

### II.3. Diseminarea rezultatelor științifice. Participarea la manifestări tehnico-științifice specifice domeniului proiectului.

Diseminarea rezultatelor pentru etapa a IV-a a proiectului s-a realizat prin publicarea a 1 articol ISI și 1 în evaluare, a 2 articole BDI (indexate SCOPUS) și prin participarea cu 11 prezentări la conferințe internaționale și naționale, după cum urmează:

#### Listă de articole publicate/în curs de evaluare:

1. Dumitru Mitrică, Vasile Soare, Ionuț Constantin, Mihai Teodor Olaru, Victoria Soare, Viorel Bădiliță, Florentin Stoiciu, Gabriela Popescu, Ioan Carcea, „**Influence of the heat treatment processes on the properties of high entropy alloys based on Al-Cr-Fe-Mn-Ni system**”, Materials Performance and Characterisation – ASTM, ISSN: 2379-1365, <https://doi.org/10.1520/MPC20170018>.
2. Dumitru Mitrică, Vasile Soare, Ionuț Constantin, Mihai Tudor Olaru, Valentin Drăguț, Gabriela Popescu, Cristian Predescu, Andrei Berbecaru, Victoria Soare, Mihai Ghiță, Ioan Carcea, „**Influence of composition and as-cast structure on the mechanical characteristics of selected high entropy alloys**”, Transactions of Nonferrous Metals Society of China, articol în curs de evaluare, factor de impact 1,342, ISSN 1003-6326.
3. Popescu Gabriela, Brânzei Mihai, Popescu Cristian, Matei Alecs Andrei, Trușcă Roxana, Csaki Ioana, „**Pressure Influence on the AlCrFeNiMn/Graphite High Entropy Composite Microhardness**”, Key Engineering Materials 2017, vol.750, ISSN: 1662-9795, p.9-14, proceeding BDI, indexat SCOPUS, DOI: 10.4028/ www.scientific.net/KEM.7
4. Buluc Gheorghe, Chelariu Romeo, Popescu Gabriela, Sârghi Mihail, Carcea Ioan, „**Study on Wear Resistance FeNiCrMnAl High Entropy Alloy - Mechanical Properties**”, Key Engineering Materials 2017, vol.750, ISSN: 1662-9795, p.34-38, proceeding BDI, indexat SCOPUS, DOI: 10.4028/www.scientific.net/KEM.7

#### Listă prezentări la Conferințe:

1. Dumitru Mitrică, Vasile Soare, Mihai Tudor Olaru, Valentin Drăguț, Gabriela Popescu, Cristian Predescu, Andrei Berbecaru, Victoria Soare, Mihai Ghiță, „**Influence of the element additions to the microstructural and mechanical characteristics of selected high entropy alloys**”, 10<sup>th</sup> International Conference of Materials Science and Engineering – BRAMAT, 8-11 martie Brașov, 2017, prezentare orală.
2. I. Carcea, R. Chelariu, B. Istrate, A. Ciorobâtcă, G. Buluc, „**Oxidation of FeNiCrMnAl High Entropy Alloy - Wear Resistant Alloy. Chemical and Structural Characterization**”, 10<sup>th</sup> International Conference of Materials Science and Engineering – BRAMAT, 8-11 martie Brașov, 2017, poster.
3. Florea M.R., Buluc G., Asavei L., Carcea I., „**Oxidation behavior of induction melted FeNiCrMnCu multi-component high-entropy alloys**”, 10<sup>th</sup> International Conference of Materials Science and Engineering – BRAMAT, 8-11 martie Brașov, 2017, poster.
4. Popescu Gabriela, Csaki Ioana, Popescu C.A., Brânzei M., Trușcă Roxana, Mitrică D., Soare V., „**Microstructure and Properties of AlCrFeNiMn/Gr High Entropy Composite**”

**Processed by Mechanical Alloying and Spark Plasma Sintering**", 10<sup>th</sup> International Conference of Materials Science and Engineering – BRAMAT, 8-11 martie Braşov, 2017, prezentare orală.

5. R.L. Asavei, R. M. Florea, G. Buluc, R. Chelariu, I. Carcea, "**Microstructural Analysis and Mechanical Properties of Aluminum Composite Materials Reinforced with Particles Based on FeNiCrMnAl High Entropy Alloys**", 10<sup>th</sup> International Conference of Materials Science and Engineering – BRAMAT, 8-11 martie Braşov, 2017, poster.

6. Dumitru Mitrică, Vasile Soare, Mihai Teodor Olaru, Gabriela Popescu, Cristian Predescu, Ioan Carcea, Viorel Badiliţă, Victoria Soare & Florentin Stoiciu, „**High entropy alloys for steam power plant applications**”, International Conference Modern Technologies in Industrial Engineering ModTech, Sibiu, 2017, ISSN 2286-4369, poster.

7. I. Carcea, R. Chelariu, L. Asavei, Cimpoieru N., Florea M.R., "**Investigations on composites reinforced with HEA particles**", International Conference Modern Technologies in Industrial Engineering ModTech, Sibiu, 2017, ISSN 2286-4369, poster.

8. Popescu Gabriela, Popescu C.A., Brânzei M., Truşcă Roxana, Mitrică D., Soare V., „**AlCrFeNiMn/TiB<sub>2</sub> high entropy composite processed by mechanical alloying and spark plasma sintering**”, 5th INTERNATIONAL CONFERENCE ON POWDER METALLURGY & ADVANCED MATERIALS – RoPM&AM 2017, 17-20 Sept. Cluj-Napoca, ROMANIA, prezentare orală.

9. I. Carcea, R. M. Florea, L. Asavei, V. Soare, R. Chelariu, "**Microstructure and mechanical characterization of Al/HEAp composites**", European Congress and Exhibition on Advanced Materials and Processes – EUROMAT 2017, 17-22 Septembrie 2017, Salonic, Grecia, poster.

10. D. Mitrica, V. Soare, M. Olaru, V. Badilita, V. I. Soare, F. Stoiciu, I. Carcea, „**Heat treatment and deformability of Al-Cr-Fe-Mn-Ni-Zr based high entropy alloys**”, European Congress and Exhibition on Advanced Materials and Processes – EUROMAT 2017, 17-22 Septembrie 2017, Salonic, Grecia.

11. Dumitru Mitrica, Albert Tudor, Antonio Rinaldi, Vasile Soare, Cristian Predescu, Andrei Berbecaru, Florentin Stoiciu, Viorel Badilita, „**Structural transformations of heat treated Co-less high entropy alloys**”, EMRS fall meeting, Varşovia, Polonia, 2017.