

CURRICULUM VITAE  
**MICHAEL BIZIMIS**

School of Earth, Ocean and the Environment  
University of South Carolina  
701 Sumter St, EWSC 617  
Columbia SC, 29208  
Tel.: 803-777-5565  
email:mbizimis@geol.sc.edu

**Education:**

- Ph.D.: 1/1995-8/2001: Isotope Geochemistry, Igneous Petrology, Florida State University.  
Dissertation Title: “Geochemical Processes in the upper mantle: Evidence from peridotites, kimberlites and carbonatites.”  
Supervisor: Dr. Vincent J.M. Salters
- B.Sc.: 9/1989-10/1994: Geology (with specialization in Economic Geology)  
National Kapodistrian University of Athens, Greece.

**Professional appointments**

- 1/2021-present: Professor (with Tenure)  
School of Earth, Ocean and the Environment, University of South Carolina
- 8/2015-12/2020: Associate Professor (with Tenure)  
School of Earth, Ocean and the Environment, University of South Carolina
- 8/2009-2015: Assistant Professor (Tenure-track)  
Department of Earth and Ocean Sciences, University of South Carolina
- 8/2008-8/2009: Research Assistant Professor  
Department of Geological Sciences, University of South Carolina
- 11/2004-August 2008: Assistant Scholar Scientist,  
Department of Geological Sciences *and* National High Magnetic Field Laboratory, Florida State University,
- 9/2001-11/2004: Visiting Research Associate,  
Department of Earth Sciences, Florida International University (supervisor Dr. Gautam Sen).
- 8/1996-4/2001: Research Assistant,  
Division of Isotope Geochemistry, National High Magnetic Field Laboratory. Florida State University,
- 8/1995-7/1996: Teaching Assistant,  
Department of Geological Sciences, Florida State University.

**Research interests**

- Igneous petrology, radiogenic (Hf, Nd, Sr, Pb, Os, Ce) and stable (Mo, Fe) isotope Geochemistry, and volatile contents as it pertains to mantle processes, arc volcanism and plume dynamics,
- Water and the fate of volatiles in the mantle.
- Non-traditional Isotopes (Mo, Fe) as tracers of sources and processes in magmatism.
- Elemental fluxes in subduction zones (Boron, Mo-isotopes).
- Mantle plume dynamics, plume-lithosphere interaction, and the origin and sources of Oceanic Island volcanism.
- Serpentinization and elemental exchange between seawater and mantle lithosphere.
- Hg-isotopes as a tracer of Hg cycling in the environment.
- Elemental fluxes in salt marshes and coastal environments.
- Novel elemental tracers in forams and sediments to trace ocean water chemistry and past climate shifts.

### Honors and Awards

- 2019: Fulbright Specialist Award. Awarded by the Department of State. Visit IIT Kanpur, India in January 2020 as part of a Fulbright – Nehru project approved for IIT-Kanpur.
- 2016: Highly Cited Paper Award by Web of Science “top 1% of the academic field of Geosciences based on a highly cited threshold for the field and publication year”: Bizimis, M., Peslier, A.H., (2015) Water in Hawaiian garnet pyroxenites: Implications for water heterogeneity in the mantle. *Chem. Geol.*, 397, 61-75.
- 2016: Highly Cited Paper Award by Web of Science “top 1% of the academic field of Geosciences based on a highly cited threshold for the field and publication year”: Peslier, A. H., M. Bizimis, and M. Matney (2015), Water disequilibrium in olivines from Hawaiian peridotites: recent metasomatism, H diffusion and magma ascent rate, *Geochim. Cosmochim. Acta*, 154, 98-117.
- 2014: Breakthrough Star Award, University of South Carolina.
- 2012: Excellence in Reviewing, Chemical Geology, Elsevier.
- 2010: Keith Runcorn Travel Award, European Geophysical Union.

