/s12206-025-0419-7.
2. Ćulačić S., Bajić D., Maneski T. (2024) Experimental research of stress state and residual stresses of the hydropower pipeline branch model, International Journal of Pressure Vessels and Piping, vol. 207, 105089, doi: 10.1016/j.ijpvp.2023.105089.
3. Manjgo M., Vuherer T., Bajić D., Buržić Z. (2023) Assessment of the remaining life construction in exploitation, Procedia Structural Integrity, vol. 48, pp. 155-160, Publishing Elsevier, Edited by: Aleksandar Sedmak, Simon Sedmak, Branislav Djordjević, doi: 10.1016/j.prostr.2023.07.142.
4. Bajić D. (2023) Toughness Properties of a 50-Year-Old Pipeline Material, Sustainability, 15, 5143, doi: 10.3390/su15065143.
5. Mrdak M., Lačnjevac Č., Bajić D. (2023) Characterization of zirconium oxidecoating stabilized with cerium and yttrium oxide deposited on the bonding coating nickel chromium aluminum cobalt yttrium oxide, Materials Protection, vol. 64, №.1, pp. 5-12, ISSN 0351-9465, doi: 10.5937/zasmat2301005M.
6. Veljić D., Radović N., Rakin M., Sedmak A., Međo B., Mrdak M., Bajić D. (2023) Influence of Temperature and Plastic Deformation on AA2024 T3 Friction Stir Welding Joint Microstructure, THERMAL SCIENCE: ISSN 2334 - 7163 (ISSN 0354 - 9836 (printed edition)), Vol. 27, No. 1A, pp. 311-320, doi: 10.2298/TSCI220621162V.
7. Veljić D., Rakin M., Sedmak A., Radović N., Međo B., Mrdak M., Bajić D. (2022) Thermo-Mechanical Analysis of Linear Welding Stage in Friction Stir Welding: Influence of Welding Parameters, THERMAL SCIENCE: ISSN 2334-7163 (ISSN 0354-9836 (printed edition)), Vol.26, No. 3A, pp. 2125-2134, doi: 10.2298/TSCI210216186V.
8. Mrdak M., Lačnjevac Č., Rakin M., Janačković Đ., Veljić D., Bajić D. (2021) Characterisation of biocompatible layers of ZrO₂8%Y₂O used in combination with other ceramics to modify the surface of implants, Journal Materials Protection, vol. 62, №.4, pp. 262-268, ISSN 0351-9465, doi: 10.5937/zasmat2104262M.
9. Mumović M., Šibalić N., Bajić D., Vukčević M. (2021) Numerical analysis of welding sequence influencing the quality of an AA6060-T4 alloy lap joint, Structural Integrity and Life, ISSN 1451-3749, Vol.21, No.2, pp. 123–130.
10. Mrdak M., Lačnjevac Č., Rakin M., Janačković Đ., Veljić D., Bajić D. (2021) Characterization of deposited plasma spray NiCrAlCoY₂O₃ coating layers on AlMg1 alloy substrates, Journal Materials Protection, vol. 62, №.1, pp. 34-40, ISSN 0351-9465, doi: 10.5937/zasmat2101034M.
11. Levchenko O., Bezushko O., Maidanchuk T., Lukianenko A., Goncharova O., Bajic D. and Veljic D. (2021) Effect of liquid glass type on hygienic characteristics of coated electrodes for arc welding of tin bronzes, E3S Web of Conferences: eISSN: 2267-1242, Volume, 280, 09018, doi: 10.1051/e3sconf/202128009018.
12. Mrdak M., Bajić D., Veljić D., Rakin M. (2021) Characterisation of Biomedical Titanium Layers deposited by a Vacuum Plasma Spray Process, Materials and Technology: ISSN 1580-2949, Vol. 55. No.2, pp. 231-235, doi: 10.17222/mit.2020.135.
13. Lukinenko A.O., Motrunich S.I., Bajić D., Kuleshov V.A., Poklialtskyi A.G., Labur T.M. (2021) Noise Level Assessment and Mechanical Properties of Welded Joints of Aluminium Alloys of the Al-Cu-Li System in FSW and TIG Welding, FM Transactions: ISSN 1451-2092, Vol. 49, No.1, pp. 220-224. ISSN 1451-2092.

