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1. Academic Titles

- Diploma of Mining and Metallurgical Engineer, National Technical University of Athens, Greece, 7.85/10.0
- Ph.D. in Chemical/Extraction Metallurgy, University of Wales-Swansea, Department of Materials Engineering, sponsored by the British Council and the Th. & N. Valsamakis Foundation
- City and Guilds in Information Technology (Coding and Programming in C / Microcomputer, Operating systems and environments / Database methods), The City & Guilds London Institute

2. Professional (Academic, Research & Industrial) Experience

- Professor of “Applied Metallurgy”, University of Ioannina (UOI), Department of Materials Science and Engineering, Greece (2017- to date)
- Visiting Professor, Hellenic Naval Academy, (Feb. 2018-Aug. 2018)
- Associate Professor of “Applied Metallurgy”, University of Ioannina (UOI), Department of Materials Science and Engineering, Greece (2010- 2017)
- Assistant Professor of “Applied Metallurgy”, tenure, University of Ioannina, Department of Materials Science and Engineering, Greece (2006-2010)
- Assistant Professor of “Applied Metallurgy”, University of Ioannina, Department of Materials Science and Engineering, Greece (2002-2006)

- Director of the Laboratory of Applied Metallurgy, University of Ioannina (2004-to date), *certified by the Official Government Gazette (FEK 254/10.02.2016 s. B)*
- Head of Research Laboratories, Bentonite Division, S&B Industrial Minerals SA (2000-2002), *supervising 8 technologists/foremen, analysis of at least 5000 samples per year, R&D in new techniques of evaluation of the company products*
- Research & Service Engineer, Metal Industrial Research & Technology Co (MIRTEC SA), Volos, Greece (1997-2000), *submission of proposals, realization of research projects, semi-industrial plasma furnace assembly, installation and operation, realization of sectorial studies, etc.*
- Post-doctoral Researcher, Univ. Salford, Research Institute for Design, Manufacture & Marketing, UK (1995-1997). Research projects: *Magnetron sputtered functionally graded coatings, Y-PSZ coatings, intermetallic coatings, sponsored by BNFL (British Nuclear Fuels)*
- Post-doctoral Researcher, University of Manchester Institute of Science & Technology-Corrosion & Protection Centre, UK (1992-1995). Research projects: *Degradation of ceramics in nuclear reactor environments-sponsored by BNFL, Development of software for thermodynamic phase diagram construction in the systems U, UF6 – ceramics - sponsored by BNFL, Degradation of polymeric matrix composites in saline environments – sponsored by the US Office of Naval Research*
- Trainee in *Scanning Electron Microscopy*, Centre of Research & Technology, Hellenic Airforce (1988, 6 m)
- Researcher, Laboratory of Extraction Metallurgy, NTUA, (*Research Project on the Prereduction of chromite concentrates*), (1987, 10 m)
- Diploma Thesis in Hellenic Ferroalloys SA (*Mechanical Strength of Sintered Chromite Pellets*), (1986, 12 m)

3. Teaching Activities at UoI

Undergraduate (course organizer)

- Physical Metallurgy I (13w*4h/w, 2001- 2006)
- Physical Metallurgy II (13w*4h/w, 2002- to date)
- Applied Metallurgy Laboratory (13w*4h/w, 2004- to date)
- Corrosion & Protection of Metals (13w*3h/w, 2002- to date)
- Engineering Alloys (13w*3h/w, 2003- to date)
- Aluminium Technology (13w*3h/w, 2003- to date)
- Entrepreneurship I (4 semesters, consultancy work, teaching undertaken by the Dept. Economics, 2004-2008)
- Entrepreneurship II (4 semesters, business plan formulation in metal industries, partnership with the Dept. Economics, 2004-2008)

Post-graduate (module organizer)

- Phase Transformations in Metals-6h/y / Advanced Metallic Materials-6h/y, coordinator of the course 2004-2009/ Laboratory Courses in Metallic Materials 6h/y (MSc in Chemistry & Technology of Materials, 2004-to date)

- Metallic Materials of High Added Value, 7w*3h/w (MSc in Advanced Materials, also having acted as scientific responsible, 2014-todate)
- Surface Degradation of Metallic Materials and Protection Measures, 7w*3h/w (MSc in Advanced Materials, also having acted as scientific responsible, 2014-todate)

Long life learning

- Experimental Techniques for Evaluating Surface Degradation of Materials / Properties and Applications of Advanced Metallic Materials (Program for long-life learning and knowledge update of university graduates, 12h, 2015)