### Funding Received

- 2025: NSF 2401492 Collaborative Research: Investigation of Volcanism and Tectonics in the Bight Transform Region (55.5N-57.0N, Mid-Atlantic Ridge) (124,073, Year 1)
- 2024: NSF 2049310: Collaborative Research: US GEOTRACES GP17-ANT: Constraining the Neodymium (Nd) Isotope and Rare Earth Element Cycles near the Amundsen Sea Continental Margin PI: Bizimis (\$462,039)
- 2022: USGS contract Supplement : Nd, Hf, Sr isotope Analyses USGS. \$6,400. PI: Bizimis
- 2021: NSF-EAR 2050271: “Distinguishing Sediment, Serpentinite, and Altered Oceanic Crust in the Source of Aleutian Volcanic Rocks Using Boron & Molybdenum Isotopes” PI: Yogodzinski, co-PI: Bizimis \$370,790
- 2021: USGS contract: Nd, Hf, Sr isotope Analyses USGS. \$31,340. PI: Bizimis
- 2020: USGS contract: Radiogenic Isotope and Platinum Group Element Analyses \$19,920. PI: Bizimis.
- 2019: ASPIRE III: Acquisition of a Microwave System to Support Multidisciplinary Research in Material, Environmental, and Geological Sciences. PI: M. Baaloussa (EHS), co-PI: Bizimis, co-PI: Wang (Chemistry): \$68,779 .
- 2018: COLLEGE OF ARTS AND SCIENCE: Support for Small Equipment Purchase: A direct injection inlet system for enhanced sensitivity and sample throughput in plasma-source mass spectrometers: PI: Howie Scher, co-PI M. Bizimis (\$15,000).
- 2017: OFFICE OF THE PROVOST. Visiting Scholars Program: “ Curriculum Development In Quantitative Metamorphic Petrology and Collaborative Research in Mantle Geochemistry. PI: Bizimis, co-PI: Yogodzinski. (\$5,225).
- 2017: OFFICE OF THE VPR: High precision Iron – isotope ratio analytical capabilities on geological samples at the University of South Carolina. PI: Bizimis (\$14,953).
- 2016: NSF-OCE 1624315: “Collaborative Research: Water concentration and distribution in the oceanic lithosphere”. PI: Bizimis (\$282,150).
- 2015: NSF-OCE 1537135: “Collaborative Research: Geochemistry of IODP Site 1438 and West Philippine Basin Volcanic Rocks: Constraints on Subduction Initiation and the Early Development of the Izu-Bonin-Marianas” PI: Yogodzinski, co-PI: Bizimis (\$ 155,355).
- 2015: OFFICE OF THE VPR, USC: Sewage overflows from the 1000-year rain event and their impacts on the cycling of carbon and toxic metals in the Congaree river watershed. PI: Rothenberg (EHS), co-PIs: Baaloussa, Bizimis, Lang, Stangler. \$6,000 Bizimis portion. <sup>SEP</sup>
- 2014: NSF-EAR 1347890: "Collaborative Research: PGE and Pb Systematics in Altered Abyssal Peridotites: Integrating Experiments with Natural Samples." PI: Bizimis (\$153,440).
- 2011: NSF-OCE 1129280: "Collaborative Research: Water Stratigraphy of the Oceanic Lithosphere Using Mantle Xenoliths from Hawaii" PI: Bizimis (\$120,578).
- 2010: USC-PIRA award. Assessing the role of submarine groundwater discharge as a major source of mercury in coastal waters PI: Bizimis (\$19,499).

- 2009: NSF-OCE 0928280: Collaborative Research: Serpentinization and cycling of B, Nd and Sr in submarine hydrothermal systems: An experimental study on the effects of pH and temperature. PI: Bizimis (\$173,958).
- 2009: NSF-EAR-IF 0841461: Upgrade of Electron Microprobe for Earth Science and Materials Research at the University of South Carolina: PI: Yogodzinski, co-PI: Bizimis, Barbeau, Hintz, Zhao (\$166,853).
- 2008: NSF-MRI: 0820723 MRI: Acquisition of ICPMS Instrumentation for Interdisciplinary Research: PI: Thunell, co-PIs: Bizimis, Scher, Shaw (\$695,247).
- 2006: NSF-OCE 0622827 (NSF-OCE 0852488 transfer to USC in 2008): Constraints on the Hawaiian swell and plume lithosphere interaction from Kaua'i mantle xenoliths. PI: Bizimis (\$219,603).
- 2006: NSF-EAR 0635864: Nb/Ta Fractionations as Tracer of Subduction. PI: Salters, co-PI: Bizimis (\$299,076)

#### Funding received by supervised students

- 2023: SPARC Graduate Research Award to Ekaterina Rojas-Kolomiets: Deciphering the compositional origin of Earth's crust with molybdenum isotopes.
- 2018: SPARC Graduate Research Award to Paul Beguelin, PhD candidate Geological Sciences: "Cerium isotopes as a tracer of recycled sediments in the Earth's mantle",
- 2018: GSA-Graduate Student Research award to Aaron W. Ashley, MSc. candidate Geological Sciences. "The effects of carbonatitic metasomatism on the water systematics of the lithosphere".
- 2016: GSA-Graduate Student Research award to Paul Beguelin, PhD candidate Geological Sciences: Is the Depleted Rejuvenated Component part of the Hawaiian plume? Insights from Hf isotopes ratios in Niihau lavas.
- 2014: SPARC Graduate Research to Carl Frisby, PhD candidate Geological Sciences: Active mapping of trace metal distribution across grain boundaries within altered peridotites.
- 2013: Magellan Scholar: Leslie Bruce, Geological Sciences, Spanish: Isotopic Ratios of Hafnium and Neodymium from Mantle Xenoliths on Lanzarote Island, Spain
- 2011: Magellan Scholar: Won Howell, Geological Sciences: Constraints on the Origin for the Garnet Pyroxenites from O'ahu, Hawaii.