14. Mrdak M., Bajić D., Veljić D., Rakin M. (2020) *Mechanical and structural characteristics of atmospheric plasma sprayed multifunctional oxide TiO₂ coating*, Materials and Technology: ISSN 1580-2949, Vol. 54. No.6, pp. 807-812. ISSN 1580-2949.
15. Bajić D., Mrdak M., Bajić N., Veljić D., Rakin M., Radosavljević Z. (2020) Development of Coated Electrodes with Solid Wire and Flux-Cored Alloyed Wire for Microalloyed Steel Welding, Materials, Vol. 13, No.9, 2152, ISSN 1996-1944.
16. Savitsky O.M., Savitsky M.M., Bajić D. (2020) Specificities of application of activating fluxes in electrical welding in protective atmosphere, FM Transactions, 48(3): 576-580. ISSN 1451-2092.
17. Ćulačić S., Maneski T., Bajić D. (2020) Stress Analysis of a Pipeline as a Hydropower Plant Structural Element, Strojniški vestnik - Journal of Mechanical Engineering, 66(1): 51-60. ISSN 0039-2480.
18. Lukyanenko A.O., Labur T.M., Poklyatsky A.G., Motrunich S., Bajic D. (2019) Investigation of fatigue strength and norms of emission of harmful substances in the air during MIG and TIG welding of 1460 aluminum-lithium alloy, FM Transactions, 47(3): 608-612. ISSN 1451-2092.
19. Savytsky O.M., Savytsky M.M., Bajić R.D. (2017) Efficiency of the Application of Activating Fluxes in Shielded arc Welding. Technical Gazette, 24 (4): 975-980. ISSN 1330-3651.
20. Lukyanenko A.O., Labur T.M., Poklyatsky A.G., Kuleshov A.G., Baich D. (2017) Sanitary-Hygienic characteristic of Nonconsumable Electrode Argon-Arc Welding of 1201 and 1460 Aluminium Alloys, The Paton Welding Journal: ISSN 0957-798X, No.10, pp. 43-46. doi: 10.15407/twj2017.10.07.
21. Maneski T., Bajić D., Momčilović N., Milošević Mitić V., Balać M. (2018) Determination of Internal Pressure Value Causing Pipe Branch Model to Plastically Deform, FM Transactions, 46(2): 218-223. ISSN 1451-2092.
22. Perović M., Baloš S., Kozak D., Bajić D., Vuherer T. (2017) Influence of Kinematic Factors of Friction Stir Welding on the Characteristics of Welded Joints of Forged Plates Made of EN AW 7049 A Aluminium Alloy. Technical Gazette, 24 (3): 723-728. ISSN 1330-3651.
23. Bajić D., Momčilović N., Maneski T., Balać M., Kozak D., Ćulačić S. (2017) Numerical and experimental determination of stress concentration factor for a pipe branch model. Technical Gazette, 24 (3): 687-692. ISSN 1330-3651.
24. Savytsky O., Savytsky M., Shkrabalyuk Y., Vuherer T. and Bajic D., (2016.) The Influence of Electric Arc Activation on the Speed of Heating and the Structure of Metal in Welds, THERMAL SCIENCE: ISSN 2334-7163 (ISSN 0354-9836 (printed edition)), Vol. 20, No.1, pp. 239-246. doi: 10.2298/TSCI140530125S.
25. Bajić N., Bajić D., Veljić D., Rakin M., Janjušević Z. (2014) The advantages of using activated flux-cored wire compared to solid wire in the MAG welding process from the aspect of metallurgical characteristics. Metalurgija, 53 (3): 361-364. ISSN 0543-5846.
26. Savytsky O., Savytsky M., Bajic D., Shkrabaly Y. (2014) Influence of the impurities on the depth of penetration with carbon steel welding. Metalurgija, 54 (2): 167-170. ISSN 0543-5846.
27. Veljić D., Sedmak A., Rakin M., Bajić N., Međo B., Bajić D. & Grabulov V. (2013) Experimental and numerical thermo-mechanical analysis of friction stir welding of high-strength aluminium alloy. Thermal Science, 18 (Supplement 1), pp. S29-S38. ISSN 2334-7163 (ISSN 0354-9836 printed edition).
28. Bajić N., Bajić D., Veljić D., Rakin M. (2013) Advantage of use of activated flux-cored wire instead of solid wire with the MAG welding process from the mechanical properties aspect. Metalurgija, 52 (4): 453-456. ISSN 0543-5846.
29. Bajic D., Kuzmenko G.V., Samardzic I. (2013) Welding of rails with new technology of arc welding. Metalurgija, 52 (3): 399-402. ISSN 0543-5846.
30. Milosavljevic A., Petronic S., Polic-Radovanovic S., Babic J., Bajic D. (2012) The Influence of the Heat-Treatment regime on a fracture surface of nickel-based superalloys. Materials and Technology, 46 (4): 411–417. ISSN 1580-2949.
31. Veljić D., Perović M., Sedmak A., Rakin M., Trifunović M., Bajić N. & Bajić D. (2012) A coupled thermo-mechanical model of Friction Stir Welding. Thermal Science, 16 (2): 527-534. ISSN 2334-7163 (ISSN 0354-9836 printed edition).
32. Samardžić I., Bajić D., Klarić Š. (2010) Influence of the activiting flux on weld joint properties at arc stud welding process, Metalurgija, 49 (4): 325-329. ISSN 0543-5846.