Supervision of Theses

- Supervision of **93 Diploma** Theses: 90 completed and 3 in progress (*Corrosion of Metals, Physical Metallurgy: Development, Heat Treatment and Evaluation of Metallic Materials, Thermally Sprayed Coatings*)
- Supervision of **19 MSc** Theses: 14 completed (*Construction Materials, Corrosion of Advanced Alloys - Archaeological Metals - Reinforced Concrete, Metal Matrix Nano Composites, Heat Treatment of Metals, Thermally Sprayed Coatings*) and 5 in progress
- Supervision of **7 PhD** theses: 6 completed: 1) *Development of New Glass Systems for Heavy Metal Entrapment*, 2) *Development of Nanostructured Coatings by Thermal Spraying*, 3) *Corrosion and Wear Behaviour of Nanostructured Cermet Coatings*, 4) *Environmental Degradation Study of Novel Al-Matrix Composites reinforced by Carbide Particles*, 5) *Synthesis of High Temperature Coatings by the New Method CAFSY (Combustion-Assisted Flame Spraying) – Corrosion, Wear and Erosion evaluation*, 6) *Development and Surface properties of Al-Co Complex Metallic Alloys* and 1 is being conducted (*Corrosion of Concrete Reinforced with Metals of Restoring Ancient Components- Effect of Low Cost Inhibitors*)
- Member of tri-membered advisory board of **8 PhD** theses: 3 completed (*Physical-Chemical Evaluation of Modified Clays as Heavy Metal Adsorbents, Enhanced Bonded Aircraft Repair Using Nano-Modified Adhesives, Fatigue, corrosion and NDT characterization of concrete reinforcing steels*), 5 in progress
- Member of seven-membered committee of **8 PhD** theses: (5 completed, 2 in progress)
- Evaluator of PhD thesis from the National Institute of Technology Jaipur (India) on *erosion behaviour & thermal spraying*, supervisor: Prof. Ashok Sharma
- Chairwoman of the 3-membered examining committee of the PhD thesis: *Nanostructured Amorphous Carbon-Metal Films for Protective and Solid Lubricant Applications*, Technological University of Cyprus, Department of Mechanical Engineering and Materials Science and Engineering, supervisor: Asst. Prof. G. Constantinides

4. Research Interests

- Corrosion of metallic materials (electrochemical and high temperature)
- Advanced coatings (nano- and micro- structured, multi-layer, gradient)
- Metastable alloys (amorphous, nanocrystalline, ultra-fine structured, complex metallic alloys)

- Particulate metal matrix composites (nano- and ultra-fine reinforcements, nano- and fine structured matrix)
- Advanced techniques for alloy characterization
- New technologies for alloy manufacture
- Alloy heat treatment

5. Distinctions

- 5 scholarships: Human Capital Mobility (Oviedo Univ. 1997), British Council (PhD), Finnish Ministry of Education (PhD), Th. and N. Valsamakis Foundation (PhD), Hellenic State Foundation of Scholarships (NTUA-undergraduate).
- Highest national score to attend the Mining & Metallurgical Eng. Dept. (NTUA) after National Exams
- Included in the top five engineers of MIRTEC SA (1998, 1999).
- Scientific/technical program committee member of 9 Int. Conf. (6th Int. Conf. Engineering against Fracture-ICEAF VI, Spetses, June 2020; 5th Int. Conf. Engineering against Fracture-ICEAF V, Chios, June 2018; 2nd Int. Conf. on Materials Science and Engineering Application- ICMSEA2017, Nanjing, China, April, 2017; 4th Int. Conf. Engineering against Fracture-ICEAF IV, Skiathos, June 2015; 3rd Global Conf. on Materials Science and Engineering (CMSE 2014) Xianning, Hubei, China, Nov. 2014; Materials & Renewable Energy (MRE 2014), Hong-Kong, Aug. 2014; 2nd Global Conf. on Materials Science and Engineering (CMSE 2013) Xianning, Hubei, China, Nov. 2013; 3rd Int. Conf. Engineering against Fracture-ICEAF III, Kos, June 2013; The International Congress on Materials and Renewable Energy, Athens, July 2013; 2nd Int. Conf. Engineering against Fracture-ICEAF II, Mykonos, June 2011). Also proposed: 2nd Int. Workshop on Materials Science and Engineering [IWMSE2016], August 12-14, 2016, Guangzhou, China and Corrosion & Surface Treatment in Industry 2015, Slovakia, 30th Sept - 2nd Oct 2015, etc.)
- Scientific committee member of 6 Nat. Conf. on Metallic Materials (2004, 2007, 2010, 2013, 2016, 2019)
- Organizer and Chairwoman of 1 National 1d-Conf. on Metallic & Ceramic Materials in Technological Applications (Apr. 2009).
- Organizer and Chairwoman of the 6th National Conference on Metallic Materials (3d -Dec. 2016)
- As a member of the administrative board of the Hellenic Metallurgical Society participating in the organization of EUROMAT 2017
- Best Diploma Thesis award, Dec. 2019 (3rd National Competition of Diploma and MSc theses in Materials Science & Engineering 2018-2019) for A. Faka (co-supervision with Dr. A. Zervaki, Univ. Thessaly)
- Best oral presentations at the 6th Panhellenic Conference on Metallic Materials, Ioannina Dec. 2016, K. Lentzaris, **A.G. Lekatou**, A. E. Karantzalis, E. Antonakis, *High temperature oxidation behavior of heat treated cast austenitic stainless steel* & A. Pouliou, D. Petroglou, E. Georgatis, **A. Lekatou**, A.E. Karantzalis, *Development and characterization of refractory high entropy alloys*
- Best poster presentation at the 6th Panhellenic Conference on Metallic Materials, Ioannina Dec. 2016, **A.G. Lekatou**, I. Kenanoglou, K. Kalantzis, A.E. Karantzalis, D. Sioulas, K.

