



Curriculum vitae Europass



Personal data

Name / Surname **GABRIELA SIMA**
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E-mail(s) gsima2001@yahoo.com, gsima70@yahoo.com
Nationality Romanian
Birth date 05 April 1970
Gender F

Professional experience

Period **2007– present**
Occupation or position held **Associate Professor, Ph.D. Eng.**
Activities and main responsibilities Education and research activity in Material Science and Engineering
Employer name and address Faculty of Mechanics, Department of Engineering and Management of Technological Systems, University of Craiova, Drobeta Turnu Severin, Mehedinti, Romania
Activity type Higher education

Period **2002 – 2007**
Occupation or position held **University lecturer engineer**
Activities and main responsibilities Education and research activity in Material Science and Engineering
Employer name and address Faculty of Engineering and Management of Technological Systems, University of Craiova, Drobeta Turnu Severin, Mehedinti, Romania
Activity type Higher education

Period **1998 - 2002**
Occupation or position held **University assistant engineer**
Activities and main responsibilities Education and research activity in Material Science and Engineering
Employer name and address Technic, Economic and Administration University College of Drobeta Turnu Severin, University of Craiova, Romania
Activity type Higher education

Period **1994 - 1998**

Occupation or position held **Universitary preparatory engineer**
 Activities and main responsibilities **Education and research activity in Material Science and Engineering**
 Employer name and address Technic, Economic and Administration University College of Drobeta Turnu Severin, University of Craiova, Romania
 Activity type Higher education

Period **1994 - present**

Occupation or position held Member in 2 projects with international financial support and in 14 projects with national financial support (annexes)
 Activities and main responsibilities Scientific research activity
 Member in „*Technology and Innovation in Advanced ReseArch of Composites (tiara-C)*” (<http://cis01.central.ucv.ro/proiectecercetare/tiarac/>) and „*Advanced Engineering Group*” (*GIA*) (www.imst.ro), Faculty of Mechanics, Department of Engineering and Management of Technological Systems, University of Craiova, Drobeta Turnu Severin. Tiara-C group focuses on composite materials: metallic or ceramic - based matrix.
 Employer name and address University of Craiova
 Activity type Higher education

Period **1994 - present**

Activities and main responsibilities Published scientific papers: 53 (annexes)
 Books – 3 (annexes)
 University books – 2 (annexes)
 Laboratory Handbook – 3 (annexes)
 Employer name and address University of Craiova
 Activity type Article publishing and books

Education and forming

Perioada **2009-prezent**

Calificarea / diploma obținută Postgraduate program “*Teacher/Supervisor of industrial practice/ technological and research*” <http://193.226.12.231:8080/dm/>
 Numele și tipul instituției de învățământ / furnizorului de formare Coordinator Technical University "Gheorghe Asachi", Iasi
 Project co-financed by European Social Fund through the Sectoral Operational Program Human Resources Development 2007-2013, (POSDRU), axis 1, direction 1.2, 2009-2011, Specialization university teachers for the position of "teacher supervisor" practice, code contracts: 571/1.3/S/17884

Period **2008**

Obtained qualification / diploma ECDL - European Computer Driving License Core, Syllabus Version 4.0
 Institution name and type European Computer Driving License - ECDL Romania

Period **2006**

Obtained qualification / diploma PhD in Materials Science and Engineering
 Main objects studied / gained professional competences PhD thesis title: *Research on elaboration of no-ferrous alloy based matrix composites materials antifriction by Powder Metallurgy processing*
 Institution name and type Faculty of Mechanics, University of Craiova, Romania

Period **2006**

Obtained qualification / diploma Postgraduate studies „*Finance Opportunities in process of Romania European Integration*”
Institution name and type Faculty of Engineering and Management of the Technological Systems, Drobeta Turnu Severin, University of Craiova, Romania

Period **2005**

Obtained qualification / diploma Postgraduated studies: “*Computer Assited Design*”
Institution name and type Faculty of Engineering and Management of the Technological Systems, Drobeta Turnu Severin, University of Craiova, Romania

Period **1996 - 1997**

Obtained qualification / diploma master's degree, Special Materials and Technologies, Research: „*No-ferrous alloy based matrix composites materials antifriction reinforced by carbides powder particles*”
Institution name and type Faculty of Mechanics, University of Craiova, Romania

Period **1989 - 1994**

Obtained qualification / diploma Mechanical engineer
Institution name and type Machines Construction Technology Dept., Faculty of Mechanics, University of Craiova, Romania