#### Teaching

- Courses taught at USC:
  - GEOL 103 Environment of the Earth (F08).
  - GEOL 110 Cultural Geology (F18)
  - GEOL 110 (developed new as fully asynchronous (F20, SP21, Su21, Su22, F22, SP23, SP24)
  - GEOL 202 Rocks and Minerals (F09, F13).
  - GEOL 205 Earth Resources (F10, F11, F12, F14, F15, F16, F17).
  - GEOL 318 Field Studies:
    - Sp10: Volcanology field trip for undergraduates to the Azores Islands.
    - Sp11: Volcanology field trip for undergraduates to Hawaii.
  - GEOL 345 Igneous and Metamorphic Petrology (Sp17, F19, F 21, F23)
  - GEOL/MSCI 520 Isotope Geology/Geochronology (Sp09, Sp11, Sp13, Sp15, Sp19).
  - GEOL/MSCI 521 Introduction to Geochemistry (Sp10, Sp12, Sp14, Sp16, Sp22).
  - GEOL 800 Seminar (F09)
  - GEOL 818 Seminar in Geophysics (co-taught with S. White).
- Courses taught at Florida State University:
  - GLY 1000 Dynamic Earth.

#### Student supervision

- Post-doctoral Fellows supervision:
  - Dr. Alexander Marfin (October 2022- October 2023; now at U of Indiana)
  - Dr. Soumen Mallick (April 2011- April 2012; now at Brown University.
  - Dr. Tarun Khanna (with Dr. G. Yogodzinski, July 2010-July 2011), now at NGRI, Hyderabad, India.
  - Dr. Reshmi Das (Fall 2010), now Assistant Professor at Jadavpur University, Kolkata, India

- PhD Student supervision:
  - Stephanie Anderson (current)
  - Ekaterina Rojas-Kolomiets (current)
  - Garbriel de Souza Franco (current)
  - Paul Beguelin (USC, 2019; Now Post Doc at U. Munster, Germany).
  - Carl Frisby, (PhD, 2016; now in Industry).
  - Dr. Nicole Tibbetts, (FSU 2010, co-supervised and supported through my grants, now in Industry).
  - Dr. Indra Sen (FIU 2010, supported through my grants, now ITT – Kanpur, India).
  
- Master's Student supervision:
  - Reece Hammond (August 2024, now Industry)
  - Sierra Paterson (USC 2021, now Industry)
  - Aaron Wolfgang Ashley (USC 2019, Now PhD candidate at FSU)
  - Jessica Holm (USC 2016, now in Industry).
  - Ryan Antle (USC 2013, now in Industry).
  - Shawn Wallace (USC 2011, now in Industry).
  
- Undergraduate Research supervision / Thesis Supervision (since 2010):
  - Frannie Mellia (USC 2024)
  - Maggie Gordon (Honors Senior Thesis, USC 2023)
  - Justin Webb (USC 2021; Industry)
  - Sarah Mielke (USC 2021; Now at graduate program U. of New Mexico)
  - Joshua Edelson (USC 2019, Industry)
  - Kyle Gawinski (2018, Industry)
  - Kyle Jacobs (2017, Industry).
  - Trevor Brown (2016, now in Industry).
  - Eleanor McIntosh ( 2016, now graduate program at UC San Diego, SCRIPPS).
  - Leslie Bruce, (2015, Magellan Scholar, MSc at UT-Austin).
  - Erin Adams (now Smoak). (2014, MSc at USC).
  - Stevie Henrick (2014, MSc at Florida State University).
  - Won Howell, (2012, Senior Thesis, Magellan Scholar, now in Industry).
  - Caitlin Gionfriddo, (2010, Honor College Thesis, PhD at U. Melbourne, Australia).

**Professional Affiliations:**

American Association for the Advancement of Science  
American Geophysical Union.  
Geological Society of America.  
Geochemical Society

**Recent Scientific Collaborators:**

L. Ackerman (Academy of Sciences, Czech Republic), A. Brandon (U of Houston), D. Clague, (MBARI), D. Foustoukos (Carnegie Institute of Washington), E. Gazel (Cornell), R. Hickey-Vargas (FIU), M. Jackson (UCSB), A. Peslier (NASA-Jacobs), A. Stracke (U. of Munster), G. Yogodzinski (U. South Carolina).

**Service and Leadership**

- Outstanding Student Paper Awards committee, Volcanology, Geochemistry, Petrology Group, AGU 2022.
- Co-chair and Undergraduate Student volunteer coordinator: Southeastern Geological Society of America Meeting, 2016 Columbia SC.
- Clarke Medal Award committee member, Geochemical Society (2015-2017).
- Associate Editor for the Journal of Geophysical Research-Solid Earth, (2007-2012).
- Served as NSF-OCE proposal review panel member (2007, 2008, 2013).
- Served as NSF-GEO proposal review panel member (2019).