Lentzaris, A.K. Sfikas, A. E. Karantzalis, *Surface degradation of composites prepared by Al₂O₃ and Ni nanopowders*.

- Second best poster award in the 2006 Int. Thermal Spray Conf., May 15-18, 2006, Seattle, Washington, **A. Lekatou**, N. Gavrilakis, D. Grimanelis: “Electrochemical behaviour of MMC HVOF coatings”, Thermal Spray 2006: Science, Innovation, and Application,” Ed. B. R. Marple, C. Moreau, Pub. ASM Int., ISBN 0-87170-809-4, 207
- Second best paper at the 5th Panhellenic Conference on Metallic Materials, Volos Nov. 2013, A.K. Sfikas, **A. Lekatou**, A.E. Karantzalis, D. Sioulas, “*The role of Complex Metallic Alloys in the electrochemical behaviour of the system Al-Co*”, 233-238.
- Elected member of the administrative board of the Hellenic Metallurgical Society (member of FEMS), 2010-2013, 2013-2016, 2020-2023.
- Member of the Editorial Board of the “Material Science and Engineering with Advanced Research” Journal, <http://verizonaonlinepublishing.com/MaterialScienceEditors.aspx>
- Member of the Editorial Board of the “Technology Transfer: fundamental principles and innovative technical solutions”, <http://eu-jr.eu/ttfpits>
- Member of the Senate of the Univ. Ioannina representing the Assistant Professors (2003-2004)
- IRCA certified inspector of quality assurance systems (2000)
- Succeeded in the European Commission contest for the post of ‘Scientific officer’ (COM/R/A/4162 1227, 1997)
- Proposal evaluator for the Ministry of Development (investment and research), Ministry of Education (research), NTUA (research)
- Reviewer of more than 20 international scientific journals

6. Publications

6.1 Books

1. **A. Lekatou**: “*Corrosion and Protection of Metals in Simple Words*”, 2013, Nemertes Pub., ISBN: 978-960-9951-2-4, 620 p. (in Greek)
2. **A. Lekatou**: «*Introduction to Corrosion & Protection of Metals*», 2010, Theodoridis Pub, ISBN: 978-960-86109-9-6, 400 p. (in Greek)
3. **A. Lekatou**: «*Phase Transformation in Metals*», Theodoridis Pub, 2009, ISBN-978-960-86109-3-4, 393 p. (in Greek)
4. **A. Lekatou**, S. Lekatos: «*Introduction to Physical Metallurgy I*», Theodoridis Pub., 2009, ISBN-978-960-86109-8-9, 304 p. (in Greek)
5. **A. Lekatou**: «*Engineering Alloys*», Papasoteriou Pub., 2005, ISBN 960-7530-62-4, 431 p. (in Greek)

6.2. University Departments having proposed the above books as main course books:

- 1.1. Univ. Patras, Chemical Eng. Dept., recommending course: Material Protection Technologies
- 1.2 Aristotle Univ., Mech. Eng. Dept., recommending course: Corrosion & Protection of Metals