Period **1984 - 1988**

Obtained qualification / diploma High-school graduating diploma
Institution name and type Mathematics-Physics High School, „George Bacovia”, Bacau Romania

Aptitudes and personal competences

Foreign languages English
French

Technical competences and aptitudes Powder metallurgy, Metallic composites, Nanomaterials and nanotechnologies, in accordance with the gained specializations

Social competences and aptitudes see annexes

PC using competences and aptitudes Microsoft XP System: Word, Excel, Power Point Electronic systems for communications

Driver licence B type, 1988

Informatii suplimentare Member in 5 Scientific and professional societies (annexe)

Annexes Research activity, publications, society memberships,
Lists of publications articles, books, research contracts

Annexes

Teaching topics

Powder Metallurgy, Materials Science and Engineering, Composite Materials

Research activity

Member of the research team "*Technology and Innovation in Advanced Research of Composites* (tiara-C), (tiarac@central.ucv.ro, <http://www.imst.ro/tiara/>) and **Advanced Engineering Group** (AEG) (www.imst.ro) of the University of Craiova, Faculty of Mechanics, Department of Engineering and Management of Technological Systems. Tiara-C group focuses on composite materials: metallic or ceramic - based matrix.

National funding research projects/grants

❖ National research activity (member)

1. Research grant PNCDI-II no.265/2007, beneficiary : Ministry of Education and Research ; coordinator : Institute of Welding and Materials Testing, ISIM, Timisoara; partner: University din Craiova, Faculty of Engineering and Management of Technological Systems, Drobeta Turnu Severin ; partnership coordinator: s.l. dr. ing. Savu Danut; title : **Microwelding systems for circuit elements and incapsulation of microstructures and actuators**; acronym : **MICROWELD** ; funding course : 2007-2009, (www.isim.ro)
2. Research grant EXCELENCE RESEARCH (CEEX), code 1592, beneficiary: University of Craiova, Faculty of Engineering and Management of Technological Systems from Drobeta Turnu Severin, title: **Developing of knowledge concerning nanostructured materials elaborated and microprocessed by Powder Metallurgy for M.E.M.S. components**, acronym: **PRONANOMAT**, funding course: 2006-2008, (www.imst.ro);
3. Research grant EXCELENCE RESEARCH (CEEX) code 2013, beneficiary: Ministry of Education and Research ; coordinator : Institute of Welding and Materials Testing, ISIM, Timisoara; partner: University din Craiova, Faculty of Engineering and Management of Technological Systems, Drobeta Turnu Severin , partnership coordinator: prof.dr.ing.Mihail Mangra; title: **Plurifunctionalized microstructures for Ti alloy coated by advances technology**, acronym **MICROFUNCTIA**, funding course: 2006-2008, (www.isim.ro);
4. Research grant EXCELENCE RESEARCH (CEEX) no. 94/2006, beneficiary: Ministry of Education and Research; coordinator: Institute of Chemic-Physics „I.G. Murgulescu”, Bucharest, Romania; partner: University of Craiova, Faculty of Engineering and Management of Technological Systems, Drobeta Turnu Severin; partnership coordinator: prof. Mihail Mangra; title : **The influence of the composition and the structure on the thermodynamical, electrical and magnetic properties of the micro- and nanostructured oxidic materials with special magnetoresistive properties**; acronym : **CMR-TEM** ; funding course : 2006-2008;(www.icf.ro) ;
5. Research grant INVENT, beneficiary: INMA; coordinator: I.C.P.E. – C.A., Bucharest; partner: University of Craiova, Faculty of Engineering and Management of Technological Systems from Drobeta Turnu Severin ; partnership coordinator : prof. Mihail Mangra; title: **Sintered magnets based on Nd-Fe-B alloys with high thermal stability**; acronym: **MAGSTAB**; funding course: 2005-2006; (www.inma.ro)
6. Research grant, code 108/2005, beneficiary National University Research Center N.U.R.C. (C.N.C.S.I.S.); project coordinator: prof. Mangra Mihail; title: **Research on sintered carbon steels processing from mixtures with Fe powders and Fe₃C nanopowder particles**, 2005, (www.cnscis.ro);
7. Research grant no. 33062/2004, code 315, beneficiary National University Research Center N.U.R.C. (C.N.C.S.I.S.); project coordinator: assoc. prof. Gheorghe Stefan; title: **Studies on the manufacturing technologies of some Cu-based sintered antifriction materials with low tin content**, 2004, (www.cnscis.ro);
8. Research grant no. 33062/2004, code 294, beneficiary National University Research Center N.U.R.C. (C.N.C.S.I.S.); project coordinator: assoc. prof. Teisanu Cristina; title: **Fe-based sintered materials for auto lubricant bearings manufacturing**, 2004, (www.cnscis.ro);
9. Research grant no. 33547/2003, code 294, beneficiary National University Research Center N.U.R.C. (C.N.C.S.I.S.); project coordinator: assoc. prof. Teisanu Cristina; title: **Fe-based sintered materials for auto lubricant bearings manufacturing**, 2003, (www.cnscis.ro);
10. Research grant no. 40202/2003, code 272, beneficiary National University Research Center N.U.R.C. (C.N.C.S.I.S.); project coordinator: prof. Mangra Mihail; title: **Research on pressure sintering with microwave heating**, 2003, (www.cnscis.ro);
11. Research grant no. 33547/2003, code 305, beneficiary National University Research Center N.U.R.C. (C.N.C.S.I.S.), project coordinator: assoc. prof. Gîngu Oana, title: **Processing of lightweight nanocomposites materials for aerospace and automotive transportation**, 2003, (www.cnscis.ro);

