

Listă de lucrări

I. Cărți și capitole în cărți de specialitate

1. Ardelean M., Ardelean E., **Socalici A.**, Hepuț T., *Tehnologia materialelor*, Politehnica Timișoara, 978-606-554-979-1, 483 pag.
2. **Socalici A.**, *Baza energetică și de materii prime în industrie*, Politehnica Timișoara, 978-606-554-888-6, 2014, 308 pag.
3. **Socalici A.**, Hepuț T., Drăgoi F., *Contribuții privind influența gazelor asupra calității produselor din oțel*, Politehnica Timișoara, ISBN 978-606-554-500-7, 2012, 120 pag.
4. Hepuț T., **Socalici A.**, Ardelean E., Ardelean M., Constantin N., Buzduga M., *Valorificarea deșeurilor feroase mărunte și pulverulente*, Politehnica Timișoara, ISBN 978-606-554-245-7, 2011, 340 pag.
5. **Socalici A.**, Ardelean E., Ardelean M., Hepuț T., Josan A., *Turnarea și solidificarea oțelului*, CERMI Iași, ISBN 978-973-667-303-0, 2007, 350 pag.
6. Ardelean E., Ardelean M., **Socalici A.**, Hepuț T., Abrudean C., *Optimizarea proceselor de turnare continuă a oțelului*, CERMI Iași, ISBN 978-973-667-299-6, 2007, 200 pag.
7. Nica G., **Socalici A.**, Ardelean E., Hepuț T., *Tehnologii pentru îmbunătățirea calității oțelului*, Mirton Timișoara, ISBN 973-661-138-8, 2003, 160 pag.
8. Hepuț T., Nica G., **Socalici A.**, Ardelean E., *Defectele lingourilor și semifabricatelor din oțel*, Politehnica Timișoara, ISBN 973-8247-52-8, 2001, 174 pag.

II. Material didactic/Lucrări didactice

1. **Socalici A.**, *Structura lingourilor de oțel*, Mirton Timișoara, ISBN 973-661-543-X, 2004, 150 pag.
2. Hepuț T., Nica G., **Socalici A.**, Ardelean E., Maksay S., *Turnarea și solidificarea oțelului sub formă de lingouri*, Destin Deva, ISBN 973-9105-30-0, 2000, 122 pag.
3. **Socalici A.**, Maksay S., *Considerații termice în metalurgie*, Sigma Plus Deva, ISBN 973-9486-13-4, 2000, 120 pag.
4. **Socalici A.**, Poluanți, E-learning, 2012, <https://cv.upt.ro/course/view.php?id=839>
5. **Socalici A.**, Benea L., Todorut A., Strugariu L., *Ingineria mediului - Teme experimentale*, Politehnica Timisoara, ISBN 978-606-554-597-7, 2013, pag. 88
6. Weber F., **Socalici A.**, Sabău F., Ioan A., Ardelean E., Ardelean M., Nica G., Puțan V., Major I., Mihuț G., Lăpușan A., Anghel S., Josan A., Kiss I., *Comportarea materialelor metalice la solicitări statice și dinamice*, Mirton Timișoara, ISBN 973-585352-3, 2001.
7. Milostean D., Hepuț T., **Socalici A.**, Ardelean E., *Baza energetică și de materii prime, Aplicații*, Politehnica Timișoara, ISBN 978-973-625-843-5, 2009, pag.70
8. **Socalici A.**, Ardelean E., Hepuț T., Găvănescu A., Nica G., Stăniloiu I., *Prepararea minereurilor feroase*, Litografia UPT, 1999.

III. Coordonare de programe de studii, organizare și coordonare de programe de formare continuă și proiecte educaționale

1. Coordonator Proiect (Partener UPT) CEEPUS - CIII-BA-1402-01-1920 New teaching technologies and new applications in modernization of teaching at the Faculties of Technical Sciences in connection with the needs of small and medium enterprises in the