- Session Chair at AGU (AGU 2008 Joint Assembly).
- Session chair Goldschmidt Conference (2012; two sessions in 2014; 2018; 2020)
- Outstanding Student Paper Awards committee, Volcanology, Geochemistry, Petrology Group, AGU 2013.
- Ad-hoc reviewer for Nature, J. of Petrology, Geochimica Cosmochimica Acta, Earth and Planetary Science Letters, Geochemistry, Geophysics, Geosystems, Chemical Geology, Geology, Amer. Mineralogist, Bul. of Volcanology, Marine Chemistry, J. of Environmental Monitoring, Proc. Indian Academy of Science, and others.
- Reviewer for NASA, NSF, Canadian Science Foundation, Swiss National Foundation, Italian Antarctic Research Programme.
- Mentored and trained a middle school research student (2010: Ms Dominique Choe; received 1<sup>st</sup> place among 8<sup>th</sup> graders).
- Trained and supervised several undergraduate summer interns on geochemistry research (part of an NSF-funded REU program while at FSU).
- Designed hands-on activities and exhibits related to the Geochemistry during the NHMFL Annual Open House activities (FSU, from 1996 to 2008).
- Regular visitor to Brennen and LV Conter Elementary Schools (Columbia, SC) to talk about: What Geologists Do!

#### Service to the Department and University:

- Graduate Studies Director, SEOE 2021-present
- 2015- present: Director, Center for Elemental Mass Spectrometry (CEMS) laboratory
- 2010-2020: Undergraduate Committee
- 2016 – 2017: Member (elected) of the PFAC (steering committee of the School of the Earth, Ocean and The Environment).
- 2008-2011: Graduate Admissions Committee.
- 2011, 2014, 2015: Peer Review committee (Chair in 2015)
- 2011: Budget committee, Department of Earth and Ocean Sciences.
- 2011-2014: Faculty Senator
- 2018-2019: Chair: Geochronology Search committee, 2012-2013 Member: Aqueous Geochemistry committee.

#### Peer Reviewed Publications

(Google Scholar h-index = 41, i10-index = 74, > 5200 citations).

(\*) Denotes student or postdoc author supervised. (+) Denotes Bizimis is corresponding author.

97. Polák, L., Ackerman, L., Magna, T., Rappich, V., Bizimis, M., Giebel, R.J., Dahlgren, S., Viladkar, S., Significance of highly siderophile element and Re–Os isotope systematics in global carbonatites, *Geochemistry*, 126095, <https://doi.org/10.1016/j.chemer.2024.126095>.
96. Marfin, A., Bizimis, M., Lightfoot, P. C., Yogodzinski, G., Ivanov, A., Brzozowski, M., Latyshev, A., Radomskaya, T., (2024) Constraints on the source of Siberian Trap magmas from Mo isotope evidence, *Geochimica et Cosmochimica Acta*, 375, 106-122, [doi.org/10.1016/j.gca.2024.05.013](https://doi.org/10.1016/j.gca.2024.05.013).
95. Beloša, L., Callegaro, S., Meyzen, C. M., Gaina, C., Polteau, S., Bizimis, M., & Mazzini, A. (2024). Deep mantle component and continental crust remobilization in the source of Vesteris Seamount, East Greenland margin. *Geochemistry, Geophysics, Geosystems*, 25, e2023GC011196. <https://doi.org/10.1029/2023GC011196>
94. (\*)Rojas-Kolomiets, E., Jensen, O., Bizimis, M., Yogodzinski, G. and Ackerman, L. (2024) Corrigendum to "Serpentinite fluids and slab-melting in the Aleutian arc: Evidence from molybdenum isotopes and boron systematics", *Earth and Planetary Science Letters*, Volume 603, 2023, 1-12/117970]. Volume 625, article id. 118474. [10.1016/j.epsl.2023.118474](https://doi.org/10.1016/j.epsl.2023.118474)
93. Sato, H., Machida, S., Meyzen, C. M., Ishizuka, O., Senda, R., Bizimis, M., Ashida, K., Mikuni, K., Sato, T., Fuji, M., Nogi, Y., Kato Y., (2024). The Conrad Rise revisited: Eocene to Miocene volcanism