12. Research grant no. 33451/2002, code 941, beneficiary National University Research Center N.U.R.C. (C.N.C.S.I.S.), project coordinator: assoc. prof. Ciupitu Ion, title: **PM working devices on tool-machines**, 2002, (www.cnccsis.ro);
13. Research grant no. 35253/2001, code 16, beneficiary National University Research Center N.U.R.C. (C.N.C.S.I.S.), cod 16/2001, project coordinator prof. Mangra Mihail, title: **Research on Spark Plasma Sintering (SPS) for anisotropic ceramic magnets processing**, 2001, (www.cnccsis.ro);
14. Research grant no. 544/1999 (34) beneficiary National University Research Center N.U.R.C. (C.N.C.S.I.S.), project coordinator prof. dr. ing. Mangra Mihail, title: **Research on processing metallic and ceramic magnetic materials for building machines construction and electro technical industries**, 1999, (www.cnccsis.ro).

❖ International research activity

1. The 6th Framework program on Research, Tehnological Development and Demonstration, FP6-013908/2005-2007, beneficiary European Commission; project coordinator Chalex Ltd., Anglia; title: **Improving the understanding of the impact of nanoparticles on human health and the environment - IMPART**; funding: 700.000 Euros; (www.impart-nanotox.org)

❖ Training activity in university technical domain

1. **POSDRU project, axis 1, direction 1.2, 2009-2011, Specialization of the university staff for „Supervisor Academic Staff” for industrial / technological practice and research activity, coordinator Technical University „Gheorghe Asachi”, Iasi; funding course: 2009-2012 (long term expert in technical field)** (<http://193.226.12.231:8080/dm/>)
1. **Program code RO 2002/000 - 586.05.02.02.160, beneficiary Agency for Development of South-West Oltenia Region, Phare 2002 Program / Human resources development; title: Improvement and antreprenurial development in techniques field; funding course: 2004. 63.700 Euro;** (www.imst.ro)