- environment, 2019
2. Responsabil FIH – SEE - Proiecte de mobilitate în învățământul superior, SEE 19-MOB-0025, Coordonator Universitatea Politehnica Timișoara, Director Prof.dr.ing.Lia Dolga.
 3. Expert în cadrul proiectului cofinanțat din Fondul Social European prin Programul Operațional Capital Uman 2014-2020 - *Asigură-ți Viitorul prin Educație și Antreprenoriat - AVEA*, Cod Contract: POCU 39168 / 29.05.2019.
 4. Cadru Didactic Supervisor în cadrul proiectului finanțat prin POCU - *Construiește-ți viitorul prin stagii de practică!* – CONPrACT, Cod Contract: POCU 67070 /12.09.2018.
 5. Membru grup tinta în cadrul proiectului “*Dezvoltarea și consolidarea culturii calității la nivelul sistemului de învățământ superior românesc - QUALITAS*”, Cod Contract: POSDRU/155/1.2/S/141894
 6. Cadru Didactic Supervisor în cadrul proiectului “*Parteneriat dezvoltat pentru CONSilierea și PRACTICA Studenților în vederea creșterii angajabilității lor - CONPRACTIS*”, Cod Contract: POSDRU/189/2.1/G/156607
 7. Membru grup tinta în cadrul proiectului “*Im bunătățirea calității sistemului național de învățământ superior - IMPACT*”, Cod Contract: POSDRU/155/1.2/S/139950
 8. Formator în cadrul proiectului “*Inserție activă pe piața muncii prin FORmare profesională inovativă în domeniul INGineriei - FORMING*”, Cod Contract: POSDRU/125/5.1/S/13400
 9. Expert pe termen scurt în cadrul proiectului “*Cresterea atraktivitatii si performantei programelor de formare doctorala si postdoctorala pentru cercetatori in stiinte ingineresti - ATRACTING*”, Cod Contract: POSDRU/159/1.5/S/137070
 10. Membru grup tinta la Programul internațional - proiect POSDRU/90/2.1/S/63742 cu titlul „*VIA – Vocație, Interese, Autocunoaștere și dezvoltare, drumul către succesul profesional*”
 11. Membru grup tinta Proiectul “*Dezvoltarea și implementarea unui sistem de monitorizare, îmbunătățire continuă și evaluare a calității în învățământul superior deschis și la distanță pe baza indicatorilor de performanță și standardelor internaționale de calitate*”, POSDRU/86/1.2/S/60720, Programul de Formare și conștientizare în asigurarea calității în învățământul la distanță
 12. Membru grup tinta la Proiectul „*Scoala universitară de formare inițială și continuă a personalului didactic și a trainerilor din domeniul specializațiilor tehnice și ingineresti – DidaTec*”, POSDRU/87/1.3/S/60891, Programul de Formare în blended-learning și tehnologii educaționale moderne pentru învățământ universitar
 13. Membru grup tinta la proiectul „*Managementul corelării sistemului de învățământ cu piața muncii*”, POSDRU/86/1.2/S/52422, Programul de Formare privind utilizarea instrumentelor de urmărire a frecvențării și de monitorizare a inserției alumni pe piața muncii
 14. Membru grup tinta la Proiectul „*Scoala doctorală în sprijinul cercetării în context european*”, POSDRU/21/1.5/G/13798
 15. Membru grup tinta la Proiectul „*Comunitatea universitară pentru managementul calității în invatamantul superior*”, POSDRU/86/1.2/S/61959
 16. Expert pe termen scurt la Proiectul „*Dezvoltarea unui sistem operațional al calificărilor din învățământul superior din România*”, POSDRU/2/1.2/S/2
 17. Expert la proiectul bilateral Romania-Germania "Sprijinirea autoritatii romane de mediu la preluarea si stabilirea standardelor in procedura integrata de autorizare in Romania", Prezentarea si discutarea Celor Mai Bune Tehnici Disponibile in sapte ramuri

- industriale, Seminarul comun 5 asupra BREF, prelucrarea oțelului
18. Coordonator Program de studii master "*Materiale și tehnologii avansate în industria autovehiculelor*"/Domeniul Ingineria Materialelor/Facultatea de Inginerie Hunedoara/UPT
 19. Coordonator Program de studii licență "*Ingineria valorificării deșeurilor*"/Domeniul Ingineria Mediului / Facultatea de Inginerie Hunedoara/UPT

IV. Articole în reviste cotate ISI Thomson Reuters și în volume indexate ISI Proceedings

1. Bucur, F., Putan, V., **Socalici, A.**, Josan, A., Research on the influence of chemical composition on the hardness of cast iron, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 81(3), pp. 149-156, 2019, **ISI Journal**
2. C Birtok Băneasă, A Budiul-Berghian, **A Socalici**, R Bucevschi, Simulation of thermal transfer through the polyamide intake manifold, Materiale plastice, 56(1), pp.191-194, 2019, **IF 1,393**
3. Socalici, A; Ardelean, E; Pascu, L; Putan, V, Friction and Wear Behaviour of Composite Materials Containing Organic Components, MATERIALE PLASTICE 54(2), pp: 269-273, 2017, **ISI Journal, FI 0,778**.
4. Ardelean, E; Socalici, A; Pascu, L; Putan, V, Laboratory Researches Regarding Wear of the Composite Materials for Making Brake Shoes, MATERIALE PLASTICE 54(2), pp: 203-206, 2017, **ISI Journal, FI 0,778**.
5. **Socalici A.**, Pascu L., Ardelean E., Heput T., *The influence of carbon, manganese and silicon content upon the hardness of phosphorous cast iron used in manufacturing rolling stock braking shoes*, Technical Gazette, 23(6), 2016, **ISI Journal, FI 0,723**.
6. **Socalici A.**, Popa E., Puțan V, Drăgoi F., *Researches on the reduction of steel hydrogen content by its secondary treatment inside the ladle*, Technical Gazette, 23(5), 2016, **ISI Journal, FI 0,723**
7. **Socalici, A**; Ardelean, E., Strugariu, L., *Research on the possibilities of sustainable use of powdery waste*, Environmental Engineering and Management Journal, 15(1), 2016, pp.207-212, **ISI Journal, FI 1,096**
8. **Socalici, A**; Ardelean, E., Crisan, E., Heput, T., *Research on the increase of the reaction surface of self-reducing briquettes*, Environmental Engineering and Management Journal, 15(2), 2016, pp.443-451, **ISI Journal, FI 1,096**
9. Andronache, C; **Socalici, A**; Heput, T, *The influence of micro coolers on the physical-mechanical characteristics of the steels used in making railway monoblock wheels*, Technical Gazette, 20(3), 2013, pp.419-424, **ISI Journal, FI 0,601**
10. Putan, A; Putan, V; Heput, T; **Socalici, A**, Steel treatment with calcium-aluminate synthetic slag and addition of titanium oxide, Revista de Metalurgia, 49(1), 2013, pp.31-44, **ISI Journal, FI 0,241**
11. Pascu, LV; Putan, A; **Socalici, A**; Heput, T, *Researches on the quality of pig iron to be used in making rail braking shoes*, Metalurgia International,18(4), 2013, pp.193-199, **ISI Journal**
12. Andronache, C; **Socalici, A**; Heput, T; Popa, E, *Research on the influence of steel ingot solidification process control on the tenacity characteristics*, Metalurgia International,17(9), 2012, pp.234-238, **ISI Journal, FI 0,134**
13. Dragoi, F; **Socalici, A**; Ardelean, E; Popa, E; Heput, T, *Researches on the influence of*