- 1.3. Technological Institute of Ionian Islands: Dept. Environment Technologists and Cultural Heritage Conservation, recommending course: Maintenance of Metallic Objects I
- 1.4. Univ. Ioannina, Mater. Sci. Eng. Dept., recommending course: Corrosion & Protection of Materials
- 2.1. Technological Institute of Ionian Islands: Dept. Environment Technologists and Cultural Heritage Conservation, recommending course: Maintenance of Metallic Objects I
- 2.2. Univ. Patras, Chemical Eng. Dept., recommending course: Material Protection Technologies
- 3.1. Aristotle Univ., Mech. Eng. Dept., recommending course: Thermal Processes and Phase Transformations in Alloys
- 3.2. Univ. Ioannina, Mater. Sci. Eng. Dept., recommending course: Physical Metallurgy II
- 4.1. Aristotle Univ., Mech. Eng. Dept., recommending course: Laboratory Methods of Material Investigation
- 4.2. Univ. Ioannina, Mater. Sci. Eng. Dept., recommending course: Physical Metallurgy I
- 5.1. Univ. Patras, Mater. Sci. Dept., recommending course: Industrial Metals and Alloys
- 5.2. Aristotle Univ., Mech. Eng. Dept., recommending course: Advanced Materials Technology
- 5.3. Aegean Univ., Product & Systems Design Dept., recommending course: Engineers and Materials in Design
- 5.4. Nat. Tech. Univ. Athens, Naval Architecture Marine Eng. Dept., recommending course: Materials Sci. & Technol. plus Lab.

6.3 Refereed Journals

6. **A.G. Lekatou***, S. Tsouli, C. Nikolaidis, S. Kleftakis, I.K. Tragazikis, T.E. Matikas, *Effect of fly ash on the corrosion performance and structural integrity of stainless steel concrete rebars in acid rain and saline environments*, Fracture and Structural Integrity, 2019, DOI: 10.3221/IGF-ESIS.tt.uu
7. E. Chantziara, K. Lentzaris, **A.G. Lekatou***, A.E. Karantzalis*, *Sliding wear and solid particle erosion response of aluminum reinforced with tungsten carbide nanoparticles and aluminide particles*, Fatigue & Fracture of Engineering Materials & Structures, 2019, 42(7), 1548-1562
8. S. Tsouli, **A.G. Lekatou***, C. Nikolaidis, S. Kleftakis, *Corrosion and tensile behavior of 316L stainless steel concrete reinforcement in harsh environments containing a corrosion inhibitor*, Structural Integrity Procedia, 2019, 17, 268-275
9. **A.G. Lekatou***, A. Poulia, H. Mavros, A.E. Karantzalis, *Thermal treatment, sliding wear and saline corrosion of Al in-situ reinforced with Mg₂Si and ex-situ reinforced with TiC particles*, J. Mater. Eng. Perform., 2018, 27(10), 5030-5039
10. K. Lentzaris, A. Poulia, E. Georgatis, **A.G. Lekatou**, A.E. Karantzalis, *Analysis of microstructure and sliding wear behavior of Co_{1.5}CrFeNi_{1.5}Ti_{0.5} high entropy alloy*, J. Mater. Eng. Perform., <https://doi.org/10.1007/s11665-018-3374-y>
11. **A.G. Lekatou***, N. Gkikas, V. Gousia, A.E. Karantzalis, K. Lentzaris, *Effects of in-situ intermetallics on the microstructural array and saline corrosion performance of cast Al/WCp composites*, J. Mater. Eng. Perform., 2018, 27(10), 5164-5176
12. S. Tsouli, **A.G. Lekatou***, S. Kleftakis, T.E. Matikas, P.T. Dalla, *Corrosion behavior of 304L stainless steel concrete reinforcement in acid rain using fly ash as corrosion inhibitor*, Procedia Structural Integrity, 2018, 10, 41-48