Publications

1. Gingu, O., Benga, G., Olei, A., Lupu, N., Rotaru, P., Tanasescu, S., Mangra, M., Ciupitu, I., Pascu, I., **Sima, G.**, *Wear Behaviour Of Ceramic Biocomposites Based On Hydroxiapatite Nanopowders*, (2011), [Proceedings of the IMechE](#), vol 225, Issue 1, **Part E: JOURNAL OF PROCESS MECHANICAL ENGINEERING**, p 62-71 ISSN (printed): 0954-4089. ISSN (electronic): 2041-3009, Scor relativ de influenta al revistei (2012): 0,393, <http://pie.sagepub.com/content/225/1/62.short>; doi:10.1243/09544089JPME307, _
2. **Sima, G.**, Mangra M., Gingu, O., Criveanu M., Olei A., *Influence of the Reinforcing Elements on the Wear Behavior of Al/(SiC+Graphite) Composites Elaborated by Spark Plasma Sintering Technology*, Materials Science Forum Vol. 672 ,(2011) pp 241-244, ISBN-13 978-3-03785-010-7 ; Online available since 2011/Jan/20 at www.scientific.net, © (2011) Trans Tech Publications Ltd., Switzerland-UK-USA., Impact factor of this journal (2005): 0.399; Journal Citation Reports® 2006, published by Thomson Scientific; <http://www.scientific.net/MSF.672.241>, doi:10.4028/www.scientific.net/MSF.672.241;
3. Olei, B.A., Gingu, O., Lupu, N., **Sima, G.**, *Structural Analysis of PM Biocomposites Based on Hydroxyapatite Nanopowders Elaborated by Spark Plasma Sintering Route*, *Periodical of Solid State Phenomena* Vol. 188 (2012) , “Advanced Materials and Structures IV”, pp.52-58, Trans Tech Publications, ISBN: 978-3-03785-391-7, Online available since 2012/May/14 at www.scientific.net. © (2012) Trans Tech Publications Ltd., Switzerland-UK-USA. <http://www.scientific.net/SSP.188.52> doi: 10.4028/www.scientific.net/SSP.188.52.;
4. Gingu, O, Nicolicescu C., **Sima, G.**, *Research of the Milling Time Influence on Ag-Cu Powder Particles Size Processed by Mechanical Alloying Route*, *Periodical of Solid State Phenomena* Vol. 188, (2012) , “Advanced Materials and Structures IV”, pp.382-387, Trans Tech Publications Ltd, ISBN: 978-3-03785-391-7, Online available since 2012/Mai/14 at www.scientific.net. © (2012) Trans Tech Publications Ltd., Switzerland-UK-USA. <http://www.scientific.net/SSP.188.382>, doi: 10.4028/www.scientific.net/SSP.188.382.
5. **Sima, G.**, Gingu, O., Benga, G., Rotaru, P., RUIZ-NAVAS, E., MORENO, J.C. ., *Thermal investigation and wear behaviour of lightweight self-lubricant composites for automotive parts*, 1st Central and Eastern European Conference on Thermal Analysis and Calorimetry CEEC-TAC1”, Craiova, 7-10 September 2011, p.225, ISBN 978-606-11-1893-9;