33. Bajic, D.R., Melnichuk, G.M., Lusan, A.F., Savitsky, M.M. (2002) Method and Conditions of Argon Arc Welding of Steels With Activating Fluxes, The Paton Welding Journa (Avtomicheskaya Svarka), №10: 31 - 34, ISSN 0957 - 798X.
34. Bajic, D.R., Savitsky, M.M., Melnichuk, G.M., Lusan, A.F. (2002) A-TIG Welding of Structural Steels for Power Engineering Applications, The Paton Welding Journal (Avtomicheskaya Svarka), №9: 30 - 34, ISSN 0957 - 798X.

Papers (Publish in International Journals - selection papers):

1. Vuherer T., Pal M., Bajić D., Manjgo M., Manjgo Mirza, Samardžić I., Kondić Ž. (2024) Comparison of ATIG welding powders and their influence on mechanical properties, Welding & Welded Structures (Zavarivanje i zavarene konstrukcije), vol. 69, №3, str. 99-110, ISSN 0354 - 7965, doi: 10.5937/zzk2403099V.
2. Savitsky O.M., Savitsky M.M., Bajić D., Vashchenko V.N. (2023) Thermal barrier in welded joints of carbon steels, Welding & Welded Structures (Zavarivanje i zavarene konstrukcije), vol. 68, №2, str. 51-60, ISSN 0354-7965, doi: 10.5937/zzk2302051S.
3. Savitsky O.M., Savitsky M.M., Bajić D. (2022) Influence of Chemical Composition on Structural Transformations in Carbon Steels and their Welding Joints, Welding & Welded Structures (Zavarivanje i zavarene konstrukcije), vol. 67, №4, str. 147-155, ISSN 0354-7965, doi: 10.5937/zzk2204147S.
4. Šibalić N., Bajić D., Mumović M. (2021) Study of Welding of Butt and Corner Joints Using the FSW Method, Welding & Welded Structures (Zavarivanje i zavarene konstrukcije), vol. 67, №4, str. 157-165, ISSN 0354-7965, doi: 10.5937/zzk2204157Q.
5. Mrdak M., Lačnjevac Č., Rakin M., Janaćković Đ., Veljić D., Bajić D. (2020) The mechanical and microstructural properties of VPS - Ti porous coating deposited on titanium alloy substrates for osseointegration, Journal Materials Protection, vol. 61, no. 1, pp. 52-59, ISSN 0351-9465, doi: 10.5937/zasmat2001052M.
6. Perović M., Vuherer T., Bajić D., Gerić K., Baloš S., Rakin M. (2018) Fracture toughness of base and weld metal of aluminum alloy EN AW 7049A T652 FSW joint, Welding & Welded Structures (Zavarivanje i zavarene konstrukcije), vol. 63, br. 4, str. 159-167, ISSN 0354-7965.
7. Bajić D., Ćulafić S. (2017) Comparison of numerical and experimental results of stress-deformation state in a pipeline branch, Machines, Technologies, Materials, XI (2), pages 59-62.
8. Vuherer T., Zrilić M., Samardžić I., Bajić D., Manjgo M., (2016) Suitability of residual stress measurement methods in practice. Varilna tehnika, 64 (2): 9-14.
9. Despotović B., Marsenić T., Bajić D., Vuherer T., Samardžić I. (2014) Weldability of modern 9-12 Cr martensitic steels for steam boiler components, Welding&Welded Structures, 58 (1), pages 5-14.