13. D. Baltzis D, O. Evaggelou, **A.G. Lekatou**, A.S. Paipetis, Acoustic Emission Feasibility Study for Carbon Epoxy Coated Aluminum Corrosion Monitoring, *Int. J. Metallurgical & Materials Engineering*, 2018, 4, 143, doi: <https://doi.org/10.15344/2455-2372/2018/143>
14. V.G. Efremenko, Yu.G. Chabak, K. Shimizu, **A. Lekatou**, T.V. Pastukhova, A.Yu. Azarkhov, V.I. Zurnadzhy, *Comparative analysis of the microstructural features of 28wt% Cr-cast iron fabricated by pulsed plasma deposition and conventional casting*, *J. Mater. Eng. Perform.*, 2018, 27(2), 379–388.
15. V. I. Zurnadzhy, V. G. Efremenko, E. V. Dunaev, **A. Lekatou**, R. A. Kussa, Increasing volume hardness of steel grinding balls using Q-N-P HEAT TREATMENT, *Science and Transport Progress, Bulletin of Dnipropetrovsk National University of Railway Transport*, 2018, 78(2), 103-113, DOI: <https://doi.org/10.15802/stp2018/129535>
16. S. Tsouli, **A.G. Lekatou***, E. Siozos, S. Kleftakis, Accelerated corrosion performance of AISI 316L stainless steel concrete reinforcement used in restoration works of ancient monuments, *MATEC Web of Conferences 2018*, 188, 03003
17. **A.G. Lekatou***, M. Mpalanou, K. Lentzaris, A.E. Karantzalis, N. Melanitis, Microstructure and surface degradation of Al reinforced by Al_xW intermetallic compounds via different fabrication routes, *MATEC Web of Conferences 2018*, 188, 03001
18. E. Chantziara, K. Lentzaris, **A.G. Lekatou**, A.E. Karantzalis, Solid particle erosion response of aluminum reinforced with tungsten carbide nanoparticles and aluminide particles, *MATEC Web of Conferences*, 2018, 188, 03002
19. **A.G. Lekatou***, A.K. Sfikas, A.E. Karantzalis, *The influence of the fabrication route on the microstructure and surface degradation properties of Al reinforced by Al₉Co₂*, *Materials Chemistry & Physics*, 2017, 200, 33-49.
20. **A. Lekatou***, N. Gkikas, A.E. Karantzalis, G. Kaptay, Z. Gacsi, P. Baumli, A. Simon, *Effect of wetting agent and carbide volume fraction on the wear response of aluminum matrix composites reinforced by WC nanoparticles and aluminide particles*, *Archives of Metallurgy and Materials*, 2017, 62, 2B, 1235-1242.
21. Efremenko V.G., Chabak Yu.G., Shimizu K., **Lekatou A.G.**, Zurnadzhy V.I., Karantzalis A.E., Halfa H., Mazur V.A., Efremenko B.V., *Structure refinement of high-Cr cast iron by plasma surface melting and post-heat treatment*, *Materials Design*, 2017, 126, 278–290
22. G. Efremenko, Yu. G. Chabak, A. E. Karantzalis, **A. Lekatou**, A. Vakulenko, V. A. Mazur, V. I. Fedun, Plasma case hardening of wear-resistant high-chromium cast iron, *Strength of Materials*, 2017, 49(3), DOI 10.1007/s11223-017-9886-0.
23. **A.G. Lekatou***, I. Kenanoglou, K. Kalantzis, A.E. Karantzalis, D. Sioulas, K. Lentzaris, A.K. Sfikas, *Surface Degradation of Composites Prepared by Al₂O₃ and Ni Nanopowders*, *Mater. Sci. Eng. Adv. Res. SI*, 2017, 7-18, 7-18. doi: <https://doi.org/10.24218/msear.2017.2S>
24. K. Lentzaris, **A.G. Lekatou***, A. Ntoumazios, A.E. Karantzalis, A.K. Sfikas, *Solid Particle Erosion of Aluminum In-Situ Reinforced with a Cobalt Aluminide*, *Mater. Sci. Eng. Adv. Res. SI*, 2017, 19-25, <https://doi.org/10.24218/msear.2017.3S>
25. E. Karapanou, **A.G. Lekatou**, A.K. Sfikas, E. Georgatis, K. Lentzaris, A.E. Karantzalis, *Vacuum Arc Melting Processed Fe-Al Matrix Based Intermetallic Composites, Reinforced with VC Phases: Assessment of Microstructure, Sliding Wear and Aqueous Corrosion Response*, *Mater. Sci. Eng. Adv. Res. SI*, 2017, 1-6
26. E. Bata, K. Lentzaris, **A.G. Lekatou**, N.M. Barkoula, A. Poulia, *Effect of Solid Particle Erosion on the Aqueous Corrosion Behaviour of a Ti6Al4V Sheet*, *Mater. Sci. Eng. Adv.*