6. Gingu, O., Rotaru, P., Osiceanu, P., Tanasescu, S., Nicolicescu C., **Sima, G.**, Andreea, N., Milea, Al., *Thermal investigation of Al-Cu alloys processed by mechanical alloying - 1st Central and Eastern European Conference on Thermal Analysis and Calorimetry CEEC-TAC1*, Craiova, 7-10 September 2011; p.101, ISBN 978-606-11-1893-9;
7. Benga, G., Gingu, O., **Sima, G.**, Ciupitu, I., Rotaru, P., Moreno, J.C., *Thermophysical properties and wear assessment of nanostructured biocomposites*, 1st Central and Eastern European Conference on Thermal Analysis and Calorimetry CEEC-TAC1, Craiova, 7-10 September 2011, p.133, ISBN 978-606-11-1893-9;
8. Olei, B.A., Gingu, O., Lupu, N., **Sima, G.**, *Structural Analysis of PM Biocomposites Based on Hydroxyapatite Nanopowders Elaborated by Spark Plasma Sintering Route*, 4th International Conference on **Advanced Materials and Structures - AMS '11**, Timisoara, 27 - 28 October 2011;
9. Gingu, O., Nicolicescu C., **Sima, G.**, *Research of the Milling Time Influence on Ag-Cu Powder Particles Size Processed by Mechanical Alloying Route*, 4th International Conference on **Advanced Materials and Structures - AMS '11**, Timisoara, 27 - 28 October 2011;
10. Pascu Ileana, Gingu, O., Rotaru, P., **Sima, G.**, *Study About The Quality Of Ceramic Biocomposites HAP/Ti Obtained By Two Steps Sintering (TSS) Route*, World Congress PM'2010, Florence, Italy, 10-14 oct 2010;
11. Gingu, O., Pascu, I., Lupu, N., Rotaru, P., Harabor, A., Olei, A., **Sima, G.**, Calderon Moreno, J., *New Sintering Processing Route For Ceramic Biocomposites Based On Hydroxyapatite Nanopowders For Hard Tissue Grafting*, World Powder Metallurgy Congress and Exhibition, WPM 2010, Florence, Italy, 10-14 Oct. 2010;
12. **Sima, G.**, Gingu, O., Mangra, M., *Comparative Wear Behaviour of the Antifriction Al-Based Composite Materials Sintered by Classic and Spark Plasma Sintering (SPS) Route*, European Powder Metallurgy congress EUROPM 2009, 12-14 oct. 2009, Copenhagen, Denmark, vol3. p.125-131;
13. Gingu, O., Lupu, N., Tanasescu, S., Rotaru, P., Harabor, A., Mangra, M., Ciupitu, I., **Sima, G.**, Olei, A., Bucse, I., *Spark Plasma Sintering Behavior Of Ceramic Biocomposites Based On Hydroxyapatite Nanopowders*, European Powder Metallurgy congress EUROPM 2009, 12-14 oct. 2009, Copenhagen, Denmark, vol3. p.103-108;
14. Criveanu, M. C., Gingu, O., **Sima, G.**, Mangra, M., Bucse, I., Ciobanu, M., Ghermec, C., *Properties of Sintered Steels Made from Fe Powders by Carburising-Sintering Process*, European Powder Metallurgy congress EUROPM 2009, 12-14 oct. 2009, Copenhagen, Denmark, vol I, p.55-60;
15. **Sima, G.**, Mangra, M., Gingu, O., Criveanu, M., Olei, B.A., *Influence of the reinforcing elements on the wear behavior of Al/(SiC+Graphite) composites elaborated by Spark Plasma Sintering technology*, The 4th International Conference on Powder Metallurgy RoPM2009, Craiova, Romania, 8-11 july, 2009, Under the EPMA auspices; ISBN 978-973-53-0097-5; p.175;
16. Gingu, O., Rotaru, P., Torralba, J.M., Harabor, A., Mangra, M., Ciupitu, M., **Sima, G.**, Criveanu, M., Olei, B.A., Bucse, I., *New sintering processing route for ceramic biocomposites based on hydroxyapatite nanopowders*, The 4th International Conference on Powder Metallurgy RoPM2009, Craiova, Romania, 8-11 july, 2009, Under the EPMA auspices; ISBN 978-973-53-0097-5; p.57
17. Criveanu, M.C., Mangra, M., Rosso, M., Gingu, O., **Sima, G.**, Ghermec, C., *Sintering behaviour of Iron Powders during carburising+sintering process for PM steel elaboration*, The 4th International Conference on Powder Metallurgy RoPM2009, Craiova, Romania, 8-11 july, 2009, Under the EPMA auspices, ISBN 978-973-53-0097-5, p.62;
18. **Sima, G.**, Gingu, O., Mangra, M., Ghermec O, Ghermec C.- *Research on the manganites powder particles processed by mechanical alloying. particles size evolution*, Review of Industrial Engineering, vol.2, 2008;
19. Gingu, O., Mangra, M., Orban, R., Clyne, B., Torralba, JM., **Sima, G.**, Gergely V., Ruis-Navas, E., Gordo, EO., *Foams and dense light-weight metallic composites processed by powder metallurgy technology*, Review of Industrial Engineering, no1, vol.1, 2008, Universitaria Printing House, Craiova; ISSN 1583-5200, p 66-75;
20. **Sima, G.**, Gingu, O., *Particle size distribution of Al/SiC powders composite elaborated by mechanical alloying*, Review of Industrial Engineering, vol.1, nr.2, 2008, Universitaria Printing House, Craiova; ISSN 1583-5200, p:62-65;
21. Ghermec,O., Mangra, M., Ciupitu, I., Ghermec C., Gingu, O., **Sima, G.**, *Studies regarding synthesis of strontium doped lanthanum manganite by mechanosynthesis - Review of Industrial Engineering*, vol.2, 2008, p:30-35;;
22. **Sima, G.**, Gingu, O., *Comparatison between some properties on the Antifriction Al-based Composite Materials Sintered by Classic and Spark Plasma Sintered route*, European Powder Metallurgy Congress and Exhibition EUROPM2007, Toulouse, France , 15-17 Oct 2007, vol.3, p. 221-223; ISBN 978-1-899072-31-6;