- the slags formed in the installations on the hydrogen removal efficiency*, Revista de Metalurgia, 47(6), 2011, pp.477-484, **ISI Journal, FI 0,202**
- 14. **Socalici A.**, Heput T., Ardelean M., Ardelean E., Putan V., *Researches regarding practical application of deferrised steelshop slags in agriculture*, Journal of Environmental Protection and Ecology, 1, 2010, pp.227-237, **ISI Journal, FI 0,178**
 - 15. **Socalici A.**, Heput T., Ardelean E., Ardelean M., *Research regarding using the wastes with carbon content in siderurgical industry*, Journal of Environmental Protection and Ecology, 2, 2010, pp.465-470, **ISI Journal, FI 0,178**
 - 16. Ardelean Marius, **Socalici Ana**, Heput Teodor, Ardelean Erika, *Research on obtaining lubricating powder from various types of wastes*, Journal of Environmental Protection and Ecology, 2, 2010, pp.593-600, **ISI Journal, FI 0,178**
 - 17. Ardelean Erika, Ardelean Marius, **Socalici Ana**, Heput Teodor, *Recycling of slag from the aluminium industry to steel refining*, Journal of Environmental Protection and Ecology, 2, 2010, pp.635-642, **ISI Journal, FI 0,178**
 - 18. Ardelean Erika, Ardelean Marius, Heput Teodor, **Socalici Ana**, *Possibilities of recycling the lime-dolomite plant dust*, Journal of Environmental Protection and Ecology, 1, 2010, pp.217-226, **ISI Journal, FI 0,178**
 - 19. Heput, T; Ardelean, E; **Socalici, A**; Osaci, M; Ardelean, M, *Steel deoxidation with syntetic slag*, Metalurgia International,15(5), 2010, pp.22-28, **ISI Journal, FI 0,154**
 - 20. Josan, A; Heput, T; **Socalici, A**; Ardelean, E; Ratiu, S, *The simulation of hot rolling process, in order to determine the thermal field distribution in the mill rolls*, Metalurgia International,14(7), 2009, pp.27-35, **ISI Journal, FI 0,173**
 - 21. **Socalici Ana**, Ardelean Erika, Heput Teodor, Ardelean Marius, *Experimental researches want to improve the quality of continuous cast semi-finished sections*, Metalurgia International,13(11), 2008, pp.48-56, **ISI Journal**
 - 22. **Socalici, A**; Teodor, H; Ardelean, E; Marius, A; Milostean, D, *Experimental researches in pilot phases regarding at processing of ferrous pulverous and scrap waste in briquette*, Metalurgia International,13(13), 2008, pp.57-62, **ISI Journal**
 - 23. Josan, A; Vilceanu, L; Vasile, P; **Socalici, A**, *Researches concerning the particularities of the hypereutectoide steel, using for casting the mill rolls*, Metalurgia International, 13(7), 2008, pp.33-38, **ISI Journal**,
 - 24. Marius, A; Teodor, H; Ardelean, E; **Socalici, A**; Vilceanu, L, *New methods and analysis functioning techniques for cooling bed tool of the profile laminators*, Metalurgia International,13(5), 2008, pp.48-53, **ISI Journal**
 - 25. **Socalici, A**; Ardelean, E; Hepuț, T; Ardelean, M, *The influence of micro-coolants of the mechanical proprieties of the carbon steels*, Metalurgia International, 13(4), 2008, pp.50-55, **ISI Journal**
 - 26. **Socalici, A**; Ardelean, E; Hepuț, T; Ardelean, M, Josan A., *Solidification simulation of the continuous cast blanks with micro-coolants added in the mould*, Metalurgia International,12(8), 2007, pp.20-25, **ISI Journal**
 - 27. Ardelean E., Ardelean M., **Socalici A.**, Heput T., *Simulation of continuous cast steel product solidification*, Revista de Metalurgia, 43(3), 2007, pp.181-187, **ISI Journal, FI 0,436**
 - 28. Hepuț, T; Ardelean, E; **Socalici, A**; Maksay, S; Gavanescu, A, *Steel desulphurization with synthetic slag*, Revista de Metalurgia, 43(1), 2007, pp.31-44, **ISI Journal, FI 0,436**