Res. SI, 2017, 26-33

27. G. Bakoulis, **A.G. Lekatou**, A. Poulia, A.K. Sfikas, K. Lentzaris, A.E. Karantzalis, *Al - (Al₉Co₂, Al₁₃Co₄) Powder Metallurgy Processed Composite Materials: Analysis of Microstructure, Sliding Wear and Aqueous Corrosion*, Mater. Sci. Eng. Adv. Res. SI, 2017, 53-60
28. **A. Lekatou***, A.K. Sfikas, Ch. Petsa, A.E. Karantzalis, *Al-Co alloys prepared by vacuum arc melting: Correlating microstructure evolution and aqueous corrosion behavior with Co content*, Metals 2016, 6(3), 46; doi:10.3390/met6030046, Special issue: Oxidation of metals.
29. A. Poulia, E. Georgatis, **A. Lekatou**, A.E. Karantzalis, *Microstructure and wear behavior of a refractory high entropy alloy*, Int. Journal of Refractory Metals and Hard Materials, 2016, 57, 50–63.
30. D. Baltzis, S. Orfanidis, **A. Lekatou**, A.S. Paipetis, *Stainless steel coupled with carbon nano-tube modified epoxy and carbon fibre composites: Electrochemical and mechanical study*, Plastics, Rubber and Composites: Macromolecular Engineering, 2016, 45(3), 95-103.
31. V. Efremenko, Y.G. Chabak, **A. Lekatou**, A. Karantzalis, A. Efremenko, *High-temperature oxidation and decarburization of 14.55 wt pct Cr-cast iron in dry air atmosphere*, Metallurgical & Materials Transactions A, 2016, 47 (4), 1529-1543
32. V.Gousia, A. Tsioukis, **A. Lekatou**, A.E. Karantzalis, *Al-MoSi₂ particulate composites produced by flux-aided casting: Assessment of microstructure, sliding wear, solid particle erosion and aqueous corrosion behaviour*, J. Materials Engineering & Performance, 2016, 25 (8), 3107-3120.
33. A.E. Karantzalis, Z. Arni, K. Tsirka, A. Evangelou, **A. Lekatou**, V. Dracopoulos, *Fabrication of TiC reinforced composites by Vacuum Arc Melting: TiC mode of re-precipitation in different molten metals and alloys*, J. Materials Engineering & Performance, 2016, 25 (8), 3161-3172.
34. V.G. Efremenko, Yu.G. Chabak, **A. Lekatou**, A.E. Karantzalis, K. Shimizu, V.I. Fedun, A.Yu. Azarkhov, A.V. Efremenko, *Pulsed plasma deposition of Fe-C-Cr-W coating on high-Cr-cast iron: Effect of layered morphology and heat treatment on the microstructure and hardness*, Surface & Coatings Technology, 2016, 304, 293-305.
35. **A. Lekatou***, D. Sioulas, A.E. Karantzalis, D. Grimanelis, *A comparative study on the microstructure and surface property evaluation of coatings produced from nanostructured and conventional WC-Co powders HVOF-sprayed on Al7075*, Surface & Coatings Technology, 2015, 276, 539–556.
36. G. Xanthopoulou, A. Marinou, G. Vekinis, **A. Lekatou**, M. Vardavoulias, *Synthesis and heat treatments of NiAl-Ni₃Al high-temperature sprayed coatings by in-flight combustion synthesis (CAFSY)*, Int. J. Self-Propagating High-Temperature Synthesis, 2015, 24(4), 192–202
37. A. Simon, D. Lipusz, P. Baumli, P. Balint, G. Kaptay, G. Gergely, A. Sfikas, **A. Lekatou**, A. Karantzalis, Z. Gacsi, *Microstructure and mechanical properties of Al-WC composites*, Archives of Metallurgy and Materials, 2015, 60(2), 1517-1521.
38. Somlyai-Sipos L. - Baumli P. - Kaptay G. - Bálint P. - Dezső A. - Simon A. - Gácsi Z. - **Lekatou, A.** - Sfikas, T. - Karantzalis, A., *Volfrám-karbid szemcsékkel erősített alumínium mátrixú kompozit fejlesztése (Development of tungsten carbide particle reinforced aluminum matrix composites)*, Bányászati és kohászati lapok (Mining and Metallurgical