- and its implications for magma sources and tectonic development. *Journal of Geophysical Research: Solid Earth*, 129, e2023JB027380. <https://doi.org/10.1029/2023JB027380>
92. Klaver, M., Elliott, T., Ionov, D.A., Bizimis, M., Berndt, J., Klemme, S., (2024) Nickel isotope fractionation factors between silicate minerals and melt, *Geochimica et Cosmochimica Acta*, <https://doi.org/10.1016/j.gca.2023.11.026>.
  91. Khanna, T.C., Kanakdande, P.C., Bizimis, M., Arora, K., (2023) Geochemical benchmarks in the Phanerozoic LIPs constrained from well-cores in the Deccan Volcanic Province, India, *Lithos*, 462–463, 107403, <https://doi.org/10.1016/j.lithos.2023.107403>.
  90. Xydous, S., Baziotis, I.P., Klemme, S., Bizimis, M., Vroon, P.Z., Berndt, J., Day, J.M.D., Asimow, P. (2023) Petrological and geochemical evidence for a hot crystallization path and a recharge filtering bypass at Antimilos, Milos volcanic field, Greece. *Contrib Mineral Petrol* **178**, 82 <https://doi.org/10.1007/s00410-023-02067-z>
  89. Liu, X.-N., Hin, R.C., Coath, C.D., Bizimis, M., Su, L., Ionov, D.A., Takazawa, E., Brooker, R., Elliott, T., 2023. The magnesium isotopic composition of the mantle. *Geochimica et Cosmochimica Acta* 358, 12-26. <https://doi.org/10.1016/j.gca.2023.08.011>
  88. (\*)Rojas-Kolomiets, E., Jensen, O., Bizimis, M., Yogodzinski, G. and Ackerman, L. (2023) Serpentinite fluids and slab-melting in the Aleutian arc: Evidence from molybdenum isotopes and boron systematics. *Earth and Planetary Science Letters* 603, 117970, <https://doi.org/10.1016/j.epsl.2022.117970>
  87. Price, A.A., Jackson, M.G., Blichert-Toft, J., Konrad, K., Bizimis, M., Koppers, A.A.P., Konter, J.G., Finlayson, V.A. and Sinton, J.M. (2022) Distinguishing Volcanic Contributions to the Overlapping Samoan and Cook-Austral Hotspot Tracks. *Journal of Petrology* 63, 10.1093/petrology/egac032
  86. Mitra, A., Sen, I.S., Pandey, S.K., Velu, V., Reisberg, L., Bizimis, M., Cloquet, C., Nizam, S., (2021). Lead Isotope Evidence for Enhanced Anthropogenic Particle Transport to the Himalayas during Summer Months. *Environmental Science & Technology* 55, 13697-13708. <https://doi.org/10.1021/acs.est.1c03830>
  85. Byerly, B., Jackson, M., Bizimis, M. (2021): Carbonatite versus silicate melt metasomatism impacts grain scale  $^{87}\text{Sr}/^{86}\text{Sr}$  and  $^{143}\text{Nd}/^{144}\text{Nd}$  heterogeneity in Polynesian mantle peridotite xenoliths. *Geochemistry, Geophysics, Geosystems*, 22, <https://doi.org/10.1029/2021GC009749>
  84. Siegrist, M., Yogodzinski, G.M. and Bizimis, M. (2021) Origins of Os-isotope and platinum-group element compositions of metasomatized peridotite and cumulate pyroxenite xenoliths from Kharchinsky Volcano, Kamchatka. *Geochimica et Cosmochimica Acta* 299, 130-150, <https://doi.org/10.1016/j.gca.2021.01.045>
  83. McCarthy, A., Yogodzinski, G.M., Bizimis, M., Savov, I.P., Hickey-Vargas, R., Arculus, R. and Ishizuka, O. (2021) Volcaniclastic sandstones record the influence of subducted Pacific MORB on magmatism at the early Izu-Bonin arc. *Geochimica et Cosmochimica Acta* 296, 170-188, <https://doi.org/10.1016/j.gca.2021.01.006>
  82. Buff, L., Jackson, M.G., Konrad, K., Konter, J.G., Bizimis, M., Price, A., Rose-Koga, E.F., Blusztajn, J., Koppers, A.A.P. and Herrera, S. (2021) “Missing links” for the long-lived Macdonald and Arago hotspots, South Pacific Ocean. *Geology*, 10.1130/G48276.1
  81. Jackson, M.G., Blichert-Toft, J., Halldórsson, S.A., Mundl-Petermeier, A., Bizimis, M., Kurz M.D., Price, A.A., Harðardóttir, S., Willhite, L.N., Breddam, K., Becker, T.W. and Fischer, R.A. (2020) Ancient helium and tungsten isotopic signatures preserved in mantle domains least modified by crustal recycling. *Proceedings of the National Academy of Sciences* 117, 30993, 10.1073/pnas.2009663117
  80. Nizam, S., Sen, I.S., Vinoj, V., Galy, V., Selby, D., Azam, M.F., Pandey, S.K., Creaser, R.A., Agarwal, A.K., Singh, A.P. and Bizimis, M. (2020) Biomass-Derived Provenance Dominates Glacial Surface Organic Carbon in the Western Himalaya. *Environmental Science & Technology*. 10.1021/acs.est.0c02710
  79. Elkins, L.J., Meyzen, C.M., Callegaro, S., Marzoli, A. and Bizimis, M. (2020) Assessing Origins of End-Triassic Tholeiites From Eastern North America Using Hafnium Isotopes. *Geochemistry, Geophysics, Geosystems* 21, e2020GC008999.
  78. Humphries, M.S., Benitez-Nelson, C.R., Bizimis, M., Ralph, T.J., Larkin, Z.T., McCarthy, T.S. (2020). Dust provenance and its role as a potential fertilizing agent for the Okavango Delta, Botswana (*Earth Surface Processes and Landforms.*, accepted ) doi:10.1002/esp.4840.
  77. Osborne E.B., Umling N.E., Bizimis M., Buckley W., Sadekov A., Tappa E., Marshall B., Sautter L.,