29. Lupu, O., L. Zgripcea, **A. Socalici**, E. Ardelean, Recovery and valorification of iron from industrial waste, 7th International Conference on Advanced Materials and Structures AMS18, 28-31 Martie 2018, Timișoara, România, **ISI Proceedings**
30. Lupu, O., L. Zgripcea, **A. Socalici**, E. Popa, E., Hărău, C., Pulverous Ferrous Waste Processing By Agglomeration, International Conference on Applied Material Sciences ICAS 2018, 10-11 May 2018, Banja Luka, Boznia and Herzegovina, **ISI Proceedings**
31. Ardelean E., Ardelean M., **Socalici A.**, Putan V., Putan A., Researches on the influence of slag addition and secondary treatment duration on steel quality, International Conference on Applied Material Sciences ICAS 2018, 10-11 May 2018, Banja Luka, Boznia and Herzegovina, **ISI Proceedings**
32. Ardelean, E; **Socalici, A**; Ardelean, M; Serban, S; Vatasescu, M, The analysis of the steel deoxidation process in a vacuum installation, International Conference on Applied Sciences, IOP Conference Series-Materials Science and Engineering ICAS 2016 May 25-27, 2016, Hunedoara, Romania, Volume 163, 2016, pp. 012025, **ISI Proceedings**
33. **Socalici, A**; Pascu, L; Ardelean, E; Putan, V., Experiments on composites meant for making brake pads for the rolling stock, International Conference on Applied Sciences, IOP Conference Series-Materials Science and Engineering ICAS 2016 May 25-27, 2016, Hunedoara, Romania, Volume 163, 2016, pp. 012003, **ISI Proceedings**
34. **Socalici A.**, Pascu, L., Ardelean E., Popa, E, *Researches on obtaining composite materials to be used in manufacturing brake pads*, International Conference on Applied Sciences, IOP Conference Series-Materials Science and Engineering ICAS, June 03-05, 2015, Military Econ Acad Wuhan, Wuhan, PEOPLES R CHINA, Volume 106, 2015, pp. 012015, **ISI Proceedings**
35. Popa, E, Pascu, L., **Socalici A.**, Lăscuțoni A., *Industrial research on the quality of brake shoes meant for rolling stock*, International Conference on Applied Sciences, IOP Conference Series-Materials Science and Engineering ICAS, June 03-05, 2015, Military Econ Acad Wuhan, Wuhan, PEOPLES R CHINA, Volume 106, 2015, pp. 012016, **ISI Proceedings**
36. Ardelean, E., Lăscuțoni, A., Ardeleanm. M., **Socalici A.**, Hepuț, T., *Simulation of solidification process for billet with phi 350mm section, continuous casted*, International Conference on Applied Sciences, IOP Conference Series-Materials Science and Engineering ICAS, June 03-05, 2015, Military Econ Acad Wuhan, Wuhan, PEOPLES R CHINA, Volume 106, 2015, pp. 012034, **ISI Proceedings**
37. **Socalici A.**, Pascu, L. Popa, E, Hepuț, T., *The influence of the cast iron structure upon the hardness of brake shoes meant for the rolling sock*, International Conference on Applied Sciences, ICAS october 2014, IOP Conference Series: Materials Science and Engineering, Volume 85, Number 1, 2015, pp. 12026-12034, **ISI Proceedings**
38. Pascu, L., **Socalici, A.**, Popa, E., Crisan, E., *The influence of chemical composition upon the hardness of brake shoes meant for rolling stock*, International Conference on Numerical Analysis and Applied Mathematics ICNAAM 22–28 September 2014, Rhodes, Greece, AIP Conf. Proc. 1648, 680005 (2015) , **ISI Proceedings**
39. **Socalici A.**, Popa E., Hepuț T., Vilceanu L., Contributions *related to the control of steel ingot solidification*, International Conference on Applied Sciences, ICAS 22-25 october 2013, Wuhan, PEOPLES R CHINA, IOP Conference Series-Materials Science and Engineering, Volume 57, 012004, 2014, **ISI Proceedings**
40. **Socalici A.**, Popa E., Hepuț T., Puțan V., *Contributions to steel semi-finished parts quality improvements*, International Conference on Applied Sciences, ICAS 22-25

- october 2013, Wuhan, PEOPLES R CHINA, IOP Conference Series-Materials Science and Engineering, Volume 57, 012003, 2014, **ISI Proceedings**
41. **Socalici A.**, Popa E., Hepuț T., Drăgoi F., *Research regarding the Improvement of the Steel Quality*, 5th International Conference on Advanced Materials and Structures (AMS 2013) Timisoara, Advanced Materials and Structures IV, Solid State Phenomena, Volume 216, pp. 273-278, **ISI Proceedings**
 42. Lăscuțoni A., Ardelean E, **Socalici A.**, Ardelean, M., *Mathematical modeling of micro-coolers added in the continuous casting tundish*, 11th International Conference of Numerical Analysis and Applied Mathematics ICNAAM 21 September 2013, Rhodes, Greece, Vol. 1558, pp.1603-1606, **ISI Proceedings**
 43. Strugariu L., Crisan E., **Socalici A.**, Heput T., *Mathematical modeling based on qualitative characteristics of briquettes depending on the composition of recipes*, 11th International Conference of Numerical Analysis and Applied Mathematics ICNAAM 21 September 2013, Rhodes, Greece, Vol. 1558, pp.1644-1647, **ISI Proceedings**
 44. Pascu, L., Stoica, D, **Socalici, A.**, *Determining the Cooling Affected Volume by Adding Microcoolers in the Steel*, International Conference of Numerical Analysis and Applied Mathematics, ICNAAM 19-25 september 2012, Kos, Greece , Numerical Analysis and Applied Mathematics Volume 1479, pp. 763-766, **ISI Proceedings**
 45. Andronache C., **Socalici A.**, Vîlceanu L., Hepuț T., *Researches On The Influence Of Chemical Composition Regarding The Physical-Mechanical Characteristics Of Steel For The Manufacture Of Monobloc Wheels*, 4th International Conference on Advanced Materials and Structures, AMS 27-28 octomber 2011, Timisoara, Romania, Advanced Materials and Structures IV, Solid State Phenomena 2012, Volume 188, pp. 353-357, **ISI Proceedings**
 46. Popa, E; Pauca, A; **Socalici, A.V.**, *Numerical Simulation of Solidification Phenomena in Continuous Cast Semi-Finished Products*, 10th International Conference of Numerical Analysis and Applied Mathematics ICNAAM 19-25 September 2011, Halkidiki, Greece, Vol. 1389, **ISI Proceedings**
 47. Pinca-Bretorean, C., Tirian, GO., **Socalici, AV.**, Ardelean, ED., *The optimization of the main beam for the resistance structure of an over-sized rolling bridge*, The 9-th WSEAS International Conference on Simulation, modelling and optimization, 03-05September 2009, Budapest, Romania, pp.86-914, **ISI Proceedings**
 48. Ardelean M., Ardelean E., Heput T., **Socalici A.**, *Simulation Results Regarding to Cinematic Parameters of Mechanical Systems*, The 13-th WSEAS International Conference on Systems, Mathematics and Computers in Science Engineering, Rodos Island, Greece, 22-24 July 2009, pp.254-259, **ISI Proceedings**