- Pages). *Kohászati (Metallurgy)*, 2015, 148(2), 34-39, in Hungarian.
39. **A. Lekatou***, A.E. Karantzalis, A. Evangelou, V. Gousia, G. Kaptay, Z. Gacsi, P. Baumli, A. Simon, *Aluminium reinforced by WC and TiC nanoparticles (ex-situ) and aluminide particles (in-situ): Microstructure, wear and corrosion behaviour*, *Materials & Design*, 2015, 65(1), 1121-1135.
 40. G. Gkikas, **A. Lekatou**, D. Sioulas, A.S. Paipetis, *Effect of MWCNT doped adhesives on the degradation of bonded joints in corrosive environments*, *Plastics, Rubber and Composites*, 2014, 43(10), 322-329.
 41. G. Xanthopoulou, A. Marinou, G. Vekinis, **A. Lekatou**, M. Vardavoulias, *Ni-Al and NiO-Al composite coatings by combustion-assisted flame spraying*, *Coatings* 2014, 4, 241-260; doi:10.3390/coatings4020241
 42. A.E. Karantzalis, **A. Lekatou**, M. Evaggelidou, *Microstructure and sliding wear assessment of Co-TiC composite materials*, *Int. J. Cast Metals Research*, 2014, 27 (2), 73-79.
 43. G. Gkikas, A. Paipetis, **A. Lekatou**, N.M. Barkoula, D. Sioulas, B. Canflanca, S. Florez, *Corrosion and environmental degradation of bonded composite repair*, *I. J. Structural Integrity*, 2013, 4 (1), 67-77.
 44. H. Mavros, A.E. Karantzalis, **A. Lekatou**, *Solidification observations and sliding wear behaviour of cast TiC particulate reinforced AlMgSi matrix composites*, *J. Composite Materials*, 2013, 47 (17), 2149-2162
 45. **A. Lekatou***, A. Sfikas, A.E. Karantzalis, D. Sioulas, *Microstructure and corrosion performance of Al-Co alloys*, *Corrosion Science*, 2012, 63, 193-209.
 46. E. Georgatis, **A. Lekatou***, A.E. Karantzalis, H. Petropoulos, S. Katsamakis, A. Poulia, *Development of a cast Al-Mg₂Si-Si In-Situ composite: microstructure, heat treatment and mechanical properties*, *J. Materials Engineering & Performance*, 2013, 22 (3), 729-741
 47. A.E. Karantzalis, **A. Lekatou***, A. Kapoglou, H. Mavros, V. Dracopoulos, *Phase transformations and microstructural observations during subcritical heat treatments of a high-chromium cast iron*, *J. Materials Engineering and Performance*, 2012, 21 (6), pp. 1030-1039
 48. A. Poulia, E. Georgatis, **A. Lekatou**, A.E. Karantzalis, *Dry - sliding wear response of MoTaWNbV high entropy alloy*, *Adv. Eng. Mater.* DOI: 10.1002/adem.201600535.
 49. G. Gkikas, D. Sioulas, **A. Lekatou**, N.M. Barkoula, A.S. Paipetis, *Enhanced bonded aircraft repair using nano-modified adhesives*, *Materials and Design*, 2012, 41, 394-402
 50. A. Karantzalis, **A. Lekatou**, K. Tsirka, *Solidification observations and sliding wear behavior of vacuum arc melting processed Ni-Al-TiC composites*, *Materials Characterization*, 2012, 69, 97-107.
 51. D. Zois, **A. Lekatou***, M. Vardavoulias, T. Vaimakis, A.E. Karantzalis, *Partially amorphous stainless steel coatings: Microstructure, annealing behaviour and statistical optimization of spray parameters*, *Surface & Coatings Technology*, 2011, 206 (6), 1469-1483.
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6.6 Article in national press

211. **Lekatou, A.**: *“The integrated aluminum industry in Greece”*, *Special Issue on Aluminum KERDOS*, Oct. 1998., in Greek.

6.7 Software Development

212. **A. Lekatou**, S.B. Lyon: *“Thermodynamic Phase Diagrams in the systems U, UF6-Ceramics”*, Feb. 1992.

6.8 Book Chapters

213. Sofia Tsouli, **Angeliki G. Lekatou***, Spyridon Kleftakis: *The effect of fly ash on the corrosion performance of AISI 316L stainless steel reinforced concrete for application to restoration works of ancient monuments*, Maria Kouli and Fulvio Zezza (Eds): *“Conservation of Monuments in the Mediterranean Basin, Natural and Anthropogenic Hazards and Sustainable Preservation”*, Springer Nature, 2018, Ch. 17, ISBN: 978-3-319-78092-4, https://doi.org/10.1007/978-3-319-78093-1_17
214. **A. Lekatou**: *Priorities for the technological evolution of the metallurgical industry of the region of Thessaly, region of Thessaly, Entrepreneurship and Innovation Policies in the European Periphery. A research Agenda*”, Eds: Y.L. Bakouros, P.D. Skayannis, Y.A. Stamboulis, U. Thessaly Press, 2002, 221-236, ISBN: 960-8029-18-X.

6.9 Book Editor

215. Proceedings of the 6th Pan-Hellenic Conference in Metallic Materials, Ioannina, 7-9 Dec. 2016, Tziolas Pub., ISBN: 978-960-418-664-8

6.10 PhD Thesis

“Solid state reduction of Greek chromite”, University of Wales-Swansea; Supervisor: Senior Lecturer R.D. Walker

6.11 Diploma Thesis

“Compression strength of sintered chromite pellets”, National Technical University of Athens; Supervisor: Assoc. Prof. H. Vazarlis, in Greek, awarded 10.0/10.0

7. Bibliometrics

7.1 Citations (Jan. 2020)

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8. Competitive projects

Coordination or Scientific management for Dept. Mater. Sci. Eng., UoI

1. An integrated approach to the development and evaluation of nanostructured metallic-ceramic materials and their combinations (Infrastructure of education, health and welfare), approved in 2017
2. Development and characterization of crystalline and amorphous Al matrix composites reinforced with ceramic nanoparticles, by the employment of simple and low-cost techniques, Hellenic-Hungarian partnership with the University of Miskolc- Physical Metallurgy Department, Materials Science Institute, 2012-2014 (Coordinator)
3. Development of new systems and methodologies of heavy metal entrapment by modified clay glassification (General Secretariat of Research & Technology (PENED, 2006-2010) (Coordinator)
4. Internship of students UOI Department of Materials Science and Engineering (Ministry of Education, 2005-2009) (Coordinator)
5. Encouragement of Business Activities, Innovative Applications and Selective Student Courses (Ministry of Education (EPEAEK II-2005), Scientific management for DMSE
6. Encouragement of Business Activities, Innovative Applications and Selective Student Courses (Ministry of Education (EPEAEK II-2003), Scientific management for DMSE

