

RESEARCH – PUBLICATIONS

CONTRIBUTING ACADEMIC STAFF

Faculty Members				
Name	B.Sc.	M.Sc.	Ph.D.	Subject Area
Emeritus Professors: 1				
Pascal K. Gkotsis	AUTH, Dept. of Civil Engineering	Penn State Univ., MA, USA, Dept. of Engineering Mechanics & Science	UCLA, CA, USA, Dept. of Materials Science and Engineering	Applied Mechanical Engineering / Dynamics
Professors (Full): 3				
Dimitrios Chasapis	Dept. of Physics, University of Stuttgart, DE	---	Institute of Applied Physics, University of Stuttgart, DE	Physics / Thermodynamics
Constantine David	AUTH, Dept. of Mechanical Engineering	---	Mechanical Engineering Dept., University of Kaiserslautern, DE	Machining Technology / Machine Tools
Anastasios Moissiadis	AUTH, Dept. of Mechanical Engineering	---	University of Bochum, DE	Machine Elements / Conveying and Elevating Machines
Associate Professors: 8				
Konstantinos Anthymidis	AUTH, Dept. of Mechanical Engineering	---	AUTH, Dept. of Mechanical Engineering	Materials Science / Surface Metal Treatment
Savvas Geivanidis	AUTH, Dept. of Mechanical Engineering	---	AUTH, Dept. of Mechanical Engineering	Internal Combustion Engines / Pollution Treatment
Athanasiос Katsanevakis	AUTH, Dept. of Mechanical Engineering	University of Sheffield Dept. of Business Administration, UK	University of Surrey, Chemical Engineering Dept., UK	Energy Systems / Thermal Engines
Kostas Kleidis	AUTH, Dept. of Physics	---	AUTH, Dept. of Physics	Applied Mathematics / Cosmology

Dimitrios Missirlis	AUTH, Dept. of Mechanical Engineering	---	AUTH, Dept. of Mechanical Engineering	Thermo-Fluid Mechanics / Heat Inverters
Athanasiос Pantazopoulos	Univ. of Patras, Dept. of Electrical Engineering	---	Univ. of Patras, Computer Engineering, and Informatics Dept.	Computer Science / Informatics
Dimitrios Sagris	AUTH, Dept. of Mechanical Engineering	---	AUTH, Dept. of Mechanical Engineering	Production Systems / Industrial Robotics
Dimitrios Sofialidis	AUTH, Dept. of Mechanical Engineering	University of Manchester, Dept. of Mechanical Engineering, UK	AUTH, Dept. of Civil Engineering	Fluid Mechanics / Computational Fluid Dynamics
Assistant Professors: 2				
Christos Simoglou	AUTH, Dept. of Electrical Engineering	---	AUTH, Dept. of Electrical Engineering	Electrical Engines / Power Stations
Φρειδερίκος Ορέστης	AUTH, Dept. of Mechanical Engineering	---	AUTH, Dept. of Mechanical Engineering	Computational Mechanics / Finite Element Methods
Lecturers: 1				
Nikolaos Maschidis	AUTH, Dept. of Mechanical Engineering	AUTH, Dept. of Mechanical Engineering	---	Materials Science / Machine Elements

PUBLICATIONS (per Faculty Member in alphabetical order)

✓ Konstantinos Anthymidis (Ph.D. in Mechanical Engineering), Associate Professor

Articles of Original Research

1. K. G. Anthymidis, E. Stergioudis, D. N. Tsipas, «**Boriding in a fluidized bed reactor**», Materials Letters **51**, 156-160 (2001).
2. K. G. Anthymidis, E. Stergioudis, D. N. Tsipas, «**Boriding of titanium alloys in a fluidized bed reactor**», Journal of Materials Science Letters **20**, 2067-2069 (2001).
3. K. G. Anthymidis, P. Zinoviadis, D. Roussos, D. N. Tsipas, «**Boriding of nickel in a fluidized bed reactor**», Materials Research Bulletin **37**, 515-522 (2002).
4. K. G. Anthymidis, G. Stergioudis, D. N. Tsipas, «**Boride coatings on non-ferrous materials in a fluidized bed reactor and their properties**», Science and Technology of Advanced Materials **3**, 303-311 (2002).
5. K. G. Anthymidis, E. Stergioudis, P. Zinoviadis, D. Roussos, D. N. Tsipas, «**Boriding of ferrous and non-ferrous metals and alloys in fluidized bed reactor**», Surface Engineering **18**, 1-5 (2002).