V. Articole în reviste și volumelelor manifestări științifice indexate în alte baze de date internaționale

1. Strugariu L., Hepuț T., **Socalici A.**, *Recovery of sludge resulting from corrosion protection operations*, Metalurgia International, Bucuresti, Romania, ISSN 15822214, pp.161-165, 2013, **SCOPUS**
2. Popa E., Heput T., Ardelean E., **Socalici A.**, *Identifying the main defects appeared in the structure of continuous blanks*, International Journal of Systems Engineering, Applications and Development, 6(1), pp.36-43, 2012, **Scholar Google**
3. Pauca A., Hepuț T., **Socalici A.**, *Researches on the influence of alloying elements on the adamit steel type*, International Journal of Systems Engineering, Applications and

- Development, 6(1), pp.44-51, 2012, [Scholar Google](#)
4. **Socalici A.**, Ardelean E., Hepuț T., Ardelean M., *Research regarding pulverous ferrous waste processing by pelletizing*, International Journal of Energy and Environment, 6(3), pp.334-341, 2012, [Scholar Google](#)
5. Puțan A., Puțan V., Vilceanu L., **Socalici A.**, *Research on the Use of Waste to Reducing Slag Formation*, International Journal of Energy and Environment, 6(3), pp.342-349, 2012, [Scholar Google](#)
6. Todoruț A., **Socalici A.**, *Recovery of powdery waste results from technological flows in siderurgy*, International Journal of Systems Engineering, Applications and Development, 6(3), pp.251-258, 2012, [Scholar Google](#)
7. Ardelean M., Ardelean E., Hepuț T., **Socalici A.**, *Establishing the main technological parameters of induction surface hardening for shaft parts type*, Annals of Faculty Engineering Hunedoara – International Journal of Engineering, 9(4), pp. 37-40, 2011, B+, [Scholar Google](#)
8. Hepuț T., **Socalici A.**, Ardelean E., Ardelean M., *Research on the diameter electrodes in electric arc furnaces*, Annals of Faculty Engineering Hunedoara – International Journal of Engineering, 9(3), pp. 263-265, 2011, B+, [Scholar Google](#)
9. A. Todoruț, L.Strugariu, T.Hepuț, **A. Socalici**, E. Ardelean, *Research to Improving the Micropelletting Process on Agglomerated Technological Flow*, Annals of Faculty Engineering Hunedoara – International Journal of Engineering, 9(3), pp.203-207, 2011, B+, [Scholar Google](#)
10. **Socalici A.**, Hepuț T., Ardelean E., Ardelean M., *Research on drug specific electrodes type EBT electric arc furnace*, Annals of Faculty Engineering Hunedoara – International Journal of Engineering, 9(3), pp.123-126, 2011, B+, [Scholar Google](#)
11. Hepuț T., Ardelean E., **Socalici A.**, Ardelean M., *Experiments and results regarding the use foamed slags at the steel elaboration in electric arc furnaces*, Annals of Faculty Engineering Hunedoara – International Journal of Engineering, 9(2), pp.109-112, 2011, B+, [Scholar Google](#)
12. Andronache C., **Socalici A.**, Maksay S., Hepuț T., *Reserch regarding the quality of the steel used for making rolling stok components*, Annals of Faculty Engineering Hunedoara – International Journal of Engineering, 8(3), pp. 415-421, 2010, B+, [Scholar Google](#)
13. Ardelean E., Ardelean M., Heput T., **Socalici A.**, Benea Laura, *Research concerning to the possibility of use the sideritic residue for production of clinker*, Annals of Faculty Engineering Hunedoara – International Journal of Engineering, 8(3), pp. 86- 91, 2010, B+, [Scholar Google](#)
14. Hepuț T., **Socalici A.**, Ardelean E., Ardelean M., *Environment ecological process in Hunedoara area through reinsertion in economic circuit of scrap and pulverous waste*, Annals of Faculty Engineering Hunedoara – International Journal of Engineering, 7(3), pp.299- 302, 200, B+, [Scholar Google](#)
15. **Socalici A.**, Ardelean E., Ardelean M., Hepuț T., *Possibility to recycling of deferrized steelshop slags in agriculture*, Annals of Faculty Engineering Hunedoara – International Journal of Engineering, 7(3), pp.293- 298, 2009, B+, [Scholar Google](#)
16. C. Pinca Bretorean, G. Tirian, **A.V. Socalici**, E. Ardelean, *Dimensional optimization for the strenght structure of a traveling crane*, WSEAS Transactions on Applied and Theoretical Mechanics, Greece, 4(4), pp.147-156, 2009, [SCOPUS](#)
17. Ardelean M., Ardelean E., **Socalici A.**, Hepuț T., *Studies regarding of sideritic residue utilization for cement production*, ACTA TECHNICA CORVINIENSIS – Bulletin of