- Thunell R.C., (2020) A sediment trap evaluation of B/Ca as a carbonate system proxy in asymbiotic and nondinoflagellate hosting planktonic foraminifera (*Paleoceanography and Paleoclimatology*, accepted) doi:10.1029/2019PA003682.
76. (\*)Ashley, A.W., Bizimis, M., Peslier, A.H, Jackson, M., Konter, J. (2020) Metasomatism and Hydration of the Oceanic Lithosphere: A Case Study of Peridotite Xenoliths from Samoa *Journal of Petrology*, 61, 2 ega028 [doi.org/10.1093/petrology/egaa028](https://doi.org/10.1093/petrology/egaa028)
  75. Morton, P.L., Landing, W.M, Shiller, A.M., Moody, A.M., Kelly, T.B., Bizimis, M., Donat, J.R., De Carlo, E H., Shacat, J., (2019) Shelf inputs and lateral transport of Mn, Co, and Ce in the western North Pacific Ocean . *Frontiers in Marine Science, Marine Biogeochemistry* doi:10.3389/fmars.2019.00591.
  74. Siegrist, M., Yogodzinski, M., Bizimis, M., Churikova, T., Fournelle, J.H., Dektor, C., (2019) Fragments of Metasomatized Forearc: Origin and Implications of Mafic and Ultramafic Xenoliths from Kharchinsky Volcano, Kamchatka. *Geochemistry, Geophysics, Geosystems*, 20, doi:10.1029/2019GC008478
  73. Mazza, S. E., Gazel E., Bizimis M., Moucha R., (\*) Béguélin P., E. A. Johnson, R. J. McAleer, and A. V. Sobolev, (2019), Sampling the volatile-rich transition zone beneath Bermuda, *Nature*, 5697756, 398-403.
  72. McCarthy, A., Yogodzinski, G., Tepley, F. J., Bizimis, M., Arculus, R., and Ishizuka O., (2019), Isotopic Characteristics of Neogene-Quaternary Tephra From IODP Site U1438: A Record of Explosive Volcanic Activity in the Kyushu-Ryukyu Arc, *Geochemistry, Geophysics, Geosystems*, 20. <https://doi.org/10.1029/2019GC008267>
  71. Loosli, F., Wang J., Rothenberg S., Bizimis M., Winkler C., Borovinskaya O., Flamigni L., and M. Baalousha, (2019), Sewage spills are a major source of titanium dioxide engineered (nano)-particle release into the environment. *Environmental Science: Nano*, 63, 763-777.
  70. (\*)Béguélin, P., Bizimis, M., (\*)McIntosh, E.C., Cousens, B., Clague, D.A., (2019). Sources vs. processes: Unraveling the compositional heterogeneity of rejuvenated-type Hawaiian magmas. *Earth and Planetary Science Letters*, 514: 119-129. <https://doi.org/10.1016/j.epsl.2019.03.011>.
  69. (+) (\*)Frisby, C., Foustoukos, D.I., Bizimis, M., (2019). Rare earth element uptake during olivine/water hydrothermal interaction. *Lithos*, 332-333: 147-161. <https://doi.org/10.1016/j.lithos.2019.03.003>.
  68. Khanna, T.C., Bizimis, M., Barbeau, D.L., Keshav Krishna, A., Sessa Sai, V.V., (2019). Evolution of ca. 2.5 Ga Dongargarh volcano-sedimentary Supergroup, Bastar craton, Central India: Constraints from zircon U-Pb geochronology, bulk-rock geochemistry and Hf-Nd isotope systematics. *Earth-Science Reviews*, 190: 273-309. <https://doi.org/10.1016/j.earscirev.2018.11.014>.
  67. Schaffer L., Peslier A., Brandon A., Bizimis M., Gibler R, Norman M, Harvey J (2019). Effects of melting, subduction-related metasomatism, and sub-solidus equilibration on the distribution of water contents in the mantle beneath the Rio Grande Rift (USA). *Geochimica et Cosmochimica Acta* 266, 351-381 <https://doi.org/10.1016/j.gca.2018.10.005>.
  66. Gazel, E., Trela, J., Bizimis, M., Sobolev, A., Batanova, V., Class, C., Jicha, B. (2018). Long-Lived Source Heterogeneities in the Galapagos Mantle Plume. *Geochemistry, Geophysics, Geosystems*, 19(8), 2764-2779. doi:10.1029/2017GC007338
  65. Emmons, AM, Bizimis M., Lang SQ, Stangler W, Geidel G, Baalousha M, Wanamaker E, Rothenberg SE. (2018), Enrichments of metals, including methylmercury, in sewage spills in South Carolina, USA. *Journal of Environmental Quality*. doi:10.2134/jeq2018.02.0067
  64. Umling, N, Thunel, R., M Bizimis. (2018), Deep-water expansion and enhanced remineralization in the eastern equatorial Pacific during the last glacial maximum. *Paleoceanography and Paleoclimatology* 33, 563-578.
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#### Data Contributions:

Lee, K. H., Scher, H., Brian, R., Franco, G., Bizimis, M., 2024. Hf and Nd isotopic data of sediments from IODP LEG 113, Site 689D, Maud Rise, Antarctica, Version 1.0. Interdisciplinary Earth Data Alliance (IEDA). <https://doi.org/10.26022/IEDA/113036>. Accessed 2024-03-14.

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**Conference Abstracts and Presentations, Reports:**

- (\*) Denotes student or post doc first author that worked on my research projects and supported by my grants. (+)  
Denotes contributed presentations by Bizimis.

166. K Lee, LN Yobo, M Bizimis, H Scher, F Marcantonio (2024) Spread of Ice Sheet during Late Eocene Event Before Major Ice Growth at the Eocene-Oligocene Transition (Goldschmidt conference, Chicago, IL, USA)

165. A Marfin, X Ding, ST Rader, M Bizimis, M Brzozowski, A Ivanov (2024) Thallium and copper isotope compositions for Norilsk sulfide ores (Goldschmidt conference, Chicago, IL, USA)

164. E Beaudon, EM Griffith, M Bizimis, J Sheets, J Sexton, R.Sierra-Hernández, E. Mosley-Thompson, L. G Thompson (2024) Dust Geochemical Records from a Tibetan Ice Cap: A Paleo-Environmental Messenger (Goldschmidt conference, Chicago, IL, USA)

163. (\*) ER Kolomiets, C Sequeira, V Chesnel, M Bizimis, E Gazel (2024). Light MORB-like Mo isotopes in Costa Rican arc lavas: implications for continental crust formation (Goldschmidt conference, Chicago, IL, USA)

**2023**

162. Todd, E., Cain, JS., Bizimis, Hammond, R., M., Kylander-Clark, A., Jean, MM (2023) Tectonic Setting of the Seventymile and Kanuti Ophiolite Complexes, Eastern Alaska (AGU FALL MEETING V51E-0104)

161. (\*) ER Kolomiets, M Bizimis, G Yogodzinski, Nielsen, S., Plank, TA (2023) Light Mo Isotope Signatures in ODP 886C and DSDP 183 Sediment Cores: Implications for the Mo Systematics of the Aleutian Arc. (AGU FALL MEETING D121C-0010)

160. Sato, H., Machida, S., Meyzen, C. M., Ishizuka, O., Senda, R., Bizimis, M., Ashida, K., Mikuni, K., Sato, T., Fuji, M., Nogi, Y., Kato Y., (2023) Eocene Volcanic Activity at the Conrad Rise, Southern Indian Ocean (AGU FALL MEETING PP41C-1662)

159. Waldman, R., Rojas-Kolomiets., E., Yogodzinski, G., Bizimis, M., Hauff, F., Hoernle, K (2023) Molybdenum isotopic composition of northwest pacific altered oceanic crust. GSA Annual meeting (Abstract #110-3).

158. Jensen, O., GM Yogodzinski, M Bizimis, H Scher, JG Ryan, WP Leeman (2023) Boron isotope evidence for deep-slab fluids in Aleutian magmas. GSA Annual meeting (Abstract #110-5).

157. (\*) Marfin, A., Bizimis, M., Lightfoot, P., Yogodzinski, G., Ivanov, A., Brzozowski, M., Latyshev, A., Radomskaya, T., (2023) Molybdenum isotope composition of Siberian traps basalts: implications for source contributions. GSA Annual meeting (Abstract #36-5).

156. (\*) Hammond, R., Todd, E., Kylander-Clark, A., Bizimis, M., (2023) Hf-Nd-Sr isotope systematics of alaskan ophiolite complexes: implications for the origin of marginal ocean basins in east central Alaska. GSA Annual meeting (Abstract #110-2).