6. K. G. Anthymidis, N. Maragoudakis, G. Stergioudis, O. Haidar, D. N. Tsipas, «**A comparative study of boride coatings obtained by pack cementation method and by fluidized bed technology**», Materials Letters 57, 2399-2403 (2003).
7. D. N. Tsipas, K. G. Anthymidis, Y. Flitris, «**Deposition of hard and/or corrosion resistant, single and multi-element coatings on ferrous and nonferrous alloys in a fluidized bed reactor**», Journal of Materials Processing Technology 134, 145-152 (2003).
8. P. Agrianidis, K. G. Anthymidis, C. David, D. N. Tsipas, «**Deposition of coatings containing Si and B on steels in a CVD fluidized bed reactor**», WIT Transactions on Engineering Sciences 49, 195-200 (2005).
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10. C. David, K. G. Anthymidis, P. Agrianidis, D. N. Tsipas, «**Determination of the fatigue behavior of aluminide coatings by means of the impact testing method**», Key Engineering Materials 348-349, 645-648 (2007).
11. C. David, K. G. Anthymidis, P. Agrianidis, D. N. Tsipas, «**Determination of the fatigue resistance of HVOF thermal spray WC-CoCr coatings by means of impact testing**», Journal of Testing and Evaluation 35, 630-633 (2007).
12. C. David, K. G. Anthymidis, P. Agrianidis, G. Petropoulos, «**Characterization and tribological properties of boride coatings of steels in a fluidized bed reactor**», Industrial Lubrication and Tribology 60, 31–36 (2008).
13. P. Agrianidis, C. David, K. G. Anthymidis, M. Ekhrawat, «**Interregional technology transfer on advanced materials and renewable energy systems**», Journal of Materials Methods and Technologies 2, 4–10 (2008).
14. K. G. Anthymidis, C. David, D. N. Tsipas, «**Fatigue resistance assessment of slurry coating steel substrate compounds under cyclic loading**», Key Engineering Material 385-387, 133-136 (2008).
15. P. Agrianidis, K. G. Anthymidis, C. David, «**Reinforcement of Aluminum by TiB dissolution**», Key Engineering Materials 385-387, 785-788 (2008).
16. C. David, M. A. Athanasiou, K. G. Anthymidis, P. K. Gotsis, «**Impact fatigue failure investigation of HVOF coatings**», Journal of ASTM International 5, 1-8 (2008).
17. K. G. Anthymidis, C. David, D. N. Tsipas, «**Evaluation of the fatigue behavior of aluminide coating steel substrate compounds by means of the impact testing method**», Materials and Manufacturing Processes 24, 1–4 (2009).
18. P. Agrianidis, T. Agrianidis, K. G. Anthymidis and A. Trakali, «**Mechanical properties of Aluminum metal matrix composites**», Key Engineering Materials 417-418, 341-344 (2010).
19. K. G. Anthymidis, A. Balouktsis, C. David, A. Trakali, «**Wear of cutting tools used in milling treatments**», Key Engineering Materials 465, 165-168 (2011).
20. K. G. Anthymidis, C. David, D. N. Tsipas, «**Evaluation of the fatigue behavior of Aluminide coating steel substrate compounds by means of the impact testing method**», Materials and Manufacturing Processes 26, 58-61 (2011).
21. K. G. Anthymidis, C. David, A. Trakali, D.N. Tsipas, «**Evaluation of the fatigue resistance of chromium slurry coating steel substrate compounds by means of an improved impact testing procedure**», Key Engineering Materials 488-489, 420-423 (2012).
22. K. G. Anthymidis, C. David, A. Trakali, P. Agrianidis, «**Characterization of Al metal matrix composites produced by the stir-casting method**», Key Engineering Materials 577-578, 85-88 (2014).
23. K. G. Anthymidis, C. David, A. Trakali, D. N. Tsipas, «**Siliconizing in a fluidized bed reactor**», Key Engineering Materials 592-593, 409-412 (2014).
24. K. G. Anthymidis, C. David, P. Agrianidis, A. Trakali, «**Production of Al metal matrix composites by the stir-casting method**», Key Engineering Materials 592-593, 614-617 (2014).
25. K. G. Anthymidis, A. Trakali, D. N. Tsipas, «**Single and multi-element coatings in a fluidized bed reactor**», Solid State Phenomena 258, 379-382 (2017).