23. **Sima, G.**, Gingu, O., Mangra, M., *Research Regarding Al/(SiC+Graphite) composites processed by Spark Plasma Sintering Technology, (SPS)*, The International Conference on Material Science and Engineering, BRAMAT, 22-24 Februarie 2007, vol.1, p.45-428; ISSN 1223-9631;
24. **Sima, G.**, Gingu, O., et. all, *Nanoscale mechanical behaviour of PM aluminium matrix composites*, The International Magazine of the Powder metallurgy Industry, Metalpowder Report, Elsevier, no. 7 July/August 2006, p.101;
25. Gîngu, O., Ruiz-Navas, E., Campos, M., Gordo, E., **Sima, G.**, *Comparative microstructural analysis of PM Al-based composites sintered by classic and microwave route*, Proc. Of the European Congress and Exhibition on Powder Metallurgy EUROPM2005, Prague, Czech Republic, 2-5 Oct. 2005, vol. 2, p.455-460;
26. Gîngu, O., **Sima, G.**, Mangra, M., Pisc, M., Nicoara, V., Rădulescu Bota, P., *Processing of PM Al-based composite materials by microwave sintering*, Proc. Of International Conference SINTERING 05, Grenoble, France, 5-7 Sept. 2005, p.139-142;
27. Dumitru, N., **Sima, G.**, *Finite Element modelling of the cylindrical gear teeth*, Industrial Engineering Review, vol.1, nr.1, 2005, p. 17-22;
28. Gîngu, O., **Sima, G.**, Tudor, A., *Wear behaviour of Al/SiC composites for the automotive industry*, Industrial Engineering Review, vol.1, nr.1, 2005, p. 31-34;
29. Mangra, M., **Sima, G.**, Gîngu, O., *Composite materials for the automotive industry. Tribological characteristics*, Industrial Engineering Review, vol.1, nr.1, 2005, p. 45-48;
30. **Sima, G.**, Gîngu, O., *Particle size distribution of Al/SiC powders composite elaborated by mechanical alloying*, Industrial Engineering Review, vol.1, nr.1, 2005, p. 63-66;
31. **Sima, G.**, Burfon, L., Dumitru, N., Gîngu, O., Mangra, M., Ciolacu, F., *PM Al-Matrix Composites. Nanoscale mechanical behaviour*. Powder Metallurgy World Congress & Exhibition, Viena, Austria, 17-21 october 2004, p. 263-267;
32. **Sima, G.**, Gîngu, O., *Cold compaction behaviour of self lubrication composite powder Al/SiC+Graphite* International Conference on Materials Science & Engineering BRAMAT – 2003, 13-14 March 2003, Braşov – Romania, p 164-169;
33. **Sima, G.**, Mangra, M., Gîngu, O., Ciolacu, F., *On microstructural evolution of hybrid composites Al/SiC+Graphite during solid state sintering*, Second International Conference -Advanced Materials and Structures-, Timișoara, Romania, september 19-21, 2002, p 329-332;
34. Gîngu, O., **Sima, G.**, Ciolacu, F., Mangra, M., *Mechanical alloying process – a challenge for composite powder processing* Second International Conference -Advanced Materials and Structures-, Timișoara, Romania, september 19-21, 2002, p 163-166;
35. **Sima, G.**, Mangra, M., Gîngu, O., Orban, R.L., *On MMCs parts processing by powder metallurgy route*, Proceedings of the International Conference **DF PM 2002** – Deformation and Fracture in Structural PM Materials, Stará Lesná, September 15-18, 2002, IMR SAS Košice, Slovak Republic, p 87-89;
36. Gîngu, O., **Sima, G.**, Jumate, N., Orban, R.L., Mangra, M., *Critical study on the dimensional changes during the liquid state sintering of PM Al/SiC composites*, Third International Conference on Materials and Manufacturing Technologies, Cluj – Napoca, Romania, sept 12-14, 2002, p 471-476;
37. **Sima, G.**, Mangra, M., Gîngu, O., *Critical study on the dimensional change during solid state sintering of PM Al/SiC+Graphite composites*, Third International Conference on Materials and Manufacturing Technologies, Cluj – Napoca, Romania, sept 12-14, 2002, p 545-550;
38. Mangra, M., Sima G., Gingu O., *Tribological composite materials for the automotive industry. Functional characteristics*, Proc. of the 13th International Colloquium Tribology, Ostfildern, Germany, ISBN 973-8391-50-4, 2002, p.968-972;
39. Mangra, M., **Sima, G.**, Gîngu, O., V. Nicoară, *Influence on spark plasma sintering (SPS) process parameters on the functional characteristics of the barium ferrite permanent magnets*, Third International Conference on Materials and Manufacturing Technologies, Cluj – Napoca, Romania, sept 12-14, 2002, p 467-470;
40. Mangra, M., **Sima, G.**, Gîngu, O., Ciupitu, I. *Influence on the cooling rate on Al/SiC+graphite composite microstructure*, AMPT `01 International Conference on Advances in Materials and Processing Technologies, September 18-21, 2001 Leganés, Madrid, Spain, p. 1547-1551;
41. Gîngu, O., **Sima, G.**, Mangra, M., Orban, R. L., Jumate, N. *Al/SiC composite behavior at Differential Thermal Analysis as function of composite PM route*, AMPT `01 International Conference on Advances in Materials and Processing Technologies, Leganés, Madrid, Spain, September 18-21, 2001, p. 1535-1540;
42. **Sima, G.**, Mangra, M., Gîngu, O., Gheorghe, Șt. *Wear behavior of Al-based matrix composites depending on the reinforcing elements*, The 2nd World Tribology Congress, Vienna, sept. 03-07, 2001, p. 139;

