

Katerina E. Petronotis

JOIDES Resolution Science Operator • International Ocean Discovery Program • Texas A&M University
1000 Discovery Dr., College Station, TX 77845, USA • petronotis@iodp.tamu.edu • orcid.org/0000-0003-1467-069X

Professional Experience

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|---|--------------|
| Manager of Science Operations, JRSO, TAMU (Research Scientist) | 2021-present |
| Supervisor of Science Support, JRSO, TAMU (Associate Research Scientist) | 2018-2021 |
| Expedition Project Manager/Staff Scientist, JRSO, TAMU (Assistant Research Scientist) | 2010-2018 |
| Webmaster, ODP/IODP, TAMU | 1998-2009 |
| Prime Data Coordinator, ODP, TAMU | 1996-1997 |
| Graphics Specialist, ODP, Texas A&M University (TAMU) | 1995-1996 |
| Research Scientist, Department of Geology & Geophysics, University of New England, Armidale, NSW, Australia | 1994-1995 |
| Fulbright Scholar, University of Patras, Greece | Fall 1993 |
| Research Scientist, Department of Earth & Planetary Sciences, University of New Mexico, Albuquerque, NM | 1992-1994 |
| Research and teaching Assistant, Department of Geological Sciences, Northwestern University, Evanston, IL | 1986-1991 |
| Math Tutor, Triton Community College, River Grove, IL | 1984-1986 |

Education

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| Ph.D., Geophysics, Northwestern University, Evanston, IL | 1991 |
| M.S., Geophysics, Northwestern University, Evanston, IL | 1988 |
| B.S., Applied Mathematics (with Honors), University of Illinois at Chicago, Chicago, IL | 1986 |

Seagoing Expeditions and Field Projects

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| Expedition Project Manager: Walvis Ridge Hotspot (JR Exp 391, 2021) | 2019- |
| Expedition Project Manager: Hikurangi Subduction Margin (JR Exp 375, 2018) | 2015- |
| Expedition Project Manager: Sumatra Seismogenic Zone (JR Exp 362, 2016) | 2015- |
| Expedition Project Manager: Izu-Bonin-Mariana Forearc (JR Exp 352, 2014) | 2013- |
| Expedition Project Manager: Costa Rica Seismogenesis Project (JR Exp 344, 2012) | 2011- |
| Expedition Project Manager: Costa Rica Seismogenesis Project (JR Exp 334, postcruise) | 2012- |
| Expedition Project Manager: Southern Alaska Margin (JR Exp 341, precruise) | 2011-2011 |
| Expedition Project Manager: Juan de Fuca Hydrogeology (JR Exp 327) | 2009- |
| Publications Specialist: <i>Chikyu</i> Exp 322 | 2009 |
| Publications Specialist: <i>Chikyu</i> Exp 316 | 2008 |
| Publications Specialist: <i>JOIDES Resolution</i> (JR) Exp 311 | 2005 |
| Magnetic survey of unexploded ordnance in Queensland, Australia | 1995 |
| Ground-probing-radar survey for the Athens Metro, Athens, Greece | 1993 |
| Magnetic and seismic survey of Xerxes' Canal, Macedonia, Greece | 1993 |
| Sedimentology project field assistant, New Mexico and Utah | 1991-1992 |
| Collection of samples for various paleomagnetic projects in Australia, Greece, Colorado, New Mexico, and Texas | 1988-1995 |

Katerina E. Petronotis

Public, University, & K-12 School Outreach

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| Texas A&M University College of Geosciences | 2009-2019 |
| Aggieland Saturday Open House (annually in February) | |
| GeoX science camp for high school students (annually in June) | |
| Texas Junior Science & Humanities Symposium Judge | Jan 2017 |
| SEAD Gallery, Bryan, Texas, IODP Lecture | Oct 2015 |
| Bush Presidential Museum Drilling Exhibit IODP content | Mar 2014-Feb 2015 |
| Deep Earth Academy Ship2Shore Meeting and proposal review | March 2012 |
| Brazos Valley Museum of Natural History IODP Exhibit Co-Curator | Feb-Apr 2012 |
| Maritime Museum in Rockport, Texas, IODP Exhibit contributor | Apr-Sep 2011 |
| IODP-USIO E&O JREPORT Team (Chair 2006-2009) | 2004-2012 |
| IODP School of Rock teacher workshop at Gulf Coast Repository | July 2008 |
| IODP School of Rock teacher workshop at Gulf Coast Repository | July 2007 |
| National Science Teachers Association annual conference | March 2007 |
| National Marine Educators Association annual conference | July 2004 |