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1. G. Stergioudis, H. Morawiec, K. G. Anthymidis, D. N. Tsipas, «**Boride coatings on Ti-Ni alloys in a fluidized bed reactor**», XIX Conference on Applied Crystallography, 1-4 September 2003, Krakow, Poland, pp. 360 -363 (2003).
2. K. G. Anthymidis, G. Stergioudis, H. Lefakis, D. N. Tsipas, «**Surface treatments using fluidized bed technology**», International Conference on Advanced Metallic Materials, 5 – 7 November 2003, Smolenice, Slovakia, pp. 1-4 (2003).
3. C. David, K. G Anthymidis, D. N. Tsipas, «**The impact testing procedure a capable method to investigate the fatigue resistance and the viscoelastic properties of coating substrate compounds**», International Conference of Influence of Traditional Mathematics and Mechanics on Modern Science and Technology, Messini, Greece, 24 - 28 May 2004, pp. 279 – 285 (2004).
4. G. Petropoulos, C. David, K. G. Anthymidis, «**Boriding of steels in a fluidized bed reactor**», First Manufacturing Engineering Society International Conference, Calatayud, Spain, 19 – 21 September 2005, pp. 45-49 (2005).
5. C. David, P. Agrianidis, K. G. Anthymidis, D. N. Tsipas, «**Impact testing: A capable method to investigate fatigue resistance**», 16th European Conference of Fracture (ECF16), Alexandroupolis, Greece, 3 – 7 July 2006, pp. 219 – 220 (2006).
6. P. Agrianidis, K. G. Anthymidis, C. David, A. Agrianidis, «**Reinforcement of Aluminum matrix by Fe - TiB dissolution**», 7th International Conference on the Assessment of Reliability of Materials and Structures: Problems and Solutions, St. Petersburg, Russia, 17-20 June 2008, pp. 4 – 7 (2008).
7. K. G. Anthymidis, P. Agrianidis, C. David, A. Agrianidis, «**Production of Aluminum-Steel alloy matrix composites by the stir-casting method**», Annals of DAAAM for 2008 & Proceedings of the 19th International DAAAM Symposium, B. Katalinic (Ed.), DAAAM International, Vienna, Austria, 22-25 October 2008, pp. 14 - 15.
8. C. David, K. G. Anthymidis, D. N. Tsipas, «**A comparative study of the fatigue resistance of aluminide coatings on P91 steel substrate under cyclic impact loading**», 9th International Conference on Mesomechanics, 13-17 May 2007, VVF les Badines, Presqu' Ile de Giens, 83408 HYERES LES PALMIERS, France, pp. 721 – 728 (2007).
9. K. G. Anthymidis, C. David, A. Trakali and P. Agrianidis, «**Characterization of Al metal matrix composites produced by the stir-casting method**», 12th International Conference on Fracture and Damage Mechanics, Alghero, Sardinia, Italy, 2013
10. K. G. Anthymidis, A. Trakali, C. David, and D. Tsipas, «**Siliconizing in a fluidized bed reactor**», 7th International Conference on Materials Structure & Micromechanics of Fracture, 1-3 July 2013, Brno, Czech Republic
11. K. G. Anthymidis, P. Agrianidis, G. Stergioudis, D. N. Tsipas, «**Reinforcement of Aluminum Matrix by Iron – Silicon – Chromium dissolution**», MSMF8, 27 - 29 June 2016, Brno, Czech Republic (2016).

✓ Dimitrios Chasapis (Ph.D. in Applied Physics), Professor (Full) – Deputy Head of the Department

Δημοσιεύσεις σε διεθνούς κύρους επιστημονικά περιοδικά με κριτές

1. M.C. Vlachou, J.S. Lioumbas, K. David, D. Chasapis, C. Schwarz, J. W. A. van Loon, T.D. Karapantsios, «**Subcooled flow boiling in horizontal and vertical macro-channel under Earth-gravity and hyper-gravity conditions**», International Journal of Heat and Mass Transfer 133:36-51 (2019).
2. D. Chasapis, D. Misirlis, P. A. Papadopoulos, and K. Kleidis, «**Thermodynamic analysis on the performance of a low-enthalpy geothermal field, using a CO₂ supercritical binary cycle**», Chemical Engineering Transactions 76, p. 1009 (2019).