43. Mangra, M., **Sima, G.**, Gîngu, O., Teişanu, C., Ciupitu, I., Gheorghe, Şt. *Tribological composites materials for the automotive industry, physical and mechanical characteristics*, The 2nd World Tribology Congress, Vienna, sept. 03-07, 2001, p. 491-496;
44. Gîngu, O., **Sima, G.**, Mangra, M., Ciupitu, I. *Wear behavior of Al/SiC composites depending on PM route manufacturing*, The 2nd World Tribology Congress, Vienna, sept. 03-07, 2001, p. 137;
45. Mangra, M., **Sima, G.**, Gîngu, O., Orban, R.L., *Researches concerning Al/(SiC+Graphite) nanocomposites powder particles elaboration having self-lubricating properties*, International Conference for Composites Engineering ICCE/7, July 2-8, 2000, Denver, Colorado, p. 587-588
46. Gîngu, O., Mangra, M., **Sima, G.**, Orban, R.L. *Al/SiC composite behaviour during Differential Thermal Analysis depending on the heating ambient*, International Conference for Composites Engineering ICCE/7, July 2-8, 2000, Denver, Colorado, p. 277-278;
47. Gîngu, O., Orban, R.L., Gheorghe, Şt., **Sima, G.**, *The optimization process of Al/SiC composites sintering concerning some mechanical characteristics*, Powder Metallurgy Science and Technology, The 2nd International Conference on Powder Metallurgy, RoPM 2000, Cluj Napoca, Romania, 6-8 July 2000, vol.2, p. 571-574;
48. Gîngu, O., Orban, R.L., **Sima, G.**, *Differential Thermal Analysis on Al/SiC composites manufactured by PM technology*, The 10th International Metallurgy and Materials Congress, Istanbul, Turkey, 18-20 May 2000, vol. 3, p. 1993-1997;
49. Gîngu, O., Orban, R.L., Mangra, M., **Sima, G.**, *New method Al/SiC composite elaboration by PM technology*, The 2nd National Powder Metallurgy Conference with International Participation, Ankara, Turkey, 15-17 Sept. 1999, vol.2, p. 323-327;
50. Mangra, M., **Sima, G.**, *Studies concerning the elaboration of a magnetic materials type metallic/ceramic composite by mechanical alloying*, Proceedings of the 1998 Powder Metallurgy World Congress and Exhibition, Granada, Spain, October 18-22, 1998, p. 396-401;
51. Gîngu, O., **Sima, G.**, *Processing route for Al/SiCp composites by Powder Metallurgy*, XXX October Conference on Mining and Metallurgy, Bor, Yugoslavia, 1-3 Oct. 1998, vol. II, p. 431-434;
52. Gîngu, O., **Sima, G.**, *Technico-economic aspects of application of composite materials with metallic matrix in motors industrie*, Analele Universităţii „Constantin Brâncuşi” din Târgu-Jiu, seria A, nr. 4/1997, Ed. “Ager” Tg. Jiu, p. 315-320;
53. Gîngu, O., **Sima, G.**, *Researches concerning behaviour Al/(SiC+Cu) at microhardness tasting*, Annals of University of Craiova, Series College, nr. 1/1998, p. 87-91, ISSN 1223-6020.