Papers (Publish in International Conference – selection papers):

1. Savitsky O.A., Savitsky M.M., Bajić D. (2024) The impact of heating degree during arc welding on the structure formation in the heat affected zone of welding joints in carbon steels, 33. Savetovanje sa međunarodnim učešćem ZAVARIVANJE 2024, p.S2.2, 2-5. oktobar 2024, Hotel Vrnjačke Terme, Vrnjačka Banja, Srbija. Doi: 10.46793/Zavarivanje24.S2.2S
2. Manjgo M., Vuherer T., Bajić D., Manjgo M. (2021) Analiza zaostalih napona u zavarenom spoju čelika visoke čvrstoće, 11. International Scientific-Professional Conference SBW 2021, ENGINEERING TECHNOLOGIES IN MANUFACTURING OF WELDED CONSTRUCTIONS AND PRODUCTS, SBW 2021, 03 - 05.11.2021. Slavonski Brod, Croatia.
3. Ćulafić S., Bajić D. (2021) Analytical and numerical analysis of shafts' stress and strain states of the hydro-power unit, XVIII INTERNATIONAL SCIENTIFIC CONGRESS, MACHINES. TECHNOLOGIES. MATERIALS, 08-11.09.2021, Varna, Bulgaria.
4. Marić M., Bajić D., Vuherer T. (2021) Welding Duplex Stainless Steel with MAG Welding Procedure, ASR International Conference "WELDING 2021", 22-23 April, 2021, Reșița, Romania.

5. Manjgo M., Vuherer T., Bajić D., Manjgo M. (2021) Residual stresses in MAG welded joints of S960QL steel, ASR International Conference "WELDING 2021", 22-23 April, 2021, Reșița, Romania.
6. Ma Q.P., Tian G.Y., Gao B., Bajic D., Culafic S., Liu J., Wu T., Zeng K. Liu Z., Liu Q., Yang C., Liu D. (2020) *Comparison on pipeline welds and integrity through different electromagnetic NDT techniques*, I2MTC2020 IEEE International Instrumentation & Measurement Technology Conference, TECHNOLOGY ADVANCEMENT THROUGH STRONG FOUNDATION AND PERSISTENT INNOVATION, May 25-28, 2020, Dubrovnik, Croatia.
7. Vuherer T., Samardžić I., Stoić A., Bajić D. (2018) Challenges of application of high-strength steel in welded constructions, Plenary lectures, 13th International Symposium of Croatian Metallurgical Society, SHMD '2018. MATERIALS AND METALLURGY, June 24 – 29, 2018., Šibenik (Croatia).
8. Savitsky A.M., Savitsky M.M., Bajić D., Vashchenko V.N., Shkrabalyuk Y.M. (2018) Characteristics of Structures Within Welding Joints of Hardened Steel Depending on the Weld Thermal Cycle, The 4th IIW South-East European Welding Congress, October 10 – 13, 2018., Belgrade (Serbia).
9. Perović M., Vuherer T., Bajić D., Gerić K., Baloš S., Rakin M. (2018) Characteristics of Structures Within Welding Joints of Hardened Steel Depending on the Weld Thermal Cycle, The 4th IIW South-East European Welding Congress, October 10 – 13, 2018., Belgrade (Serbia).
10. Bajić D., Ćulafić S. (2017) Comparison of numerical and experimental results of stress-deformation state in a pipeline branch. XIVth International Congress MACHINES.TECHNOLOGIES.MATERIALS'17, Borovetz (Bulgaria), 15.03. – 18.03.2017, pp. 29-32.
11. Savitsky O.M., Savitsky M.M., Vashchenko V.M., Bajić R.D. (2015) Improvement of welded pipelines. 2th International Conference, MODERN METHODS OF TESTING AND EVALUATION IN SCIENCE, Belgrade (Serbia)m, 14.12.2015, pages 36-42.
12. Vuherer T., Dunder M., Bajić D., Samardžić I. (2015) Influence of post weld heat treatment on the HAZ impact toughness on P91 steel. 8. International Counseling SB 2015, „Design, Production and Service of Welded Constructions and products“, Slavonski Brod, (Croatia), 21.-23. 10. 2015, pages 251-259.
13. Sedmak A., Petrovski B., Gubeljak N., Legat J., Samardžić I., Kozak D., Kuzmanović S., Adžiev T., Adžiev G., Ćulafić V., Bajić D., Read D. (2015) Weldment fracture mechanics. The 3rd IIW South-East European Welding Congress, "Welding and joining technologies for a sustainable development and environment", Timisoara (Romania), June 03-05, 2015, pages 49-60.
14. Bajić D., Vuherer T., Đorđević M., Ćulafić S. (2014) The application of activating fluxes in the manufacture of medium pressure pipelines. Programs and The Book of Abstracts. 22nd International Conference on Materials and Technology, Portorož (Slovenia), 20–22. October, pages 40/263.

