MEMORIU ȘTIINȚIFIC

Subsemnatul MUTAȘCU DANIEL PAUL , student doctorand în cadrul IOSUD-UPT cu numărul matricol 2916 din 2018, în domeniul de studii universitare de doctorat INGINERIA MATERIALELOR, la conducătorul de doctorat prof.univ.dr.ing. MITELEA ION / BORDEAȘU ILARE, autor al tezei de doctorat cu titlul Microstructura și rezistența la eroziune prin cavitație a unor straturi depuse prin sudare pe oțeluri inoxidabile Duplex, declar următoarele activități realizate in cadrul stagiului doctoral:

A. Lista de lucrări științifice

1. I. Mitelea, I. Bordeașu, D. Mutașcu, D. Buzdugan, C. M. Crăciunescu, "Cavitation resistance performance of Stellite 21 coatings TIG deposited on to Duplex stainless steel X2CrNiMoN22-5-3", Materials Testing, vol. 64, no. 7, pp. 967–976, July 2022 (DOI: 10.1515/mt-2021-2169);
2. D. Mutașcu, O. Karancsi, I. Mitelea, C. M. Crăciunescu, D. Buzdugan, "Pulsed TIG Cladding of a Highly Carbon-, Chromium-, Molybdenum-, Niobium-, Tungsten- and Vanadium-Alloyed Flux-Cored Wire Electrode on Duplex Stainless Steel X2CrNiMoN 22-5-3", J. Materials, vol. 16, no. 13, July 2023 (DOI:10.3390/ma16134557);
3. I. Mitelea, D. Mutașcu, O. Karancsi, C. M. Crăciunescu, D. Buzdugan, I. D. Uțu, "Microstructural Investigations of Weld Deposits from Manganese Austenitic Alloy on X2CrNiMoN22-5-3 Duplex Stainless Steel", Applied Sciences-Basel, vol. 14, no. 9, May 2024 (DOI: 10.3390/app14093751);
4. I. Mitelea, D. Mutașcu, I. D. Uțu, C. M. Crăciunescu, I. Bordeașu, "Cavitation Erosion of the Austenitic Manganese Layers Deposited by Pulsed Current Electric Arc Welding on Duplex Stainless Steel Substrates" J. Crystals, vol. 14, no. 4, May 2024 (DOI: 10.3390/cryst14040315);
5. I. Mitelea, I. Bordeașu, D. Mutașcu, C. M. Crăciunescu, I. D. Uțu, "Surface Integrity of Austenitic Manganese Alloys Hard Layers after Cavitation Erosion", Lubricants, vol 12, no. 10, 330, September 2024 (DOI: 10.3390/lubricants12100330);
6. D. Mutașcu, I. Mitelea, I. Bordeașu, D. Buzdugan, F. Franț, "Cavitation resistant layers from Stellite alloy deposited by TIG welding on Duplex stainless steel" 28th International Conference on metallurgy and materials, pp. 776 – 780, June 2020 (WOS:000539487400125);
7. F. Franț, I. Mitelea, I. Bordeașu, C. Codrean, D. Mutașcu, "Effect of Some Heat Treatments on Cavitaion Erosion Resistance of the EN AW – 6082 Alloy", 28th International Conference on metallurgy and materials, pp.663-667, June 2020 (WOS:000539487400108);
8. D. Mutașcu, I. Mitelea, I. Bordeașu, M. Burcă, I. D. Uțu, "Hardfacing of X2CrNiMoN22-5-3 Duplex stainless steel with Stellite alloy using pulsed TIG welding process", Materials today - proceedings, vol. 45, no. 5, pp. 4112-4116, June 2021 (Doi: 10.1016/j.matpr.2020.11.662);
9. D. Mutașcu, I. Mitelea, I. Bordeașu, I. D. Uțu, C. M. Crăciunescu, "Cavitation resistant layers from Corodur 65 alloy deposited by tig welding on duplex stainless",30th Anniversary International Conference on Metallurgy and Materials, Conference Proceedings, pp. 508–513, September 2021 (DOI: 10.37904/metal.2021.4135);

B. Participări la conferințe/workshop-uri

1. 28th International Conference on Metallurgy and Materials , Brno, Czech Republic, May 22nd - 24th, 2019;
2. 8th International Conference on Advanced Materials and Structures, Timișoara, România, June 17nd - 20th, 2020;
3. 9th International Conference on Advanced Materials and Structures, Timișoara, România, June 16nd - 18th, 2022.