3. M. C. Vlachou, J. S. Lioumbas, C. David, D. Chasapis, T. D. Karapantsios, «**Effect of channel height and mass flux on highly sub-cooled horizontal flow boiling**», Exp. Thermal and Fluid Science **83** 157-168 (2017).
4. Sakonidou, E. P., Karapantsios, T. D., Balouktsis, A. I., Chassapis, D., «**Corrigendum to "Modeling of the optimum tilt of a solar chimney for maximum air flow" [Sol. Energy 82 (2008) 80-94]"**», Solar Energy **86** (2): 809 (2012).
5. E. P. Sakonidou, T. D. Karapantsios, A. I. Balouktsis, D. Chassapis, «**Modeling of the optimum tilt of a solar chimney for maximum air flow**», Solar Energy **82**, 80-94 (2008).
6. D. Chassapis, T. D. Karapantsios, A. Balouktsis, «**Incorporation of hydrodynamic interaction forces to molecular statistical theory of temporary polymer networks in solution**», European Polymer Journal **43**, 3236-3249 (2007).
7. D. Chassapis, A. Balouktsis, T. D. Karapantsios, «**Flow birefringence of temporary polymer networks**», European Polymer Journal **38**, 1071-1078 (2002).
8. A. Vlachos, T. D. Karapantsios, A. Balouktsis, D. Chassapis, «**Design and testing of a new solar tray dryer**», Drying Technology **20**(6): 1243-1271 (2002).
9. A. Balouktsis, D. Chassapis, T. D. Karapantsios, «**A nomogram method for estimating the energy produced by wind turbine generators**», Solar Energy **72**(3), 251-259 (2002).
10. G. Babos, D. Chassapis, «**The calculation of the effective values of physical properties for random composites with circular inclusions**», J. Phys. Solids **51**, 209-215 (1990).
11. D. Chassapis, G. Babos, R. Takserman-Krozer, E. Kröner, «**Statistical mechanics of temporary polymer networks**», Rheological Acta **28**, 193-201 (1989).
12. E. Kröner, D. Chassapis, R. Takserman-Krozer, «**The physics of temporary polymer networks: a comparison of theory and experiment**», Biological and Synthetic Polymer Networks, pp 185-205, O. Kramer (ed.), Elsevier Applied Science, London:1988

Δημοσιεύσεις σε πρακτικά διεθνών συνεδρίων με κριτές

1. G. Panagopoulos, E. Kirtas, K. Mimidis, I. Sous, A. Kappos, I. Lialiampis & D. Chasapis, «**Inventory of the building stock in the city of Serres (Greece) for seismic vulnerability assessment and loss estimation**», 10th International Conference on Earthquake Resistant Engineering Structures, Opatija-Croatia, 29 June - 1 July 2015.
 2. T. D. Karapantsios, A. I. Balouktsis, D. Chassapis, M. D. Petala, «**A CFD model to estimate the effect of tilt and height on the natural air flow inside a solar chimney**», WSEAS conference, Venice – Italy, 21-23 November 2007.
 3. I. Balouktsis, A. Balouktsis, T. D. Karapantsios, D. Chassapis, C. David, K. Anastasiou «**Load matching and optimization of directly coupled PV to water chillers pumping systems**», WSEAS conference, Venice – Italy, 21-23 November 2007.
 4. M. E. Theodoridou, D. Chassapis, A. Balouktsis, «**The newly founded Department of Informatics in Serres: Its purpose and structure**», 3rd Global Congress on Engineering Education, Congress Proceedings, UICEE, ISBN: 0 7326 2201 8, p.p. 359-362 Glasgow Caledonian University 30 June – 5 July 2002.
 5. Α. Μπαλουκτσής, Δ. Χασάπης, Θ. Καραπάντσιος, «**Δημιουργία Νομογράμματος για τον Υπολογισμό της Μέσης Παραγόμενης Ισχύος μιας Ανεμογεννήτριας**», Τεχνολογίες Ήπιων Μορφών Ενέργειας και Περιβάλλοντος, pp. 187-195, Αθήνα 11-12 Δεκεμβρίου 2000.
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✓ Constantine David (Ph.D. in Mechanical Engineering, Dr.-Ing.), Professor (Full) – Vice President of the IHU Research Committee

Articles of Original Research

1. C. David, G. Warnecke, «**A correlation between cutting process and dynamics of the machine-tool system in grinding**», Transactions of the North American Manufacturing Research Institution of SME **XXIV**, Michigan, Ann Arbor USA, 51-56, (1996).
2. K. Bouzakis, N. Vidakis, C. David, «**Characterization of thin hard coatings regarding their lifetime performance and typical applications**», Journal of Opto-electronics **6**, 3-12, (1998).
3. K. Bouzakis, N. Vidakis, C. David, «**The concept of an advanced impact tester supported by evaluation software for the fatigue strength characterization of hard layered media**», Thin Solid Films **355-356**, 322-329, (1999).
4. G. Warnecke, C. David, «**A modeling method to analyze the dynamic behavior of grinding process and predicting the stability limit**», Journal of Production Engineering WGP Annals **VII/2**, 115-120, (2000).
5. K. Bouzakis, A. Lontos, N. Vidakis, C. David, V. Kechagias, «**Determination of the creep behaviour of monolayer thick plasma sprayed coatings, by means of the impact test and analytical FEM supported evaluation procedure**», Thin Solid Films **377-378**, 373-381 (2000).
6. K. Bouzakis, N. Vidakis, A. Lontos, S. Mitsi, C. David, «**Implementation of low temperature deposited coating lifetime parameters in commercial roller bearings catalogues**», International Journal Surface and Coatings Technology **133-134**, 489-496 (2000).
7. P. Agrianidis, K. G. Anthymidis, C. David and D. N. Tsipas, «**Deposition of coatings containing Si and B on steels in a CVD fluidized bed reactor**», WIT Transactions on Engineering Sciences **49**, 195-201 (2005).
8. G. Petropoulos, N. Vaxevanidis, A. Iakovou and C. David, «**Multi-parameter modeling of surface texture in ED Machining using the Design of Experiments methodology**», Journal of Materials Science Forum **526**, 157-162 (2006).
9. C. David, K. G. Anthymidis, P. Agrianidis and D. N. Tsipas, «**Determination of the fatigue behavior of aluminide coatings by means of the impact testing method**», Journal of Key Engineering Materials **348-349**, 645-648 (2007).
10. C. David, K. G. Anthymidis and P. Agrianidis, «**Determination of the fatigue resistance of HVOF-thermal spray WC-CoCr coatings**», Journal of Testing and Evaluation **35**, 630-633, (2007).
11. C. David, K. G. Anthymidis, P. Agrianidis and D. N. Tsipas, «**Determination of the fatigue behavior of coatings by means of an improved impact testing evaluation procedure**», WIT Transactions on Engineering Sciences, Computational Methods, and Experiments in Materials Characterization **57**, 13-21 (2007).
12. C. David, K. G. Anthymidis, P. Agrianidis and G. Petropoulos, «**Characterization and tribological properties of Boride coatings of Steels in a fluidized bed reactor**», Journal of Industrial Lubrication & Tribology **60**, 31-36 (2008).
13. A. Maravelakis, C. David, A. Antoniadis, A. Manios, N. Bilalis, Y. Papaharilaou, «**Reverse engineering techniques for cranioplasty: A case study**», Journal of Medical Engineering and Technology **32**, 115-121 (2008).
14. C. David, M. A. Athanasiou, K. G. Anthymidis and P. K. Gotsis, «**Impact fatigue failure of HVOF coatings and modeling of the viscoelastic properties of coating-substrate compound**», Journal of ASTM International **5**, 233-241 (2008).
15. K. G. Anthymidis, C. David and D. N. Tsipas, «**Fatigue resistance assessment of slurry coating steel substrate compounds under cyclic loading**», Journal of Key Engineering Materials **385-387**, 133-136 (2008).
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17. P. Agrianidis, C. David, K. G. Anthymidis, M. Ekhrawat, «**Interregional technology transfer on advanced materials and renewable energy systems**», Journal of Materials Methods and Technologies **2**, 4 – 10 (2008).

18. P. K. Gotsis, C. C. Chamis, C. David, and F. Abdi, «**Progressive fracture of laminated fiber-reinforced composite stiffened plate**», International Journal of Theoretical & Applied Fracture Mechanics **51**, 144-147 (2009).
19. D. J. Kakaletsis, C. David, C. G. Karayiannis, «**Effectiveness of seismic retrofitting techniques for bare and in-filled R/C frames**», Journal of Structural Engineering and Mechanics **39**, 4-11 (2011).
20. K. G. Anthymidis, C. David and D. N. Tsipas, «**Evaluation of the fatigue behavior of aluminide coating steel substrate compounds by means of the impact testing method**», Journal of Materials and Manufacturing Processes **26**, 58-61 (2011).
21. O. Friderikos, G. Miliaris, C. David, and I. Tsiafis, «**An investigation of cutting-edge failure due to chip crush in carbide dry hobbling using the finite element method**», Journal of Advanced Manufacturing Technology **57**, 297-306 (2011).
22. M. A. Athanasiou, G. C. Anagnostopoulos, A. C. Iliopoulos, G. P. Pavlos, and C. N. David, «**Enhanced ULF radiation observed by DEMETER two months around the strong 2010 Haiti earthquake**», Journal of Natural Hazards and Earth Systems Sciences **11**, 1091-1098 (2011).
23. K. G. Anthymidis, A. Balouktsis, C. David, and A. Trakali, «**Wear of cutting tools used in milling treatments**», Journal of Key Engineering Materials **465**, 165-168 (2011).
24. K. G. Anthymidis, C. David, A. Trakali, D. N. Tsipas, «**Evaluation of the fatigue resistance of chromium slurry coating steel substrate compounds by means of an improved impact testing procedure**», Key Engineering Materials **488-489**, 420-423 (2012).
25. S. A. Grammatikos, E. Z. Kordatos, T. E. Matikas, C. David, A. S. Paipetis, «**Current injection phase thermography for low-velocity impact damage identification in composite laminates**», Materials and Design **55**, 429-441 (2014).
26. K. G. Anthymidis, C. David, A. Trakali and P. Agrianidis, «**Characterization of Al metal matrix composites produced by the stir-casting method**», Key Engineering Materials **577-578**, 85-88 (2014).
27. K. G. Anthymidis, C. David, A. Trakali, D. Tsipas, «**Siliconizing in a fluidized bed reactor**», Key Engineering Materials **592-593**, 409-412 (2014).
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29. M. A. Athanasiou, G. C. Anagnostopoulos, C. David and G. G. Machairidis, «**The ULF electromagnetic radiation observed in the topside ionosphere above boundaries of tectonic plates**», International Journal of Research in Geo-physics [ISSN 2038-9663] (2014).
30. A. Korlos, O. Friderikos, G. Mansour, C. David, D. Sagris, «**Orthogonal cutting of Ti6Al4V alloy using experimental and theoretical analysis**», Applied Mechanics & Materials **809-810**, 183-188 (2015).
31. S. A. Tsipas, D. N. Tsipas, C. David and P. K. Gotsis, «**Boronizing of metallic materials: A review**», Journal of Materials Science and Technology **23**, 160-184 (2015).
32. A. Constantin, C. David, «**Multiplexed delay compensation and circular buffer method for moving average filtering of signal acquired from tactile sensors in a mechatronics system for walking analysis**», "HIDRAULICA" (No. 4/2015) Magazine of Hydraulics, Pneumatics, Tribology, Ecology, Sensorics, Mechatronics, ISSN 1453 – 7303 (2015).
33. A. Korlos, O. Friderikos, D. Sagris, C. David, G. Mansour, «**Experimental analysis of Ti6Al4V orthogonal cutting**», Key Engineering Materials **665**, 17-20 (2016).
34. G. Mansour, K. Tzikas, D. Tzetzis, A. Korlos, D. Sagris, C. David, «**Experimental and numerical investigation on the torsional behaviour of filament winding-manufactured composite tubes**», Applied Mechanics and Materials **834**, 173-178, (2016).
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36. M. C. Vlachou, J. S. Lioumbas, C. David, D. Chasapis, Th. D. Karapantsios, «**Effect of channel height and mass flux on highly sub-cooled horizontal flow boiling**», Journal of Experimental Thermal and Fluid Science **83**, 157–168 (2017).
37. Stergianni E., Sagris D., Tsipas Ch., David C. and Tsipas I., «**Influence Analysis of Micro-Milling Vibrational Phenomena on Workpiece Topomorphy**», Journal of Solid-State Phenomena **261**, pp 77-84, (2017)
38. A. I. Toulfatzis, G. A. Pantazopoulos, C.N. David, D. S. Sagris and A. S. Paipetis, «**Machinability of Eco-Friendly Lead-Free Brass Alloys: Cutting-Force and Surface-Roughness Optimization**», Journal of Metals **8**, 250 (2018).