Member of main research team (DMSE, UoI)

7. Advanced energy upgrading building components containing phase change composites and/or ceramic foams with electromagnetic shielding properties, (EYDE-ETAK, 2019-2021)
8. Development of advanced ceramic and metal matrix composite materials using the Spark Plasma Sintering method, Hellenic Institute of Research & Innovation, Support of academia members and researchers for research infrastructure of high value, succeeded for the 2nd stage.
9. Innovative shape memory alloy coatings for new generation-environmentally friendly aircrafts (INTERACT) (Investigate-Innovate, Hellenic Ministry of Education, approved in 2018)
10. Thermal Energy Storage Systems for Energy Efficient Buildings. An integrated solution for residential building energy storage by solar and geothermal resources- TESSe2b (2015-2019), Coord: Instituto Politecnico de Setubal, Horizon 2020: H2020-EU.2.1.5.2. - Technologies enabling energy-efficient systems and energy-efficient buildings with a low

environmental impact.

11. Development of nanostructured ceramic matrix composites with metallic inclusions- (Thalis, Ministry of Education 2012-2015)
12. Nanostructured metallic glasses for thermal-mechanical applications in aggressive environments (Pythagoras, Ministry of Education 2006-2008)
13. Post-Byzantine art in Epirus (17th-19th century) (Pythagoras, Ministry of Education 2004-2006)
14. Modification of the undergraduate program of Dept. Mater. Sci. Eng., Member of the four-membered working team
15. Expansion of third degree education: Member of the four-membered working team
16. Post-graduate Program in the Chemistry & Technology of Materials: Member of working team regarding the Advanced Materials, Mechanical properties and Phase Transformations.

Scientific management for MIRTEC SA and S&B Industrial Minerals:

17. Long term creep & thermal mechanical behaviour of Al alloys, for the supersonic aircraft (BRPT-CT98-5101), Coordinator: Aerospatiale
18. New industrial applications for quartz deposits indigenous to the Community (BRE2-CT94-1026), **A. Lekatou**: Scientific Responsible for MIRTEC S.A. replacing S. Platias, Coordinator: MIRTEC SA
19. Establishment of standards for the measurement of performance in diamond tool sawing & drilling operations (CRAFTSMT4-CT97-5053), Coordinator Epsilon Holdings Limited
20. Operation of a Hellenic Innovation Relay Centre (Innovation -NCR/221)
21. Operation of a Hellenic Innovation Relay Centre (Innovation -NCR/321)
22. Promotion of new technologies in metallic materials (98AΔ14, Human Networks, GSRT, 1999-2001, Co-ordinator MIRTEC SA
23. New technologies in aircraft constructions (Human Networks, GSRT)
24. Full exploitation of mixed scrap aluminium-steel by simultaneous recycling of mixed aluminium-steel scrap, (PABE 2000)
25. Advanced techniques of characterization of bentonite, perlite, zeolites and bauxites (S&B), 2000-2002
26. Development of database for analytical characteristics of worldwide bentonite, perlite, zeolites and bauxites and feldspars (S&B), 2000-2002
27. Optimization of bentonite for foundry and ironmaking applications (S&B), 2000-2002

Principal post-doctoral researcher:

28. Functionally graded coatings by Radio-Frequency Unbalanced Magnetron Sputtering (sponsored by British Nuclear Fuels), Univ. Salford, 1995-1997
29. PSZ coatings for glass melting furnaces in the nuclear industry” (sponsored by British Nuclear Fuels), Univ. Salford, 1995-1997
30. Intermetallic coating deposition by Closed Field Unbalanced Magnetron Sputtering (sponsored by British Nuclear Fuels), Univ. Salford, 1995-1997
31. Water degradation of polymer matrix composites (sponsored by the US Office of Naval Research), UMIST, 1992-1995
32. Testing and measurement techniques for the corrosion of polymer matrix composites (sponsored by the British Council for Sciences), UMIST, 1993-1995

33. Development of Software for thermodynamic phase diagram construction in the systems U, UF₆ – ceramics (sponsored by British Nuclear Fuels), UMIST, 1991-1992
34. Ceramic corrosion by boiling HNO₃ (sponsored by British Nuclear Fuels), UMIST, 1991-1992.