Projects (International/national):

1. Inductance-to-Digital Converter-Based Multi-Parameter Eddy Current Testing Sensors for Pipeline Displacement and Integrity Evaluation: A Collaborative Research Study, International Project, Chongqing University of Technology, Chongqing (China), 2025. - 2026.
2. Razvoj prototipa uređaja za terensko ispitivanje anker vijaka, Fond za inovacije Crne Gore, Program za provjeru inovativnog koncepta POC-013-24, 01.02.2025. – 01.02.2026.
3. ERASMUS-EDU-2023-CB-VET; ERASMUS2027; HINTS project: High Innovative VET for green and digital Transformations, European Comission, 2024-2025
4. Ostvarenje integrirane ATIG zavarnih spojeva na austenitno-feritnim duplex čellicima zavarenih sa aktivnim topiteljem (Achieving the integrity of ATIG welds on austenitic-ferritic duplex steels welded with an active flux), International Project, University of Maribor, Faculty of Mechanical Engineering, Maribor (Slovenia), 2023 - 2024.

5. Metodologija procjene preostalog vijeka konstrukcije u eksploraciji (Methodology for estimating the remaining life of the structure in operation), Federal Ministry of Education and Science of BiH, August 2021., University Džemal Bijedić Mostar, Faculty of Mechanical Engineering in Mostar, Bosnia and Herzegovina.
6. Composites for All advanced materials for a modern, improved, and sustainable society, CEI – Central European Initiative, Know-how Exchange Programme (KEP), March 2021. – October 2022., University of Montenegro, Faculty of Mechanical Engineering, University of Bologna, Italy at all.
7. ERASMUS+ project, Sustainable University - Enterprise Cooperation for Improving Graduate Employability (Održivi univerzitet - Saradnja preduzeća u cilju poboljšanja zapošljavanja svršenih studenata), 01.01.2021.-31.12.2023., International BURCH University, Bosnia and Herzegovina.
8. Damjanović M., Bajić D. and others (2019) Hoisting and Mining Machinery Context Specific Adaptive Risk Prevention Expert System (HAMRISK), EUREKA Programme
9. Bajić D., Tian G.Y. (2019) Integrated Eddy Current Sensing system for pipeline integrity and material characterisation,
10. Bajić D., Vuherer T. (2016) Arc welding of steel using activating flux, International bilateral project, Montenegro - Republic of Slovenia.
11. Bajić D., Gliha V. (2012) Fatigue behaviour of single pass joints made by ATIG welding, International bilateral project Montenegro - Republic of Slovenia.
12. Bajić D., Pašić S. (2012) Development and application of intelligent systems in welding processes, International bilateral project Montenegro - Bosnia and Herzegovina.

New technical solution:

1. Bajić N., Veljić D., Petrović A., Rakin M., Mrdak M. i Bajić D. (2021) High-alloy austenitic-ferrite base electrode for welding stainless Cr-Ni steels IHIS INOX B 19/9 Nb, University of Belgrade, Faculty of Mechanical Engineering, No.1683/3, 25.12.2020.
2. Veljić D., Bajić N., Petrović A., Rakin M., Bajić D. i Milošević N. (2021) Coated electrode for cutting and notching IHIS ŠŽ-2B, University of Belgrade, Faculty of Mechanical Engineering, No.1684/3, 25.12.2020.
3. Veljić D., Bajić N., Petrović A., Rakin M., Mrdak M., Bajić D. i Bakić G. (2021) Coated special electrode IHIS 250 SL alloyed with Si, C and N intended for hot welding and surfacing of cast iron, University of Belgrade, Faculty of Mechanical Engineering, No.1962/3, 10.12.2021.
4. Veljić D., Bajić N., Petrović A., Rakin M., Mrdak M., Bajić D. i Bakić G. (2021) Coated basic electrode IHIS E440 alloyed with Cr and Mn, hardness 350-460HB, intended for surfacing of broken machine parts exposed to wear and tear), University of Belgrade, Faculty of Mechanical Engineering, No.1963/3, 10.12.2021.

Projects (Professional experience - selection):

1. Intervention (rehabilitation) on the metal structure of the transshipment bridge "B" type CERETTI&TANFANI with a load capacity of 12 tons, "Luka Bar" AD Bar, June-July 2023.
2. Expert crack control services at the lower leading hoop of the conduction apparatus for the needs of Hydro-power plant "Piva", Montenegro Elektroprivreda Crne Gore, August 2019
3. Making of welding technology when constructing a new pedestrian bridge at the site of the existing bridge Potkrajci – Njegnjevo, Intermost doo – Podgorica, August 2018.
4. Examining the state of materials a pipe branches of №3 pipe in Hydro-power plant "Perućica", Montenegro Elektroprivreda Crne Gore, August 2018.
5. Structural improvements of the beam support the hand chain hoists at the location of valve chambers "Krupac" in order to increase its allowed maximum load of 100 kN, in Hydro-power plant "Perućica", Montenegro Elektroprivreda Crne Gore, April 2017. Project Manager.
6. Development of repair welding technology supply pipelines aggregates A1, A2 and A3 in Hydro-power plant "Piva", Montenegro Elektroprivreda Crne Gore, April 2017. Project Manager.

7. Development of welding technology and production of pipelines of the cooling water system - Phase 5 in Hydro-power plant "Piva", Montenegro Elektroprivreda Crne Gore, September 2017. Project team member.
8. Examining the state of materials a pipe branches №3 in Hydro-power plant "Perućica", Montenegro Elektroprivreda Crne Gore, August 2016. Project Manager.
9. On-line for continual monitoring of metal pipe №3 in Hydro-power plant "Perućica", Montenegro Elektroprivreda Crne Gore, August 2011. Project Manager.
10. Examining the state of materials a pipe branches №3 in Hydro-power plant "Perućica", Montenegro Elektroprivreda Crne Gore, August 2014. Project Manager.
11. Examining the state of material a pipe branches №3 in Hydro-power plant "Perućica", Montenegro Elektroprivreda Crne Gore, August 2013. Project Manager.
12. On-line for continual monitoring of metal pipe №3 in Hydro-power plant "Perućica", Montenegro Elektroprivreda Crne Gore, September 2012. – February 2013. Project Manager.
13. Examination a pipe branch A6 3th pipeline Hydropower plant "Perućica", Montenegro Elektroprivreda Crne Gore, August 2012. Project Manager.
14. Examination a pipe branch A6 3th pipeline Hydropower plant "Perućica", Montenegro Elektroprivreda Crne Gore, August 2011. Project Manager.

University books

1. Bajić D. (2024) Mašinski materijali (II dio) (Mechanical materials - Part II), University of Montenegro, Podgorica, 261 pages, ISBN 978-86-7664-264-9.
2. Bajić D. (2014) Welding procedures (Postupci zavarivanja), Faculty of Mechanical Engineering, University of Montenegro, Podgorica, 326 pages, ISBN 978-9940-527-18-1.
3. Bajić D. (2011) Pressure vessels and pipelines (Posude pod pritiskom i cjevovodi), Faculty of Mechanical Engineering, University of Montenegro, Podgorica, 292 pages, ISBN 978-9940-527-18-1.

Editors of the book:

1. Bajić D., Tonković Z. and Aliabadi F. (2016) Advances in Fracture and Damage Mechanics XIV. Selected, peer reviewed papers from the 14th International Conference on Fracture and Damage Mechanics (FDM 2015), Budva (Montenegro), September 21-23 2015, Vol. 665, Pages 310. ISBN-13: 978-3-03835-541-0. Publisher in Materials Science & Engineering, Scientific.Net.

Other relevant information:

Review works in journals found in international databases

1. THERMAL SCIENCE, ISSN 0354 - 9836
2. COMPOSITES PART B, ISSN 13598368
3. ENGINEERING FAILURE ANALYSIS, ISSN 1350 - 6307
4. METALLURGY, ISSN 0543 - 5846
5. TECHNICAL GAZETE, ISSN 1330 - 3651
6. CHEMIKAL INDUSTRY, ISSN 2217 - 7426
7. THEORETICAL AND APPLIED FRACTURE MECHANICS, ISSN: 0167 - 8442
8. MATERIALS AND TECHNOLOGY, ISSN 1580 - 2949
9. IEEE ACCESS, ISSN 2169 - 3536
10. MATERIALS, ISSN 1996-1944
11. ADVANCES IN INDUSTRIAL AND MANUFACTURING ENGINEERING, ISSN: 2666-9129
12. SCIENTIA IRANICA, ISSN 1026-3098
13. JOURNAL OF MATERIALS SCIENCE, ISSN 0022-2461
14. CRYSTALS, ISSN 2073-4352
15. ENGINEERING REVIEW, ISSN 1330-9587
16. SYMMETRY, ISSN 2073-8994
17. AEROSPACE, ISSN: 2226-4310
18. JOURNAL OF MECHANICAL ENGINEERING SCIENCE, ISSN: 20412983
19. FAMENA, ISSN: 1333-1124

20. ADVANCES IN MATERIALS AND PROCESSING TECHNOLOGIES, ISSN: 2374-0698
21. MATERIALS RESEARCH EXPRESS, ISSN: 20531591
22. INTERNATIONAL JOURNAL OF PRESSURE VESSELS AND PIPING, ISSN: 0308-0161

Membership in Scientific and Professional Organization

1. President of Montenegro Welding Society,
2. President of the Technical Committee ISME / TK 008 - Pressure Equipment, within the Institute for Standards of Montenegro since 2013.
3. Engineering chamber of Montenegro
4. Member of Serbian Society for Advancement of Welding
5. Member of Society for Structural Integrity and Life „Prof. dr Stojan Sedmak”

Winner of recognition for achieved results and contribution to the development of the University of Montenegro for the year 2023.

Member of Council for Scientific Research, Ministry of Science and Technological Development, Montenegro 22/02/2022 – 22/02/2024.

Member of the Sector Commission for Engineering, Production Technologies (Mechanical and Metal Processing, Electrical Engineering and Automation, etc.) of the Council for Qualifications, Ministry of Education, Science and Innovation of the Government of Montenegro, April 22, 2024. years.

Expert Agency for Control and /Quality Assurance of Higher Education in Montenegro for the scientific field of Technical and Technological Science.

Expert National Entity for Accreditation and Quality Assurance in Higher Education (NEAQA) in Serbia for the scientific field of Technical and Technological Science.

Expert (reviewer) Agency for Higher Education of the Republic of Srpska for the scientific field of Engineering and Technological Science.

Doctoral and postdoctoral study stay (scientist) at the E.O. Paton Institute for Electro-Welding, National Academy of Sciences Ukraine, Kiev, 2001-2003, 2003-2010 (20 months). I worked on a theoretical-experimental investigation of application modern arc welding technics.

Reviewer Journals with SCI/SCIE, SCOPUS list.

Member of the scientific committee of a many numbers of international conferences

Profile on Google Scholar: https://scholar.google.ro/citations?user=_eqQ-PUAAAAJ&hl=en