Additional Skills

Software: Microsoft Office (Word, Excel, Powerpoint), BBEdit, Kaleidagraph, Generic Mapping Tools (GMT), Adobe Suite (Acrobat, Illustrator, Photoshop, Fireworks, Dreamweaver), Canvas, and Fortran programming

Instrumentation: 2G cryogenic magnetometer, Agico spinner magnetometer, MicroMag alternating gradient magnetometer, Bartington susceptibility meter, multisensor tracks (density, P-wave velocity, magnetic susceptibility, natural gamma ray, color reflectance)

Fluent in English and Greek, some French

Affiliations & Service Committees

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| AGU Geomagnetism-Paleomagnetism-Electromagnetism Executive Committee Member and Section Webmaster | 2008-2019 |
| AGU Outstanding Student Presentation Award (OSPA) Judge | 2017-2019 |
| AGU Maurice Ewing Medal Committee | 2009-2010 |
| AGU Maurice Ewing Medal Committee | 2006-2008 |
| AGU Information Technology Committee | 2000-2002 |
| AGU Information Technology Committee | 2002-2004 |
| Fulbright Association Member | Since 1994 |
| American Geophysical Union Member | Since 1987 |

Funded Grants

Co-PI, *Engaging and retaining students in the geosciences at two-year colleges (2YC) through undergraduate research*, Texas A&M University, 2016-2018. NSF 1600177, \$11,332.

Co-PI, *Ocean Sciences for Rural Communities via Informal Science Education*, Texas A&M University, 2015-2018. NSF 1515856, \$40,672.

Katerina E. Petronotis

PI, Tectonic Evolution of the Hikurangi Plateau from Expedition 375 paleomagnetic analyses, Texas A&M University, 2018-2019. LDEO, \$4,455 (plus \$4,310 for travel; pending).

PI, Apparent Polar Wander Path of the Indian Plate in the Late Cretaceous and early Cenozoic from Expedition 362 paleomagnetic data, Texas A&M University, 2017-2018. LDEO, \$1,485 (plus \$3,475 for travel).

PI, Rock Magnetic Properties of Sediments from Expedition 352 IBM Forearc Sites U1439 and U1440, Texas A&M University, 2015. COL T344A13, \$5,820 (plus \$4,030 for travel).

PI, Magnetostratigraphy and paleolatitude studies of IODP Expedition 344 (CRISP) drill sites, Texas A&M University, 2013. COL T344A13, \$2,920 (plus \$3,000 for travel).

PI, High Resolution Apparent Polar Wander of the Pacific Plate During the Eocene, University of New Mexico, 1992. NSF 9205875, \$62.721.

Co-PI, Computer Upgrade for the Department of Earth and Planetary Sciences at the University of New Mexico, 1993. NSF 9303968, \$65,000.

Co-PI, Upgrading of Equipment in the Paleomagnetism and Rock Magnetism Laboratory, University of New Mexico, 1993. NSF 9305156, \$14,477.

Peer Reviewed Publications

Savage, H. M., Shreedharan, S., Fagereng, Å., Morgan, J. K., Meneghini, F., Wang, M., et al., 2021. Asymmetric brittle deformation at the Pāpaku fault, Hikurangi subduction margin, NZ, IODP Expedition 375. *Geochem., Geophys., Geosyst.*, 22: e2021GC009662. <https://doi.org/10.1029/2021GC009662>

McNamara, D.D., Behboudi, E., Wallace, L., Saffer, D., Cook, A.E., Fagereng, A., Paganoni, M., Hung-Yu, W., Kim, G., Lee, H., Savage, H.M., Barnes, P., Pecher, I., LeVay, L.J., and **Petronotis, K.E.**, 2021. Variable in situ stress orientations across the northern Hikurangi Subduction Margin. *Geophys. Res. Lett.*, 48, e2020GL091707. <https://doi.org/10.1029/2020GL091707>

Cook, A. E., Paganoni, M., Clennell, M. B., McNamara, D. D., Nole, M., Wang, X., et al., 2020. Physical properties and gas hydrate at a near-seafloor thrust fault, Hikurangi Margin, New Zealand. *Geophys. Res. Lett.*, 47, e2020GL088474. <https://doi.org/10.1029/2020GL088474>

McNeill, L., Dugan, B., **Petronotis, K.**, Milliken, K., Francis, J., and the Expedition 362 Scientists, 2020. Late Miocene wood recovered in Bengal-Nicobar submarine fan sediments by IODP Expedition 362. *Sci. Dril.*, 27:49–52. <https://doi.org/10.5194/sd-27-49-2020>

Barnes, P. M., Wallace, L. M., Saffer, D. M., Bell, R. E., Underwood, M. B., Fagereng, A., Meneghini, F., Savage, H. M., Rabinowitz, H. S., Morgan, J. K., Kitajima, H., Kutterolf, S., Hashimoto, