

Xanthippi Chatzistavrou, PhD

Date of birth: 4th of November 1978
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EDUCATION-STATUS

Jan. 2022-present Assistant Professor, Department of Chemical Engineering, Aristotle University of Thessaloniki, Greece

Jan. 2017-Dec. 2021 Assistant Professor, Department of Chemical Engineering and Materials Science, Michigan State University, U.S.A
Research Interests Biomaterials with antibacterial properties for tissue regeneration.

Oct. 2011-Oct. 2016 Research Fellow, School of Dentistry, University of Michigan, U.S.A
Research project: "Regeneration of human enamel and dentin using Mesenchymal Stem Cells (MSC) in combination with Bioactive materials"
Person in charge: Dr P. Papagerakis

July 2011-Oct. 2011 Post-doctoral researcher-Reintegration Marie Curie Fellowship, Department of Physics, Aristotle University of Thessaloniki, Greece
European Reintegration Grant, Marie Curie Actions, FP7-PEOPLE-2010-RG
Research project: "Development of novel bactericidal dental bioactive composites for prosthetic restorations"
Person in charge: Prof K.M. Paraskevopoulos

Oct. 2010-July 2011 Post-doctoral researcher-JSPS Fellowship, JAPAN SOCIETY FOR THE PROMOTION OF SCIENCE (JSPS), Nagoya Institute of Technology Department of Materials Science and Engineering, Nagoya, Japan
Research project: "Antibacterial bioactive glass composites for dental applications"
Person in charge: Prof T. Kasuga

May 2010-Oct. 2010 Post-doctoral researcher, Institute of Biomaterials, Department of Materials Science and Engineering, University of Erlangen-Nuremberg, Germany (*Bridging position*)
Research project: "Sol-gel derived bactericidal and bioactive glass composites"
Person in charge: Prof A.R. Boccaccini

May 2008-May 2010 Post-doctoral researcher-Marie Curie Fellowship, Department of Materials, Imperial College, London
Intra-European Fellowship, Marie Curie Actions, FP7-PEOPLE-2007-2-1-IEF.
Research project: "Novel bioactive glass-ceramic composites for dental restorations"
Person in charge: Prof A.R. Boccaccini

Sept. 2003-Mar. 2008 PhD in Solid State Physics, with honors. Department of Physics, Aristotle University of Thessaloniki, Greece
Thesis title: "Fabrication and investigation of modified materials, suitable for dental fixed prosthetic restorations, with possibilities of growth of biological structures"
Supervisor: Prof K.M. Paraskevopoulos

Oct. 2001- July 2003 MSc on Materials Physics and Technology, with honors. Department of Physics, Aristotle University of Thessaloniki, Greece
Project title: "Modified dental substrates under different conditions of thermal treatment"

Supervisor: Prof K.M. Paraskevopoulos
Sept. 1997-Sept. 2001 BSc on Physics, with honors.
Department of Physics, Aristotle University of Thessaloniki, Greece
Project title: *“Characterization of bioactive materials with applications in dental prosthetic restorations”*
Supervisor: Prof K.M. Paraskevopoulos

RESEARCH ACTIVITY AND EXPERIENCE

i) *Synthesis and study of bioactive materials*

Synthesis and characterization of novel bioactive and antibacterial materials for biomedical applications. Application of the sol-gel technique and melt derived method for synthesis of new composite materials. Study of the microstructural, physicochemical, thermal and mechanical properties of the fabricated glass-ceramic and composite materials. Detailed studies of the bioactive and biological properties for cell and tissue engineering.

ii) *Cell-material Interaction*

In vitro cell culture (cells viability, cells infiltration, histologic quantification) of different cell types (pulp cells, periodontal ligament, gingival fibroblasts, stem cells). Study of the cell-material interaction in contact with new sol-gel derived bioactive glass-ceramic materials. Fabrication, characterization and cell-material studies of 3D bioactive scaffolds (glasses-polymers-ceramics) for bone tissue engineering.

iii) *Study of antibacterial properties.*

Study of the bactericidal activity of different materials against Gram-positive and Gram-negative bacteria. Observation of the bacteriostatic and/or bactericidal behaviour of bioactive and bioinert materials.

iv) *Characterization and study of different materials*

Application of the methods; Infrared FTIR – UV/VIS spectroscopy, Thermal Analysis, Scanning Electron Microscopy, Transmission Electron Microscopy, Nuclear Magnetic Resonance (NMR) Spectroscopy, Inductively Coupled Plasma (ICP), microtomography (μ -CT) and X-Ray Diffraction Analysis for the study of different types of materials as:

- Bioactive materials
- Polymers - biodegradable polymers
- Thermoelectric materials
- Thermophotovoltaic materials
- Bioactive composites
- Functional materials for sensors
- Narrow gap semiconductors
- Minerals

COURSES ON ADVANCED STUDIES

07/2005 *“Programmed Cell Death and Cell Signalling in Development and Disease” The 2005 Lectures in Biology, The Onassis Foundation science lecture series. Foundation for Research and Technology, Heraklion, Crete, Greece*

FUNDED RESEARCH PROJECTS

- a) Greece-Romanian: Joint Research and Technology Programs (2003-2005), General Secretariat for Research & Technology, Hellenic Ministry of Development co-funded by EEC. **Title:** *“The biological response and interactions of fibroblast cell lines to dental ceramics modified by bioactive glass”*
- b) Greece-Serbia: Joint Research and Technology Programs (2004-2006), General Secretariat for Research & Technology, Hellenic Ministry of Development co-funded by EEC. **Title:** *“Investigation of Functional Materials for Production of Air Gas and Humidity Sensors”*

- c) Research Project funded by EEC: Pythagoras - Funding of research groups in the Universities (2005-2007) Operational Program for Education and Initial Vocational Training (O.P. "Education"), Hellenic Ministry of National Education and Religious Affairs. **Title:** *"Fabrication of dental materials with bioactive behaviour - Investigation of physico-chemical properties and cell-material interactions on bioactive glass modified dental ceramics"*
- d) Research Project: Operational Program for Research and Technology PENED 2003 (03ΕΔ/736)-(2006 – 2008) General Secretariat for Research & Technology co-funded by EEC : **Title:** *"Development of composite dental bioactive ceramics with biopolymer scaffolds for tissue engineering"*
- e) Marie Curie Fellowship, Department of Materials, Imperial College, London (2008-2010) Intra-European Fellowship, Marie Curie Actions, FP7-PEOPLE-2007-2-1-IEF, **Title:** *"Novel bioactive glass-ceramic composites for dental restorations"*
Individual Fellowship, Total Budget EUR 162.000
- f) JAPAN SOCIETY FOR THE PROMOTION OF SCIENCE (JSPS)
Individual Fellowship, Total Budget EUR 50.000
- g) Marie Curie Reintegration Grants, Solid State Physics, Physics Department, Aristotle University of Thessaloniki, Greece (2011-2014) FP7-PEOPLE-2010-RG, **Title:** *"Development of novel bactericidal dental bioactive composites for prosthetic restorations"*
Individual Fellowship, Total Budget EUR 200.000 (Dropped due to move to the USA)
- h) Michigan State University. Intramural, Startup Funding (2017-2020) **Total Budget \$535.000 USD**
- i) Michigan State University. Intramural, CTSI Funding 2019 **Total Budget \$25.000 USD**

CO-AUTHOR IN BOOK CHAPTER

- a) Bioactive Glass Scaffolds for Bone Tissue Engineering (Part II; Chapter 5)
Contribution in book "BIOACTIVE GLASSES: MATERIALS, PROPERTIES AND APPLICATIONS" edited by Professor Heimo Ylänen, Tampere University of Technology, Finland, Woodhead Publishing Limited (2011) pp 105-124
Xanthippi Chatzistavrou, Philippa Newby, Aldo R. Boccaccini
- b) Degradable and bioactive synthetic composite scaffolds for bone tissue engineering (Chapter 6)
Contribution in book "Degradation of Implant Materials" edited by Professor Noam Eliaz, TEL AVIV UNIVERSITY, RAMAT AVIV, ISRAEL, Springer Publishing Limited (2012) pp 111-138
A.R. Boccaccini, X. Chatzistavrou, J. J. Blaker, S. N. Nazhat
- c) Sol-gel derived silica-based bioactive glasses, glass-ceramics and composites (Chapter 6)
Contribution in book "Non-Metallic Biomaterials for Tooth Repair and Replacement" edited by Professor Pekka Vallittu, Chair of the Department of Biomaterials Science, Institute of Dentistry University of Turku (UTU), Finland, Woodhead Publishing Limited (2013) pp 194-231.
X.Chatzistavrou, E. Kontonasaki, K. M. Paraskevopoulos, P. Koidis, A.R. Boccaccini
- d) Dental Enamel Regeneration (Part V; Chapter 32)
Contribution in book "Biomaterials and Regenerative Medicine" edited by Professor Peter Ma, Richard H. Kingery Endowed Collegiate Professor, Biologic and Materials Sciences, Biomedical Engineering, Macromolecular Science and Engineering, Materials Science and Engineering University of Michigan, Cambridge University Press Limited (2013) pp 583-589
Xanthippi Chatzistavrou and Petros Papagerakis
- e) Long-term performance and failure of orthopedic devices
Chapter 16, Contribution in book "Bone Repair Biomaterials: Regeneration and Clinical Applications Second Edition", Edited by Kendell Pawelec, University of Michigan, Bone Repair Biomaterials, 2019 pp 379-410, Woodhead Publishing.
A. Marsh, N. Pajares, X. Chatzistavrou

PATENT

Chatzistavrou, X; Hammer, N, Roch A. Resurrection of Antibiotics that Resists by Silver-Doped Bioactive Glass-Ceramic Particles. Patent Pending, filed March 29, 2020 U.S. Application No. 16/833,092.

PUBLICATIONS IN PEER-REVIEWED JOURNALS (ISI Catalogue)

PUBLICATIONS ON BIOMATERIALS

Publications under preparation

1. Fused Filament Fabrication of 3D Bioactive Bioceramic Composite Scaffolds for Bone Tissue Engineering: Current Advances and Future Trends (*Review Paper*)
Adam C. Marsh, Aljoscha Roch, Xanthippi Chatzistavrou

Publications under submission

1. Off-shelving high intrinsic resistance antibiotics: resurrection of drugs by combinatorial approaches
Advanced Drug Delivery Reviews (*Under 2nd revision, preliminary accepted*)
Natalia Pajares-Chamorro, Neal Hammer, Xanthippi Chatzistavrou
2. Silver-Releasing Bioactive Glass Nanoparticles for Drug-Free Infected Tissue Regeneration Against Resistant Bacteria
Acta Biomaterialia (*Research Paper*)
Natalia Pajares-Chamorro, Sandra Hernández-Escobar, Yadav Wagley, Neal D. Hammer, Parker Acevedo, Kurt Hankenson, Xanthippi Chatzistavrou
3. Unraveling the Mechanisms of Inhibition of Silver-doped Bioactive Glass-Ceramic Particles
ACS Biomater. Sci. Eng. (*Research Paper*)
Natalia Pajares-Chamorro, Neal D. Hammer, Jonathan Hardy, Xanthippi Chatzistavrou

Published articles

1. Highlights on Advancing Frontiers in Tissue Engineering
Tissue Engineering Part B: Reviews, 2021 Oct 25
Nureddin Ashammakhi, Amin GhavamiNejad, Rumeysa Tutar, Annabelle Fricker, Ipsita Roy, Xanthippi Chatzistavrou, Kim-Lien Nguyen, Taby Ahsan, Ippokratis Pountos, Edward J. Caterson
2. Bioactive glass particles as multi-functional therapeutic carriers against antibiotic-resistant bacteria.
Journal of the American Ceramics Society 105 (3), 1778-1789 (2022)
Natalia Pajares-Chamorro, Yadav Wagley, Neal Hammer, Kurt Hankenson, and Xanthippi Chatzistavrou
3. Self-assembling human heart organoids for the modeling of cardiac development and congenital heart disease.
Nature communications, 12 (1), 1-16 (2021)
Yonatan R. Lewis-Israeli, Aaron H. Wasserman, Mitchell A. Gabalski, Brett D. Volmert, Yixuan Ming, Kristen A. Ball, Weiyang Yang, Jinyun Zou, Guangming Ni, Natalia Pajares, Xanthippi Chatzistavrou, Wen Li, Chao Zhou, Aitor Aguirre
4. 3D Ag-doped bioactive glass-ceramic scaffolds: A microstructural study to antibacterial and biological performance.
Journal of the European Ceramic Society, 41(6), 3717-3730 (2021)
Adam C. Marsh, Nathan Mellott, Martin Crimp, Anthony Wren, Neal Hammer, Xanthippi Chatzistavrou
5. Ag-doped bioactive glass particles for bone tissue regeneration and enhanced MRSA inhibition.
Materials Science and Engineering: C, 111693 (2020)
<https://doi.org/10.1016/j.msec.2020.111693>

- Natalia Pajares-Chamorro, Yadav Wagley, Chima V. Maduka, Daniel W. Youngstrom, Alyssa Yeger, Stephen F. Badylak, Neal D. Hammer, Kurt Hankenson, [Xanthippi Chatzistavrou](#)
6. 3D Printed Bioactive and Antibacterial Silicate Glass-Ceramic Scaffold by the Fused Filament Fabrication.
Materials Science and Engineering: C **118**, p.111516 (2021)
<https://doi.org/10.1016/j.msec.2020.111516>
Adam C. Marsh, Yaozhong Zhang, Lucrezia Poli, Neal D. Hammer, Aljoscha Roch, Martin Crimp, [Xanthippi Chatzistavrou](#)
 7. Sol-gel derived bioactive and antibacterial multi-component thin films by the spin coating technique.
ACS Biomater. Sci. Eng. **6**, **10**, 5549-5562 (2020)
<https://doi.org/10.1021/acsbiomaterials.0c01140>
Logan D. Soule, Natalia Pajares Chamorro, Kayla Chuong, Nathan Mellott, Neal Hammer, Kurt Hankenson, [Xanthippi Chatzistavrou](#)
 8. Three-Dimensional Phase Field Sintering Simulations Accounting for the Rigid-Body Motion of Individual Grains
Computational Materials Science 186: 109963.
Robert Termuhlen, [Xanthippi Chatzistavrou](#), Jason D Nicholas, Hui-Chia Yu
 9. Bioactive Glass Nanoparticles for Tissue Regeneration
ACS Omega **5**, 12716–12726 (2020)
Natalia Pajares-Chamorro, [Xanthippi Chatzistavrou](#)
 10. Resurrection of Antibiotics that Methicillin-Resistant Staphylococcus aureus Resists by Silver-Doped Bioactive Glass-Ceramic Microparticle
Acta biomaterialia **96**, 537-546 (2019)
N. Pajares-Chamorro, J. Shook, N. D. Hammer, [X. Chatzistavrou](#)
 11. A silver-doped bioactive glass/chitosan hydrogel with potential application in dental pulp repair
ACS Biomaterials Science & Engineering **5**, **9**, 4624-4633 (2019)
N. Zhu, [X. Chatzistavrou](#), P. Papagerakis, L. Ge, M. Qin, Y. Wang
 12. Fabrication and multiscale characterization of 3D silver containing bioactive glass-ceramic scaffolds
Bioactive Materials **4**, 215-223 (2019)
C. Marsh, N. P. Mellott, N. Pajares-Chamorro, M. Crimp, A. Wren, N. D. Hammer, [X. Chatzistavrou](#)
 13. Biological properties of modified bioactive glass on dental pulp cells
Journal of dentistry **83**, 18-26 (2019)
N. Zhu, [X. Chatzistavrou](#), L. Ge, M. Qin, P. Papagerakis, Y. Wang
 14. In Vivo Rodent Models for Studying Dental Caries and Pulp Disease
Odontogenesis, 393-403 (2019)
J. Hsiao, Y. Wang, L. Zheng, R. Liu, R. Said, L. Hadjiyski, H. Cha, T. Botero, [X. Chatzistavrou](#), Q. Dong, S. Papagerakis, P. Papagerakis
 15. In Vitro Caries Models for the Assessment of Novel Restorative Materials
Odontogenesis, 369-377 (2019)
Sulaiman Ghandourah, A. Lefkelidou, R. Said, [X. Chatzistavrou](#), S. Flannagan, C. González-Cabezas, C. J. Fenno, L. Zheng, S. Papagerakis, P. Papagerakis
 16. Bactericidal and Bioactive Dental Composites
Frontiers in Physiology, submitted to the section: Craniofacial Biology and Dental Research, doi: 10.3389/fphys.2018.00103, vol **9**, Article 103, 11 pages, 2018
[X. Chatzistavrou](#), A. Lefkelidou, L. Papadopoulou, E. Pavlidou, K.M. Paraskevopoulos, J. Ch. Fenno, S. Flannagan, C. González-Cabezas, N. Kotsanos, P. Papagerakis
 17. Collagen/fibrin microbeads as a delivery system for Ag-doped bioactive glass and DPSCs for potential applications in dentistry
Journal of Non-Crystalline Solids **432**, 143-149 (2016)
[X. Chatzistavrou](#), R. R. Rao, D. J. Caldwell, A. W. Peterson, B. McAlpin, Y. Wang, L. Zheng, J. C. Fenno, J. P. Stegemann, P. Papagerakis

18. Physical Properties of an Ag-Doped Bioactive Flowable Composite Resin
Materials **8.8**, 4668-4678 (2015)
H. Kattan*, X. Chatzistavrou*, J. Boynton, J. Dennison, P. Yaman, P. Papagerakis
(*These authors contribute equally as first authors)
19. Orai1 expression pattern in tooth and craniofacial ectodermal tissues and potential functions during ameloblast differentiation
Developmental Dynamics **244.10**, 1249-1258 (2015)
L. Zheng, V. Zinn, A. Lefkelidou, N. Tarek, X. Chatzistavrou, T. Balam, J. Nervina, S. Papagerakis, Petros Papagerakis
20. Designing dental composites with bioactive and bactericidal properties
Materials Science and Engineering: C **52**, 267-272 (2015)
X. Chatzistavrou, S. Velamakanni, K. DiRenzo, J.C. Fenno, T. Kasuga, A.R. Boccaccini, P. Papagerakis
21. Biological and bactericidal properties of Ag-doped bioactive glass in a natural extracellular matrix hydrogel with potential application in dentistry
European cells & materials (eCM) **29**, 342-355 (2015)
Y. Wang*, X. Chatzistavrou*, D. Faulk, S. Badylak, L. Zheng, S. Papagerakis, L. Ge, H. Liu, P. Papagerakis (*These authors contribute equally as first authors)
22. Fabrication and characterization of new bioactive and antibacterial composites for dental applications
Acta Biomaterialia **10**, 3723–3732 (2014)
X. Chatzistavrou, C. Fenno, D. Faulk, S. Badylak, T. Kasuga, A.R. Boccaccini, P. Papagerakis
23. Towards the synthesis of an experimental bioactive dental ceramic. Part I. Crystal structure and bioactive behavior evaluation
Materials Chemistry and Physics, **145**(1–2), 125-134 (2014)
O.M. Goudouri, E. Kontonasaki, L. Papadopoulou, N. Kantiranis, N.K. Lazaridis, K. Chrissafis, X. Chatzistavrou, P. Koidis, K.M. Paraskevopoulos
24. Sol-gel based fabrication and characterization of bioactive glass-ceramic composites for dental applications.
Journal of the European Ceramic Society **32**, 3051–3061 (2012)
X. Chatzistavrou, Olga Tsigkou, Harsh D. Amin, K.M. Paraskevopoulos, V. Salih, A.R. Boccaccini
25. Innovative Approaches to Regenerate Enamel and Dentin
International Journal of Dentistry
Vol. 2012 (2012), Article ID 856470, 5 pages
doi: 10.1155/2012/856470
X. Chatzistavrou, S. Papagerakis, P. Ma, P. Papagerakis
26. Development of new so-gel derived Ag-doped biomaterials for dental applications
Mater. Res. Soc. Symp. Proc. Vol. 1417 © 2012 Materials Research Society
DOI: 10.1557/opl.2012.743, 6 pages
X. Chatzistavrou, E. Kontonasaki, A. Bakopoulou, A. Theocharidou, A. Sivropoulou, K.M. Paraskevopoulos, P. Koidis, A.R. Boccaccini, T. Kasuga
27. Copper-releasing, boron-containing bioactive glass-based scaffolds coated with alginate for bone tissue engineering
Acta Biomaterialia **8**(2), 792-801 (2012)
M.M. Erol, V. Mourino, P. Newby, X. Chatzistavrou, J.A. Roether, L. Hupa, Aldo R. Boccaccini
28. Synthesis and Degradation of Agar-Carbomer Based Hydrogels for Tissue Engineering Applications
Journal of Applied Polymer Science **123**, 398-408 (2012)
F. Rossi, X. Chatzistavrou, G. Perale, A. R Boccaccini
29. Sol-Gel Fabrication of Glass-Ceramic Composite Materials for Dental Application
Bioceramics Development and Applications
Vol. 1 (2011), Article ID D110156, 4 pages
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- X. Chatzistavrou, D. Esteve, E. Hatzistavrou, E. Kontonasaki, K.M. Paraskevopoulos, A.R. Boccaccini
30. Comparative Bioactivity Study of 45S5 and 58S Bioglasses in Organic and Inorganic Environment
Bioceramics Development and Applications
Vol. 1 (2011), Article ID D110154, 4 pages
doi:10.4303/bda/D110154
G. Theodorou, O. M. Goudouri, E. Kontonasaki, X. Chatzistavrou, L. Papadopoulou, N. Kantiranis, K. M. Paraskevopoulos
 31. Dental Ceramics/Bioactive Glass Composites: Characterization and Mechanical Properties Investigation
Bioceramics Development and Applications
Vol. 1 (2011), Article ID D110257, 4 pages
doi:10.4303/bda/D110257
O. M. Goudouri, E. Kontonasaki, A. Theocharidou, N. Kantiranis, X. Chatzistavrou, P. Koidis, K. M. Paraskevopoulos
 32. In Vitro Bioactivity Studies of Sol-Gel Derived Dental Ceramics/Bioactive Glass Composites in Periodically Renewed Biomimetic Solution
Bioceramics Development and Applications
Vol. 1 (2011), Article ID D110250, 4 pages
doi:10.4303/bda/D110250
O. M. Goudouri, E. Kontonasaki, A. Theocharidou, L. Papadopoulou, X. Chatzistavrou, P. Koidis, K. M. Paraskevopoulos
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Materials Characterization **62**, 118-129 (2011)
X. Chatzistavrou, N. Kantiranis, E. Kontonasaki, K. Chrissafis, L. Papadopoulou, P. Koidis, A.R. Boccaccini, K.M. Paraskevopoulos
 34. Modifying a Dental Ceramic by bioactive glass via the sol gel route: Characterization and Bioactivity Investigation
Materials Chemistry and Physics **125**, 309–313 (2011)
O. Goudouri, E. Kontonasaki, A. Theocharidou, L. Papadopoulou, N. Kantiranis, X. Chatzistavrou, P. Koidis, K.M. Paraskevopoulos
 35. Sol-gel based fabrication of novel glass-ceramics and composites for dental applications
Materials Science and Engineering C **30**, 730 (2010)
X. Chatzistavrou, D. Esteve, E. Hatzistavrou, E. Kontonasaki, K.M. Paraskevopoulos, A.R. Boccaccini
 36. Characterisation of bioactive behaviour of sol-gel hydroxyapatite-CaO and hydroxyapatite- CaO-bioactive glass composites
Materials Science and Engineering: C **30**, 497 (2010)
E. Hatzistavrou, X. Chatzistavrou, L. Papadopoulou, N. Kantiranis, E. Kontonasaki, A.R. Boccaccini, K.M. Paraskevopoulos
 37. Non-crystalline Bioactive composite tissue engineering scaffolds using boron-containing bioactive glass and poly (D,L-lactic acid) coatings
Biomedical Materials **4**, 12 (2009)
T. Mantsos, X. Chatzistavrou, J. A. Roether, L. Hupa, H Arstila, A. R. Boccaccini
 38. Sintering and crystallization of 45S5 Bioglass® powder
Journal of the European Ceramic Society **29**, 3299 (2009)
O. Bretcanu, X. Chatzistavrou, K.M. Paraskevopoulos, R. Conradt, I. Thompson, A.R. Boccaccini
 39. Matrix Assisted Pulsed Laser Evaporation (MAPLE) of Poly(D,L lactide) (PDLLA) on Three Dimensional Bioglass Structures
Advanced Engineering Materials **11**(8), 685-689 (2009)
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V. Califano, F. Bloisi, L. R.M. Vicari, D.M. Yunos, X. Chatzistavrou, A.R. Boccaccini

40. Investigation of the bioactivity of dental ceramic / bioactive glass composites prepared by the sol gel route
Key Engineering Materials **396-398**, 119 (2009)
O.M. Goudouri, E. Kontonasaki, X. Chatzistavrou, L. Papadopoulou, P. Koidis, K.M. Paraskevopoulos
41. A bioactive glass/dental porcelain system by the sol gel route: Fabrication and Characterization
Key Engineering Materials **396-398**, 95 (2009)
O.M. Goudouri, E. Kontonasaki, N. Kantiranis, X. Chatzistavrou, L. Papadopoulou, P. Koidis, K.M. Paraskevopoulos
42. Study of the Bioactive Behavior of Thermally Treated modified 58S Bioactive Glass
Key Engineering Materials **396-398**, 131 (2009)
O.M. Goudouri, X. Chatzistavrou, E. Kontonasaki, N. Kantiranis, L. Papadopoulou, K. Chrissafis, K.M. Paraskevopoulos
43. Novel glass-ceramics for dental application by sol gel technique
Key Engineering Materials **396-398**, 153 (2009)
X. Chatzistavrou, E. Hatzistavrou, N. Kantiranis, L. Papadopoulou, E. Kontonasaki, K. Chrissafis, P. Koidis, K.M. Paraskevopoulos, A.R. Boccaccini
44. Sol-gel hydroxyapatite–CaO composites: Fabrication and Bioactivity Studies
Key Engineering Materials **396-398**, 99 (2009)
E. Hatzistavrou, X. Chatzistavrou, L. Papadopoulou, N. Kantiranis, K. Chrissafis, A.R. Boccaccini, K.M. Paraskevopoulos
45. Dental ceramics modified by ternary glass-ceramic coatings: Characterization and in vitro bioactivity study
Key Engineering Materials **396-398**, 111 (2009)
X. Chatzistavrou, N. Kantiranis, L. Papadopoulou, E. Kontonasaki, A.R. Boccaccini, P. Koidis, K.M. Paraskevopoulos
46. Microstructural characterization and comparative evaluation of physical, mechanical and biological properties of three ceramics for metal-ceramic restorations
Dental Materials **24**, 1362 (2008)
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47. Studying Dental Ceramic-Bioactive Glass Composites
Key Engineering Materials **361-363**, 881 (2008)
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48. Investigation of the Hydroxyapatite Growth on Bioactive Glass Surface
Journal of Biomedical and Pharmaceutical Engineering **1**, 34 (2007)
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Journal of Thermal Analysis and Calorimetry **86**(1), 255-259, (2006)
X. Chatzistavrou, K. Chrissafis, E. Polychoniadis, E. Kontonasaki, P. Koidis, K.M. Paraskevopoulos
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Journal of Thermal Analysis and Calorimetry **85**(2), 253-259 (2006)
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51. Sintered Hydroxyapatite/Bioactive Glass composites: Thermal Analysis and Bioactivity
Key Engineering Materials vol. **309-311**, 167 (2006)
X. Chatzistavrou, K. Chrissafis, E. Kontonasaki, T. Zorba, P. Koidis, K.M. Paraskevopoulos
52. Surface and bulk contributions in the crystallization process of a bioactive glass
Key Engineering Materials vol. **309-311**, 313 (2006)
X. Chatzistavrou, E. Kontonasaki, K. Chrissafis, T. Zorba, P. Koidis, K.M. Paraskevopoulos

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SCANNING **26**, 78 (2004)
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X. Chatzistavrou, T. Zorba, E. Kontonasaki, K. Chrissafis, P. Koidis, K.M. Paraskevopoulos
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60. Far infrared study of impurity local modes in Pr doped PbTe
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62. On the synthesis and characterization of polycrystalline GaSb suitable for thermophotovoltaic (TPV) applications
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63. Detailed Study of Ga low compositional substitution by In in polycrystalline GaSb
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Amariei, X. Chatzistavrou, Al. Stavrinadis, K.M. Paraskevopoulos, E.K. Polychroniadis

1. Reliability of Fused Filament Fabrication for 3D Printing Multifunctional Ag-doped Bioactive Glass-Ceramic Scaffolds Towards Bone Tissue Regeneration
2021 Society for Biomaterials (SFB) (Virtual, April 20-23)
Adam C. Marsh, Yaozhong Zhang, Yadav Wagley, Martin A. Crimp, Kurt Hankenson, Neal D. Hammer, Aljoscha Roch, Xanthippi Chatzistavrou
2. Drug-Free Antibacterial Activity of Silver-Releasing Bioactive Glass Nanoparticles for Bone Regeneration
2021 Society for Biomaterials (SFB) (Virtual, April 20-23)
Natalia Pajares-Chamorro, Sandra Hernández-Escobar, Yadav Wagley, Neal D. Hammer, Parker Acevedo, Kurt Hankenson, Xanthippi Chatzistavrou
3. Silver-doped Bioactive Glass Particles and its Antibacterial Mechanisms against Resistant Bacteria
2020 11th World Biomaterials Congress (WBC Virtual, 11 - 15 December 2020)
Natalia Pajares, Yadav Wagley, Daniel Youngstrom, Neal Hammer, Jonathan Hardy, Kurt Hankenson, Xanthippi Chatzistavrou
4. Addressing the challenges of ion incorporation in Ag-doped bioactive glass nanoparticles
2020 11th World Biomaterials Congress (WBC Virtual, 11 - 15 December 2020)
Natalia Pajares-Chamorro, Sandra Hernández-Escobar, Yadav Wagley, Parker Acevedo, Neal Hammer, Kurt Hankenson, Xanthippi Chatzistavrou
5. Coupling Material Characteristic Manipulation with Fused Filament Fabrication to Produce Multifunctional Glass-Ceramic Scaffolds
2020 11th World Biomaterials Congress (WBC Virtual, 11 - 15 December 2020)
Adam C. Marsh, Yaozhong Zhang, Lucrezia Poli, Neal Hammer, Martin Crimp, Aljoscha Roch, Xanthippi Chatzistavrou
6. Bioactive Glass Nanoparticles as Antibacterial Tool against Antibiotic-Resistant Infections
2019 Materials Research Society (MRS) Annual Fall Meetings (Boston, Massachusetts, USA, December 2-6)
N. Pajares-Chamorro, Y. Wagley, N. Hammer, K. Hankenson, X. Chatzistavrou
7. Utilizing The Fused Filament Fabrication Technique For 3D Printing Ag-doped Bioactive Glass-ceramic Scaffolds
2019 IMECE, International Mechanical Engineering Congress & Exposition, (Salt Lake City, Utah, November 10-13)
Y. Zhang, A.C. Marsh, X. Chatzistavrou, A. Roch
8. Sol-gel derived glass-ceramic with advanced antibacterial and bioactive properties (*Invited talk*)
2019 Materials Science and Technology (MS&T) (Portland, Oregon, USA, Sept. 29-Oct. 3)
N. Pajares-Chamorro, A. Marsh, L. Soule, N. Mellott, N. Hammer, K. Hankenson, X. Chatzistavrou
9. Fabrication and Multiscale Structure of Silver-doped Bioactive Glass-Ceramic Scaffolds
2019 Society for Biomaterials (SFB) (Seattle, Washington State, USA, April 3-6)
A.C. Marsh, N.P. Mellott, N. Pajares-Chamorro, N. Hammer, X. Chatzistavrou
10. Addressing the challenges of bioactive and antibacterial thin film formation using the spin coating technique
2019 Society for Biomaterials (SFB) (Seattle, Washington State, USA, April 3-6)
L. Soule, N. Pajares-Chamorro, N. Hammer, X. Chatzistavrou
11. New dental composites with bioactive and bactericidal properties (*Invited talk*)
2018 Materials Science and Technology (MS&T) (Columbus, Ohio, USA, October 15-18)
X. Chatzistavrou, A. Lefkelidou, L. Papadopoulou, J. C. Fenno, S. Flannagan, C. González-Cabezas, N. Kotsanos, P. Papagerakis
12. Reactivation of antibiotics with silver-doped bioactive glass-ceramic particles against MRSA
2018 Materials Science and Technology (MS&T) (Columbus, Ohio, USA, October 15-18)
N. Pajares, N. Hammer, X. Chatzistavrou
13. Advanced antibacterial and bioactive glass-ceramic particles for tissue healing and regeneration
2017 Materials Research Society (MRS) Annual Fall Meetings (Boston, Massachusetts, USA November 26- December 1)

- X.Chatzistavrou, N. Pajares, Y. Wagley, N. Hammer, K. Hankenson
14. Ag-doped bioactive glass-ceramic particles for combating bacteria and promoting tissue regeneration in dental and orthopedic applications (*Invited talk*)
2017 Materials Science and Technology (MS&T) (Pittsburgh, Pennsylvania, USA, October 8-12)
X. Chatzistavrou, N. Pajares Chamoro, P. Papagerakis, J.C. Fenno, N. Hammer, S. BadylaK, K. Hankenson
 15. Anti-cariogenic Properties of a Novel Bioactive Composite
2016 IADR Annual Meeting (Seoul, Republic of Korea, June 22-25)
Basma Sulaiman Ghandourah, X. Chatzistavrou, Carlos González-Cabezas, Peter Yaman, Joseph Dennison, Petros Papagerakis
 16. Synthetic microbeads incorporating Ag-doped bioglass and DPSCs for dental applications
2015 AADR/CADR Annual Meeting (Boston, Mass., USA, March 11-14)
X.Chatzistavrou, R. Rao, D. Caldwell, B. McAlpin, Y. Wang, L. Zheng, J. Fenno, J. Stegemann, P. Papagerakis
 17. The effect of Ag-BG on physical properties of flowable composite
2015 AADR/CADR Annual Meeting (Boston, Mass., USA, March 11-14)
H. Kattan, X. Chatzistavrou, P. Yaman, J. Dennison, J. Boynton, P. Papagerakis
 18. Cementoblastic/Osteogenic induction of human periodontal ligament stem cells by extracellular matrix membrane
2015 AADR/CADR Annual Meeting (Boston, Mass., USA, March 11-14)
Y. Wang, X. Chatzistavrou, D. Faulk, L. Zheng, H. Liu, L. Ge, P. Papagerakis
 19. New Regenerative and Anti-bacterial Ag-doped Material for Dental Applications
2014 AADR/CADR Annual Meeting (North Carolina, USA, March 19-22)
X. Chatzistavrou, YY. Wang, J.C. Fenno, D. Faulk, S. Badylak, T. Kasuga, AR. Boccaccini, P. Papagerakis
 20. Mechanical Characterization of a Novel Regenerative and Anti-bacterial Composite Material
2014 AADR/CADR Annual Meeting (North Carolina, USA, March 19-22)
SS. Velamakanni, X. Chatzistavrou, K. Drenzo, P. Papagerakis
 21. Novel Anti-bacterial Composite Systems for Pulp Capping and Dentin Regeneration
2014 IADR General Session (Cape Town, Africa, June 24-28)
YY. Wang, X. Chatzistavrou, D. Faulk, S. Badylak, S. Papagerakis, L. Zheng, T. Balam, T. Botero, Q. Jin, L. Ge, H. Liu, P. Papagerakis
 22. Dentin Regeneration: Comparative Study of New Materials and Their Composites
2012 IADR/LAR General Session (IGUACU FALLS, Brazil, June 20-23)
X. Chatzistavrou, S. Papagerakis, E. Kontonasaki, T. Kasuga, AR. Boccaccini, SF. Badylak, P. Papagerakis
 23. Development of new sol-gel derived Ag-doped biomaterials for dental applications
Mater. Res. Soc. Fall Meeting, November, 2012 Boston, Proc. vol. 1417
DOI:10.1557/opl.2012.743
X. Chatzistavrou, E. Kontonasaki, A. Bakopoulou, A. Theocharidou, A. Sivropoulou, K.M. Paraskevopoulos, P. Koidis, A.R. Boccaccini, T. Kasuga
 24. Ag-doped sol-gel derived novel composite materials for dental applications
BIOCERAMICS 23rd, (November 2011, Istanbul, Turkey)
X. Chatzistavrou, K.M. Paraskevopoulos, V. Salih, A.R. Boccaccini, T. Kasuga
 25. Thermoluminescence as an experimental tool towards the characterization of bioactive materials: The case of 58S bioactive glass
23rd European Conference on Biomaterials (ESB), (September 2010, Tampere, Finland)
D. Afouxenidis, G. S. Polymeris, O.M. Goudouri, E. Kontonasaki, X. Chatzistavrou, N. C. Tsirliganis, K.M. Paraskevopoulos, G. Kitis
 26. Modification of a dental ceramic with a bioactive glass via sol gel method.
23rd European Conference on Biomaterials (ESB), (September 2010, Tampere, Finland)
O.M. Goudouri, E. Kontonasaki, L. Papadopoulou, N. Kantiranis, X. Chatzistavrou, P. Koidis, K.M. Paraskevopoulos
 27. Development of Biodegradable Polymer-Bioceramic Composites for Bone Tissue Engineering Scaffolds

- 18th Processing and Fabrication of Advanced Materials Conference, PFAM-XVIII (Sendai, Japan, December 12-14, 2009) eds. M. Miinomi, M. Nakai, M. Morinaga, N. Bhatnagar, T. S. Srivatsan, Vol. 1 (2009) pp. 1-14.
- A. R. Boccaccini, X. Chatzistavrou, D. Mohamad Yunos
28. Sol-gel method in fabrication of novel glass-ceramic composite materials for dental application
Proceedings of 22nd International Symposium on Ceramics in Medicine (BIOCERAMICS 22) (Daegu, Korea, October 26-29, 2009) ed. by S. Kim, The Korean Society for Biomaterials, p. 399
X. Chatzistavrou, D. Esteve, E. Hatzistavrou, E. Kontonasaki, K. Paraskevopoulos, A.R. Boccaccini
 29. In vitro bioactivity studies of sol-gel derived dental ceramics/bioactive glass composites in periodically renewed biomimetic solution
Proceedings of 22nd International Symposium on Ceramics in Medicine (BIOCERAMICS 22) (Daegu, Korea, October 26-29, 2009) ed. by S. Kim, The Korean Society for Biomaterials, p. 795
O.M. Goudouri, E. Kontonasaki, L. Papadopoulou, N. Kantiranis, X. Chatzistavrou, P. Koidis, K.M. Paraskevopoulos
 30. Dental ceramics/bioactive glass composites: characterization and mechanical properties investigation
Proceedings of 22nd International Symposium on Ceramics in Medicine (BIOCERAMICS 22) (Daegu, Korea, October 26-29, 2009) ed. by S. Kim, The Korean Society for Biomaterials, p. 823
O.M. Goudouri, E. Kontonasaki, A. Theocharidou, N. Kantiranis, X. Chatzistavrou, P. Koidis, K.M. Paraskevopoulos
 31. Comparative bioactivity study of 45S5 and 58S bioglasses in organic and inorganic environment
Proceedings of 22nd International Symposium on Ceramics in Medicine (BIOCERAMICS 22) (Daegu, Korea, October 26-29, 2009) ed. by S. Kim, The Korean Society for Biomaterials, p. 391
G. Theodorou, O.M. Goudouri, A. Theocharidou, E. Kontonasaki, X. Chatzistavrou, L. Papadopoulou, K. M. Paraskevopoulos
 32. Fabrication of bioactive glass/dental ceramics composites by sol-gel method: Characterization and bioactivity investigation
European Congress and Exhibition on Advanced Materials and Processes, EUROMAT 2009 (7-10 September, Glasgow, UK)
X. Chatzistavrou, D. Esteve, E. Hatzistavrou, E. Kontonasaki, K. Paraskevopoulos, A.R. Boccaccini
 33. Fabrication of composite materials for dental application following the sol-gel process
22nd European Conference on Biomaterials (September 7-11, 2009 Lausanne, Switzerland)
X. Chatzistavrou, D. Esteve, E. Hatzistavrou, E. Kontonasaki, K. Paraskevopoulos, A.R. Boccaccini
 34. Application of the sol-gel technique for the fabrication of novel glass-ceramic and composite for dental application
22nd European Conference on Biomaterials (September 7-11, 2009 Lausanne, Switzerland)
X. Chatzistavrou, D. Esteve, E. Hatzistavrou, E. Kontonasaki, K. Paraskevopoulos, A.R. Boccaccini
 35. Preliminary TL/OSL Characterization on Synthetic Bioactive Materials
Proceedings of the 7th International Conference on Luminescent Detectors and Transformers of Ionizing Radiation (LUMDETR 2009) Kraków, Poland (12-17 July 2009)
D. Afouxenidis, X. Chatzistavrou, G. S. Polymeris, N. C. Tsirliganis, G. Kitis, K.M. Paraskevopoulos
 36. Application of the sol-gel technique for the fabrication of novel dental glass-ceramics
8th Pacific Rim Conference on Ceramic and Glass Technology (May 31 - June 5, 2009, Vancouver, Canada) (PACRIM8-S20-P161-2009) (2009)
X. Chatzistavrou, E. Hatzistavrou, E. Kontonasaki, K.M. Paraskevopoulos, A.R. Boccaccini
 37. Novel composite materials for dental application fabricated by the sol-gel method
12th Annual Seminar & Meeting on CERAMICS, CELLS AND TISSUES, TOPIC: Surface-reactive biomaterials as scaffolds and coatings: interactions with cells and tissues, Congress Hall of BANCA DI ROMAGNA Faenza – Italy May 19-22, 2009
X. Chatzistavrou, D. Esteve, E. Hatzistavrou, E. Kontonasaki, K. Paraskevopoulos, A.R. Boccaccini
 38. Characterization and in vitro bioactivity study of ternary glass-ceramic coatings
Mater. Res. Soc. Proc. vol. 1054 p.1054-FF05-29 (2008)
X. Chatzistavrou, E. Kontonasaki, N. Kantiranis, L. Papadopoulou, P. Koidis, E. Hatzikraniotis, K.M. Paraskevopoulos
 39. Periodontal Ligament Fibroblasts' Behaviour on Modified Bioactive Dental Ceramic Coatings

- 31st Annual Conference of the European Prosthodontic Association “From Metal to Glass and Polymers” 11-13 October 2007 Athens, Greece (book of abstracts) p. 138
 Honorary Certificate for BEST POSTER PRESENTATION.
 A. Theoharidou, E. Kontonasaki, X. Oraiopoulou, L. Papadopoulou, X. Chatzistavrou, A. Sivropoulou, K.M. Paraskevopoulos, P. Koidis
40. Effect of Multiple Firings and Annealing of Low and High Fusing Dental Ceramics, on Crystal Structure, Fracture Toughness, Micro-Hardness and Young’s Modulus
 International Association for Dental Research divisional meeting 26-29 September 2007 Thessaloniki, Greece (abstracts p. 81)
 A. Theoharidou, N. Kantiranis, P. Kavouras, E. Kontonasaki, X. Chatzistavrou, K.M. Paraskevopoulos, P. Koidis, A. Spiridopoulos, L. Papadopoulou, T. Zorba
41. Incubation of dental ceramic- bioactive glass composite in culture medium: apatite precipitation and growth
 Proceedings of 20th European Conference on Biomaterials, (Sept 27th –Oct 1st 2006, Nantes, France)
 E. Kontonasaki, X. Chatzistavrou, L. Papadopoulou, E. Polychroniadis, K.M. Paraskevopoulos, P. Koidis
42. Comparative study of Dental Ceramics - Bioactive Glass Composites
 Proceedings of 20th European Conference on Biomaterials, (Sept 27th – Oct 1st 2006, Nantes, France)
 E. Kontonasaki, N. Kantiranis, L. Papadopoulou, X. Chatzistavrou, A. Sivropoulou, K. Chrissafis, K.M. Paraskevopoulos, P. Koidis
43. Modifying Dental Porcelain through Bioglass: Changes in Thermal Properties
 Proceedings of the 7th Mediterranean Conference on Calorimetry and Thermal Analysis p. 206 (2005)
X. Chatzistavrou, K. Chrissafis, E. Polychroniadis, E. Kontonasaki, P. Koidis, K.M. Paraskevopoulos
44. Effect of Alumina addition on Bioactive Glass Thermal Behaviour
 Proceedings of the 7th Mediterranean Conference on Calorimetry and Thermal Analysis p. 200 (2005)
X. Chatzistavrou, T. Zorba, K. Chrissafis, E. Pavlidou, E. Kontonasaki, P. Koidis, K.M. Paraskevopoulos
45. Crystallization Process dependence on Particle Size: The System SiO₂-Na₂O-CaO-P₂O₅
 Proceedings of the 7th Mediterranean Conference on Calorimetry and Thermal Analysis p. 373 (2005)
X. Chatzistavrou, T. Zorba, K. Chrissafis, E. Kontonasaki, P. Koidis, K.M. Paraskevopoulos
46. Study of the phase transformation in characterized TlSbSe₂ monocrystals
 Proceedings of the 7th Mediterranean Conference on Calorimetry and Thermal Analysis p. 367 (2005)
 K. Chrissafis, M. Ozer, E. Vinga, E. Polychroniadis, X. Chatzistavrou, K.M. Paraskevopoulos
47. Comparative Spectroscopic Study of Carbonate Rocks from Western Macedonia in Greece
 5th European Conference on Minerals and Spectroscopy, Wien, September 4-8, 2004, Mitteilungen der Österreichischen Mineralogischen Gesellschaft, (Book of Ext. Abstracts), vol. 149 p. 22.
 K. Dagounaki, T. Zorba, M. Anastasiou, X. Chatzistavrou, K. Paraskevopoulos.
48. On the surface quality of pure and Te-doped GaSb wafers and their Optical Characterization. (First Prize awarded presentation)
 Proceedings of the 5th General Conference of the Balkan Physical Union (BPU-5) –Serbia Montenegro- (2003) p. 161.
 A. Amariei, D. Sakellari, X. Chatzistavrou, E. Pavlidou, K.M. Paraskevopoulos, E. Polychroniadis

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- Applied Surface Science
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INVITED SPEAKER

- 4th International Workshop on Advanced Ceramics (IWAC04), December 10-12, Nagoya, Japan 2010
- Bone and Joint Center, Henry Ford Health System, invited talk, Detroit, USA, April 2013
- Delft University of Technology (TU Delft), invited talk, Delft, The Netherlands, February 2014
- School of Dentistry, University of Detroit Mercy (UDMercy), invited talk, Detroit, USA, March 2015
- Institute of Biomaterials, University of Erlangen-Nuremberg, invited talk, Erlangen, Germany, May 2015
- Department of Chemical Engineering and Materials Science, Michigan State University, invited talk, Michigan, USA, May 2016
- Materials Science and Technology (MS&T), Pittsburgh, Pennsylvania, USA, October 8-12, 2017
- Department of Biomedical Engineering, Michigan State University, Michigan, USA, May 2018
- Materials Science and Technology (MS&T), Columbus, Ohio, USA, October 15-18, 2018
- Materials Science and Technology (MS&T), Portland, Oregon, USA, Sept. 29-Oct. 3, 2019
- Conference Day, Department of Chemical Engineering and Materials Science, MSU, May 9th, 2019
- Institute of Biomaterials, University of Erlangen-Nuremberg, invited talk, Erlangen, Germany, December 2020

MEMBERSHIPS

- American Ceramic Society
- Society for Biomaterials
- Materials Research Society
- European Society of Biomaterials
- International Association for Dental Research and American Association for Dental Research
- Hellenic Society for Biomaterials

- **Department of Chemical Engineering and Materials Science, MSU**

Two PhDs under supervision as Mentor:

Natalia Pajares-Chamorro (**Graduated April 2021**, Program: CHEMS)

Adam Christoph Marsh (**Graduated Dec. 2021**, Program: CHEMS)

Three PhD candidate under co-supervision as co-Mentor:

David Hernández Escobar (**Graduated April 2021**, Program: CHEMS)

Madeline Mackinder (Started Sep 2018, Program: CHEMS)

Chima Victor Maduka (DVM, MS) (Started Sep 2019, Program: BME)

- **Department of Chemical Engineering and Materials Science, MSU**

Fall Semester: Biomaterials and Biocompatibility (MSE 425)

Spring Semester (co-teaching): Synthesis & Processing Materials (MSE 370)

- **Teaching assistant at undergraduate course.** *School of Dentistry, University of Michigan, Ann Arbor, USA (Tutor, Dr. P. Papagerakis)*

a) Stem Cells and Tissue Regeneration

- **Tutorial assistance at undergraduate courses.** *Department of Physics, Aristotle University of Thessaloniki, Greece (Tutor, Prof. K.M. Paraskevopoulos)*

a) Laboratory on computer applications.

b) Laboratory techniques for optical characterization of materials.

c) Laboratory techniques for the study of materials' spectroscopic properties.

- **Tutorial assistance at postgraduate courses.** *Materials Physics and Technology, Department of Physics, Aristotle University of Thessaloniki, Greece (Tutor, Prof. K.M. Paraskevopoulos)*

a) Laboratory on optical characterization of materials.

- **Student co-supervision.**

Assisted and supervised undergraduate and MSc students during their practical project:

❖ Aristotle University of Thessaloniki, Greece. MSc students in Materials Physics and Technology, Department of Physics (Supervisor Prof K.M. Paraskevopoulos):

a) *Evita Karafergia, "Characterization of modified Bioactive materials: Study of the behaviour of Hydroxyapatite in Simulated Body Fluid before and after heat treatment"*

b) *Ourania M. Goudouri, "Study and characterization of bioactive materials modified by nanomaterials"*

c) *Evangelos Hatzistavrou, "Study and characterization of composite materials used in tissue engineering applications: Hydroxyapatite and Bioactive glass"*

❖ Imperial College London, United Kingdom (Supervisor Prof A.R. Boccaccini):

d) *Dominic Esteve, Undergraduate student, Department of Bioengineering, Subject: "Bioactive glass ceramics for dental applications"*

e) *Tryfon Mantsos, MSc student, Master in "Composite Materials", Department of Aeronautics, Subject: "Development of polymer coated bioactive glass composite scaffolds for tissue engineering"*

f) *Ann Sheikh, MSc student, Master in "Composite Materials", Department of Aeronautics, Subject: "Development of bone tissue scaffolds based on new silicate bioactive glasses and biopolymers"*

g) *Sean Prem, MSc student, Master in "Bioengineering", Department of Bioengineering, Subject: "Glass-ceramics from sol-gel methods for dental applications"*

❖ School of Dentistry, University of Michigan (Supervisor Dr P. Papagerakis)

h) *Zarina Tchibekova, Undergraduate student, Subject: "Novel approaches for dental tissues regeneration"*

- i) Saalini Velamakanni, Undergraduate student, Subject: ***“Optimization and Mechanical Characterization of a Novel Regenerative Bioglass/Composite Material”***
 - j) Hiba Kattan, Graduate student, Subject: ***“Ag-BG doped composites: Mechanical Properties”***
 - k) Basma Ghandourah, Graduate student, Subject: ***“Anti-cariogenic Properties and mechanism of action of a novel bioactive composite in an in-vitro Caries Model”***
- ❖ Department of Materials Science and Engineering (Supervisor Dr P. Papagerakis)
- l) Kyle DiRenzo, Undergraduate student, Subject: ***“Mechanical Characterization of new composite materials”***