39. C. David, D. Sagris, E. Stergianni, Ch. Tsiafis, i. Tsiafis, «**Experimental Analysis of the Effect of Vibration Phenomena on Workpiece Topomorphy Due to Cutter Runout in End-Milling Process**», Journal of Machines **6**, 27 (2018).
40. A. I. Toulfatzis, G. A. Pantazopoulos, C.N. David, D. S. Sagris and A. S. Paipetis, «**Final Heat Treatment as a Possible Solution for the Improvement of Machinability of Pb-Free Brass Alloys**», Journal of Metals **8**, 575 (2018).
41. J. Kozatsas, K. Kotsakis, D. Sagris, K. David, «**Inside out: Assessing pottery forming techniques with micro-CT scanning. An example from Middle Neolithic Thessaly**», Journal of Archaeological Science, Elsevier, Vol. **100**, pp. 102-119, (2018)
42. Naka, O., Millar, B.J., Sagris, D., David, C., «**Do composite resin restorations protect cracked teeth? An in-vitro study**», British Dental Journal, Vol. **225** (3), pp. 223-228, (2018).
43. M.C. Vlachou, J.S. Lioumbas, M. Kostoglou, K. David, D. Chasapis, C. Schwarz, J.W.A. van Loon, T.D. Karapantsios, "Subcooled flow boiling in horizontal and vertical macro-channel under Earth-gravity and hyper-gravity conditions", International Journal of Heat and Mass Transfer **133**, pp.36-51 (2019).
44. Gkouvas G., Agathangelidis F., Nakas C., David C., Sagris D., Petsatodis G., «**Biomechanical comparison of six intramedullary nails, for the treatment of extraarticular, proximal tibial fractures**», HIPPOKRATIA **23**, 2: 58-63 (2019).
45. Friderikos O., Sagris D., David C., Korlos A., «**Simulation of Adiabatic Shear Bands in Orthogonal Machining of Ti6Al4V using a Rigid-Viscoplastic Finite Element Analysis**», Metals - Open Access Metallurgy Journal **10(3)**, 338, (2020).

Articles in Conference Proceedings

1. K. Bouzakis, C. David, N. Vidakis, «**Development of an Impact Tester and of its software to determine the fatigue strength of hard coatings**», Annals of 9th International DAAAM Symposium “Intelligent Manufacturing, Automation & Networking”, Cluj-Napoca, Romania, 22-24th October 1998, pp. 59-60.
2. K. Bouzakis, C. David, N. Vidakis, «**Development of testing and evaluation procedures to determine the fatigue strength of hard coatings**», Proceedings of 3rd International Conference of Tribology, BALKANTRIB '99, Vol. III, Sinaia – Romania, pp. 291-302.
3. K. Bouzakis, C. David, N. Vidakis, «**Prediction of the fatigue performance of coated systems through an advanced impact tester and the software supported evaluation of experimental data**», Proceedings of 1st International Conference "THE Coatings in Manufacturing Engineering", Thessaloniki 14-15 October 1999, pp.213-222.
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✓ Dimitrios Sofialidis (Ph.D. in Computational Fluid Dynamics), Associate Professor

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✓ Orestis Friderikos (Ph.D in Mechanical Engineering), Assistant Professor

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Articles of Original Research:	303
Articles In Conference Proceedings:	298

Department's Average:

Articles of Original Research: **20 articles per Faculty Member**

Articles In Conference Proceedings: **20 articles per Faculty Member**

On behalf of the IHU Department of Mechanical Engineering,

The Head of the Department,

Kostas Kleidis

Associate Professor