- Engineering, Hunedoara, 2(1), pp.21-26, 2009, **B+**, Scholar Google
18. **Socalici A.**, Hepuț T., Ardelean E., Ardelean M., Milostean D., *Experimental researches regarding added of microcoolers at continuous casting steel*, Annals of the Oradea University, Fascicle of Management and Technological Engineering, 7(17), pp.1785-1790, 2008, **B+**, Scholar Google
19. Ardelean M., Ardelean E., **Socalici A.**, Hepuț T., *Experimental equipment for microcoolers adding in tundish and crystallizer of continuous casting installation*, Annals of the Oradea University, Fascicle of Management and Technological Engineering, Oradea, Romania, ISSN 1583-06917(17), pp.1190-1195, 2008, **B+**, Scholar Google
20. Ardelean M., Ardelean E., Hepuț T., **Socalici A.**, *Utilization of engineering plastic materials in rolling mill cooling bed construction*, Annals of the Oradea University, Fascicle of Management and Technological Engineering, 6(16), pp.1637-1640, 2007, **B+**, Scholar Google
21. **Socalici A.**, Hepuț T., Ardelean E., Ardelean M., *Research regarding of surface pressure in complex systems of lubrication slags*, Annals of the Oradea University, Fascicle of Management and Technological Engineering, 6(16), pp.1201-1206, 2007, **B+**, Scholar Google
22. Ardelean E., Hepuț T., Ardelean M., **Socalici A.**, *Influence of syntetic flux viscosity in order to increase quality of continuous casting semi-finished product*, Annals of the Oradea University, Fascicle of Management and Technological Engineering, 6(16), pp.1356-1359, 2007, **B+**, Scholar Google
23. **Socalici A.**, Ilca, I., Hepuț T., *Research concerning the structure improvement of steel ingots*, Annals of Faculty Engineering Hunedoara – International Journal of Engineering, 2(3), pp.69-74, 2004, Scholar Google
24. **Socalici A.**, *Research and experiments regarding the structure improvement of steel ingots*, Annals of Faculty Engineering Hunedoara – International Journal of Engineering, 2(1), pp.75-80, 2004, Scholar Google
25. Ardelean E., Ardelean M., **Socalici A.**, *The influence of the technological parameters on the primary cooling at the continuous casting*, Annals of Faculty Engineering Hunedoara – International Journal of Engineering, 2(1), pp.51-56, 2004, Scholar Google
26. Ardelean E., Hepuț T., **Socalici A.**, Nica G., Gavanescu A., *Investigations regarding the advanced utilisation of alloy elements for Ni and Mo alloyed steels*, Metalurgia, 55(3), pp.14-17, 2003, Scholar Google
27. **Socalici A.**, Harau C., Heput T., Ardelean E., *Development of Small and Powdery Waste Management*, 6th International Conference on Management, Marketing and Finances (MMF '12), Applied Mathematics and Economics, Vouligmeni Beach, Athens, Greece, 2012, pp.156-160, Scholar Google
28. Andronache C., **Socalici A.**, Vilceanu L., Heput T., *The influence of chemical composition on the mechanical properties of steels used for manufacturing monoblock railway wheels*, The 5th WSEAS International Conference on Engineering Mechanics, Structures, Engineering Geology (EMESEG '12), Engineering Mechanics, Urban & Naval Transportation and Tourism, Cambridge, UK, 2012, pp. 126-129, Scholar Google
29. Păucă A., **Socalici A.**, Moisă I., *Valorization of Metallic Wastes by Rolling Them in Different Profiles*, The 3 th International Conference on Energy, Environment, Devices, Systems, Communications, Computers (INEEE 12), Mathematical Modeling and Simulation in Applied Sciences, Rovaniemi, Finland, 2012, pp.171-174, Scholar Google