Collaborations

- Technical University of Cluj-Napoca, Faculty of Materials Science and Engineering, Romania
- Politehnica University of Bucharest, Laboratory of Machine Components and Tribology, Romania
- Polytechnics di Torino, Materials Science and Chemical Engineering Department, Italy
- University Carlos III of Madrid, Faculty of Materials Science and Engineering, Spain
- “Max-Planck” Institute, Dresden, Germany

Books

1. **Sima, G.**, *Mechanics and mechanical vibrations* (2009), Universitaria Printing House, Craiova, ISBN: 978-606-510-581-2; p 227;
1. **Sima, G.**, *Tribological materials sintered* (2007), Universitaria Printing House, Craiova, ISBN: 978-973-742-723-6; p 228;
2. Mangra, M., Gingu, O., Gheorghe, St., Ciupitu, C. Teisanu, C., **Sima, G.**, (2002) *Techologies and Aplications in Powder Metallurgy*, Universitaria Printing House, Craiova, 2002, ISBN: 973-8043-106-5., p 276 .

University books

1. Gingu, O., **Sima G.**, *Material Science – academic course*, Universitaria Printing House, Craiova, 2009;
2. Gingu, O., Gheorghe, St., Ciupitu, I., **Sima, G.**, *Powder metallurgy technology*, University of Craiova, Printing House, 2001;

Laboratory Handbook

1. **Sima, G., Gingu, O., Stefan, I.**, Material Science – laboratory handbook, *Universitaria Printing House, Craiova, 2011*;
2. **Sima, G.**, Mechanics and mechanical vibrations –book seminar, *Printing House, Craiova, 2011*

Society Memberships, Honors and Awards

- 2009: The IVth Edition Hübners Who is Who, ISBN 978-3-7290-0086-5, p 1249
- 2005: Romanian Welding Association (member);
- 2005: Romanian General Society of Engineers (member)
- 2000: Romanian Society of Tensometry, (member);
- 1999: Romanian Society of Nonconventional Technologies (member);
- 1997: Romanian Society of Powder Metallurgy (member).

Other Professional Activities

❖ Summer schools, workshops

Sept. 23-25, 2004: Workshop „Qualifications Agreement within the European educational process of navigation **QUEENAV 2004**”, Drobeta Turnu Severin, România; organizers: Faculty of Engineering and management of Technological Systems from Drobeta Turnu Severin, Romanian naval Authority, Romanian Ministry of Transportation (member of the organizing committee);

❖ European programs

- Oct 2003 - participation at SOCRATES program at Polytechnic University of Turin, Italy
- 2. **2009-prezent - POSDRU project, axis 1, direction 1.2, 2009-2011, Specialization of the university staff for „Supervisor Academic Staff” for industrial/technological practice and research activity, coordinator Technical University „Gheorghe Asachi”, Iasi; funding course: 2009-2012 (long term expert in technical field).** (<http://193.226.12.231:8080/dm/>). *My work in the program is focused on:*
 - 08-09 april 2011: participation in the I Interuniversity Conference of the training program organized by University of Craiova, as a partner;
 - 08-14 oct 2011: participation at the University Carlos III of Madrid, Department of Materials Science and Engineering and Chemical Engineering in order to inform about organize and evaluation of students performing practical training in engineering curricula;
 - 19-20 oct 2011: participation in the second Interuniversity Conference II training module organized by the Technical University "Gheorghe Asachi" Iasi

Other activities

- responsible for Materials Engineering specialization
- responsible for collecting data and information in the field of Materials Engineering for preparation (**RNCIS**) http://www.rncis.ro/portal/page?_pageid=54,1&_dad=portal&_schema=PORTAL
- responsible for collecting data and information in the field of Materials Engineering to assess Universities and Study Program in order classification hierarchy universities and study programs (**UEFISCD**) <http://uefiscdi.gov.ro/>;
- Materials Science specialization preparation documents for evaluation **ARACIS**
- editing staff member of the International Conference "Advances in Engineering and Management - ADEM 2010, organized by the Faculty of IMST, 19-21 May 2010, (<http://www.imst.ro/>)
- secretary at Advanced Materials section - International Conference "Advances in Engineering and Management - ADEM 2010 organized by the Faculty of IMST, 19-21 May 2010; (<http://www.imst.ro/>)
- Secretary-General of the International Conference "Advances in Engineering and Management ADEM 2012 organized by the Faculty of Mechanics, Dept of IMST, 13-14 December 2012; (<http://www.imst.ro/>)
- member of committee
 - 2007-present: License - Materials Science specialization
 - 2009-present: master - Advanced Materials, Engineering and Quality Management specialization

Hobby

Music, dance, movies