155. Brown, A., Dragovic, B., Codillo, E., Rojas Kolomiets, E. And Bizimis, M., Evaluating redox evolution at the subduction interface from the Mo perspective: a case study from the Ligurian Alps. Southeastern -GSA (Abstract # 24-8)

154. (\*) G de Souza Franco, M Bizimis, H Scher, S Kim, T Mörs (2023) Evidence for the opening of Drake Passage before 41Myr using fossil shark teeth from La Meseta Formation, Seymour Island, Antarctica (AGU FALL MEETING OS41B-1754)

153. GM Yogodzinski, O Jensen, M Bizimis, H Scher, JG Ryan, WP Leeman (2023) Fluid Sources and Pathways from Boron Isotopes in Aleutian Volcanic Rocks (AGU FALL MEETING)

152. Beaudon, E., Griffith, E.M., Sheets, J., Scher, H., Bizimis, M., Sexton, J., Sierra-Hernández, R., Mosley-Thompson, E., Thompson, L.G., Late-Pleistocene Paleodust Records from the Guliya Ice Cap (Northwestern Tibet). GOLDSCHMIDT

151. (\*) de Souza Franco, G., Bizimis, M., Scher, H., Kim, S.L., Mors, T., Reassessment of the Drake Passage opening using Nd and Sr isotope systematics of shark teeth from La Meseta Formation. GOLDSCHMIDT.

150. Brown, A., Codillo, E., Scambelluri, M., Schwarzenbach, E.M., (\*) Kolomiets, E.R., Bizimis, M., Marschall, H., Dragovic, B., Unraveling the Molybdenum (Mo) Cycle at the Subduction Interface: A case study from the Ligurian Alps. GOLDSCHMIDT.

149. Beguelin, P., Stracke, A., Bizimis, M., Ballmer, M., Huang, S., Willig, M., Depleted peridotite in the Hawaiian plume caused an increase in buoyancy and magma flux. GOLDSCHMIDT.

**2022**

148. (\*) ER Kolomiets, O Jensen, M Bizimis, G Yogodzinski, J Ryan. (2022) Heavy Mo isotope signatures and high B/Ce reveal a serpentinite source in the Aleutian arc lavas. Goldschmidt Conference

147. Lea Beloša, Carmen Gaina, Sara Callegaro, Adriano Mazzini, Christine Meyzen, Stephane Polteau, Michael Bizimis (2022) Plume-Fracture Zone interactions in the NE Atlantic. EGU Conference. EGU22-9199
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**2021**

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**2018**

134. Madrigal, P, Gazel, E., Flores K. E., Bizimis M., Jicha B. R. (2018) Plume-Ridge Interaction During Large Igneous Province Formation, V14A -02, AGU Fall Meeting.
133. Siegrist, M, Yogodzinski, G, Bizimis, M., Churicova T, (2018) Ce-anomalies, elevated Ba/Th, Metasomatic Orthopyroxenite, and variably Depleted Indian-Type MORB Mantle in Mafic and Ultramafic Xenoliths from Kharchinsky Volcano, Kamchatka T21G-0300, AGU Fall Meeting.
132. Gazel E, Sobolev A V, Bizimis M, Class C, Batanova V G, Jicha B R (2018) Komatiites from the core-mantle boundary in a modern plume: V13A-03 AGU Fall Meeting.
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127. (\*) Ashley, A.W., Bizimis, M, Peslier, AH. Jackson M. (2018) Water systematics of peridotites from the Samoa hot-spot SE-GSA Conference, Knoxville, TN, Abstract #25-2
126. Krawczyk T., Scher, H., Duggan.,B, Buckley., W, Bizimis, M. (2018) Nd and Hf isotopes from Maud Rise as tracers of glacial erosion and terrestrial input into the Southern Ocean during the Eocene-Oligocene-Transition. EGU2018-10175 EGU meeting, Vienna Austria.
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121. Ntaflou T., Abart R., Bizimis M. (2017) Amphibole incongruent melting under Lithospheric Mantle conditions in spinel peridotites from Balaton area, Hungary. EGU Conference, Vienna Austria. Abstract EGU2017-13854
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119. (\*) Beguelin, P., Bizimis, M., (\*)McIntosh, E.C., Cousens, B., Clague, DA. (2017) 5 Ma of plume source evolution in the Niihau – Kauai – North Arch magmas, Hawaii. AGU Fall Meeting. Abstract DI51B-0304
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117. Elkins L J; Marzoli A., Bizimis M, Meyzen C M, Callegaro S., Sorsen N., Lassiter J C, Ernesto M., (2017) Mantle sources for Central Atlantic Magmatic Province basalts from Hf isotopes AGU Fall Meeting. Abstract V34B-02.
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(+ ) Denotes contributed presentations by Bizimis