30. Todoruț A., **Socalici A.**, *Recovery of Powdery Ferrous Waste through Pelleting*, The 3 th International Conference on Energy, Environment, Devices, Systems, Communications, Computers (INEEE 12), Mathematical Modeling and Simulation in Applied Sciences, Rovaniemi, Finland, 2012, pp.134-139, [Scholar](#) [Google](#)
31. **Socalici A.**, Ardelean E., Heput T., Ardelean M., *Possibilities of Turning into Account Steel Plant Powdery Wastes*, The 3th International Conference on Energy, Environment, Devices, Systems, Communications, Computers (INEEE 12), Mathematical Modeling and Simulation in Applied Sciences, Rovaniemi, Finland, 2012, pp.129-133, [Scholar](#) [Google](#)
32. **Socalici A.**, Hepuț Teodor., Ardelean E., Ardelean M., *Researches regarding the recovery of small and powder ferrous wastes within iron-and-steel industry*, 6th IASME / WSEAS International Conference on Energy & Environment Cambridge, United Kingdom, 25 february 2011, pp.282-287, [SCOPUS](#)
33. Dragoi F., **Socalici A.**, Hepuț T., Ardelean E., *Researchs on the influence of gas content from the steel on its quality*, The 4th Internațional Conference on Manufacturing, Engineering, Qualiy and Production System, Barcelona, Spain, 15-19 September 2011, pp.139-146, [SCOPUS](#)
34. E. Popa, T. Hepuț, E. Ardelean, **A. Socalici**, *Contributions on the Study of Internal Flaws in Continuous Cast Semi-finished Products*, The 4th Internațional Conference on Manufacturing, Engineering, Qualiy and Production System, Barcelona, Spain, 15-19 september 2011, pp.161-164, [SCOPUS](#)
35. Pauca A., Hepuț T., **Socalici A.**, Josan A., *Research on Quality of Steel for Production of Rolling Cylinders*, The 4th Internațional Conference on Manufacturing, Engineering, Qualiy and Production System, Barcelona, Spain, 15-19 September 2011, pp.170-175, [SCOPUS](#)
36. Todorut A., Hepuț T., **Socalici A.**, Flori M., Crisan E., *Research on Expansion of the Steel Base Materials*, The 4th International Conference on Maritime and Naval Science and Engineering, Barcelona, Spain, 15-19 September 2011, pp.112-117, [SCOPUS](#)
37. **A. Socalici**, T. Hepuț, E. Ardelean, M. Ardelean, *Valorization of Powdery Ferrous Wastes in the Context of Sustainable Development*, 6th WSEAS International Conference on Energy, Environment, Ecosystems and Sustainable Development - EEESD'10, Timișoara, Romania, 2010, pp.153-157, [SCOPUS](#)
38. **A. Socalici**, T. Hepuț, E. Ardelean, M. Ardelean, *Researches Regarding the Obtaining of Active Slag by Using Reactive Admixtures Produced from Ferrous and Basic Scrap*, 6th WSEAS International Conference on Energy, Environment, Ecosystems and Sustainable Development - EEESD'10, Timișoara, Romania, 2010, pp.158-163, [SCOPUS](#)
39. **Socalici A.**, Andronache C., Heput T., *Researchs regarding the quality of the steel used for making rolling stock components*, International Symposium on Advanced Engineering and Applied Management - 40th Anniversary in Higher Education, Section 1, Hunedoara, 2010, pp.1-6, [Scholar](#) [Google](#)
40. Ardelean M., Hepuț T., Ardelean E., **Socalici A.**, *Hight productivity instalation for the recovery of waste by briquetting of powder*, International Symposium on Advanced Engineering and Applied Management - 40th Anniversary in Higher Education, Section 5, Hunedoara, 2010, pp.1-6, [Scholar](#) [Google](#)
41. **Socalici A.**, Ardelean E., Ardelean M., Hepuț T., *Researches regarding the peletizing process of ferrous pulverous waste*, International Symposium on Advanced Engineering and Applied Management - 40th Anniversary in Higher Education, Section 5,

- Hunedoara, 2010, pp.47-50, [Scholar Google](#)
42. Ardelean E., Ardelean M., **Socalici A.**, Hepuț T., *Researches in laboratory phases regarding to capitalization of ferrous pulverous waste in pellets*, International Symposium on Advanced Engineering and Applied Management - 40th Anniversary in Higher Education, Section 5, Hunedoara, 2010, pp.125-131, [Scholar Google](#)
 43. **Socalici A.**, Hepuț T., Ardelean E., Ardelean M., Milostean D., *Experimental researches in pilot phases regarding at processing of ferrous pulverous and scrap waste in briquettes*, International Conference of Metallurgy and Materials Science, Bucuresti, 2008, pp.125-131, [Scholar Google](#)
 44. Hepuț T., Ardelean E., Ardelean M., **Socalici A.**, Putan V., *Reducing of pollution in alumina factoryarea, based of red slime waste recovery*, International Conference of Metallurgy and Materials Science, Bucuresti, 2008, pp.309-316, [Scholar Google](#)
 45. **Socalici A.**, *Experiments regarding the steel temperature adjustment in the mould of the continuous casting machine*, 11th International Research Expert Conference „Trends in the Development of Machinery and Associated Technology” TMT 2007, Hammamet, Tunisia, pp.319-322, [Scholar Google](#)
 46. **Socalici A.**, Ardelean M, Puțan V., *Improving the continuous cast blank structure by using micro-coolants*, 11th International Research Expert Conference „Trends in the Development of Machinery and Associated Technology” TMT 2007, Hammamet, Tunisia, pp.315-318, [Scholar Google](#)
 47. **Socalici A.**, Puțan V., Josan A., *Numerical simulating of fluid flow and heat transfer in steel ladles during casting*, 11th International Research Expert Conference „Trends in the Development of Machinery and Associated Technology” TMT 2007, Hammamet, Tunisia, pp.1275-1278, [Scholar Google](#)
 48. **Socalici A.**, Ardelean E., Hepuț T., Pinca-Bretorean C., *Settlement possibilities of steel temperature in crystallize*, 10th International Research Expert Conference „Trends in the Development of Machinery and Associated Technology”, TMT 2006, Barcelona-Lloret de Mar, Spain, 2006, pp.161-164, [Scholar Google](#)
 49. Pinca-Bretorean C., Tirian O., **Socalici A.**, *The Study of Thermal Regime of the Hot Rolling Mill Cylinders*, 10th International Research Expert Conference „Trends in the Development of Machinery and Associated Technology”, TMT 2006, Barcelona-Lloret de Mar, Spain, 2006, pp.1327-1330, [Scholar Google](#)
 50. **Socalici A.**, *Respects Regarding the Usage Micro-Cooler to Casting Steel*, 10th International Research Expert Conference „Trends in the Development of Machinery and Associated Technology”, TMT 2006, Barcelona-Lloret de Mar, Spain, 2006, pp.157-160, [Scholar Google](#)

VI. Brevete de invenție

1. Brevet nr. 126946/30.01.2014, Teodor Hepuț, **Ana Socalici**, Erika Ardelean, Marius Ardelean, Nicolae Constantin, Miron Buzduga, Radu Buzduga, *Brișetă tubulară din deșeuri feroase pulvulerente*, RO126946-A0, RO126946-A8, RO126946-B1, titulari: Universitatea Politehnica Timisoara, Universitatea Politehnica Bucuresti, Centrul de Cercetare, Proiectare si Productie Refractare Alba Iulia, indexat ISI
2. Brevet nr. 127756/30.08.2019 - Teodor Hepuț, Eugen Crișan, Erika Ardelean, **Ana Socalici**, Marius Ardelean, *Brișetă cilindrică multicavă din deșeuri feroase pulvulerente*, RO127756-A0, RO127756-A8, titular: Universitatea Politehnica din Timisoara, indexat ISI

VII. Granturi/proiecte câștigate prin competiție

Director proiect/responsabil

1. Grant Nr. 41/2007, *Practical application of deferrized steelshop slags in agriculture/ Valorificarea în agricultură a zgurilor de oțelarie deferizate*, Balkan Environmental Association (BENA 2000RON).
2. Nr.71-044/2010, *Tehnologii avansate de conducere a proceselor industriale de calire superficială a pieselor incalzite inductiv*, 2010, Programul 4 „Parteneriate in domenii prioritare” 2007-2013, (PNCDI, UPT partener, 86.039 RON)
3. Nr. 3196/2005, *Cercetări și experimentări privind îmbunătățirea structurii semifabricatelor turnate continuu*, Programul Excelență – Proiect de cercetare pentru tineri cercetători – ET, 2005/2006/2007, (CEEX 75.000RON)
4. Nr.32940/2004, *Cercetări și experimentări privind îmbunătățirea structurii lingourilor de oțel*, (CNCSIS Grant AT, 7.750RON)
5. Nr.33550/2003, *Cercetări și experimentări privind îmbunătățirea structurii lingourilor de oțel*, (CNCSIS Grant AT, 3.600RON)

Membru în echipă

1. Grant Nr.46/2008, *Decreasing of environment pollution degree through the siderite waste capitalization for production cement*, Balkan Environmental Association, (BENA 2000 RON)
2. Grant Nr.40/2007, *The impact of lime-dolomite plants upon the environment and the possibility of reducing the ecological risk in these regions/Impactul fabricilor de var-dolomită asupra mediului și posibilități de reducere a riscului ecologic în aceste zone*, Balkan Environmental Association, (BENA 2300RON)
3. Grant Nr.24/2004, *Research regarding the recycling of the steel plant dust in siderurgic industry/Cercetări privind reciclarea prafului de oțelarie în industria siderurgică*, Balkan Environmental Association, (BENA 4000RON)
4. Nr.71-044/2007, *Tehnologii avansate de conducere a proceselor industriale de calire superficială a pieselor incalzite inductiv*, Programul 4 „Parteneriate in domenii prioritare” 2007-2013, 2007/2008/2009, (PNCDI, UPT partener, 86.039 RON)
5. Nr.31-098/2007, *Prevenirea si combaterea poluarii in zonele industriale siderurgice, energetice si miniere prin reciclarea deseurilor marunte si pulverulente*, Programul 4 „Parteneriate in domenii prioritare” 2007-2013, 2007-2010, (PNCDI 1.257.581 RON) www.prevpol.fih.upt.ro
6. Nr. 233/2006, *Tehnologie integrată de obținere a unor surse energo-tehnologice neconvenționale utilizate ca materii prime la elaborarea oțelului*, Programul Excelență – Proiect de cercetare-dezvoltare complex, 2006-2008, (CEEX 100.000RON)
7. Nr. 232/2006, *Noi materiale refractare cu funcții complexe utilizate în industria oțelului, realizate prin tehnologii moderne*, Programul Excelență – Proiect de cercetare-dezvoltare complex, 2006-2008, (CEEX 100.000RON)
8. Nr. 3194/2005, *Optimizarea regimului termic al oțelului pe traseul cuptor-agregat de tratament secundar-instalație de turnare continuă*, Programul Excelență – Proiect de cercetare pentru tineri cercetători – ET, 2005-2007, (CEEX 69.000RON)
9. Nr. 1455/2000, *Asimilarea în fabricație a prafurilor de turnare, folosite la turnarea continuă a oțelului*, Program CD ORIZONT, 2000/2001, (ORIZONT 6.500RON)

10. Nr.1/2001, *Proiectare subansamble instalație pilot cu praf de cărbune de reducere directă a minereurilor și deșeurilor feroase în cuptor tubular rotativ – subcontract la Contractul RELANSIN nr.330/1999 (1.150 RON)*
11. Nr.2/2001, *Asistență tehnică, participare la experimentări pe instalația pilot de reducere directă a minereurilor și deșeurilor feroase existente la Siderurgica Hunedoara – subcontract la Contractul RELANSIN nr.330/1999 (1.154 RON)*
12. Nr.3/2001, *Proiectarea și execuția ansamblului colector de alimentare cu energie electrică a instalației neconvenționale de producere a varului și dioxidului de carbon, Subcontract la contractul RELANSIN nr. 339/1999 (220 RON)*
13. Nr.4/2001, *Consultanță și asistență tehnică la realizarea alimentării cu energie electrică a instalației neconvenționale de producere a varului și dioxidului de carbon, Subcontract la contractul RELANSIN nr. 339/1999 (569 RON)*
14. Nr.5/2001, *Proiectarea instalației de încălzire a bilelor ceramice pentru instalația pilot de reducere directă a minereurilor și deșeurilor feroase existente la S.C SIDERURGICA S.A. Hunedoara – subcontract la Contractul RELANSIN nr.330/1999 (1.600 RON)*
15. Nr.6/2001, *Confecționat instalație încălzire bile ceramice pentru instalația neconvențională de producere a varului și dioxidului de carbon, – subcontract la Contractul RELANSIN nr.339/1999 (470 RON)*

07.02.2020

Prof.dr.ing. Ana Virginia SOCALICI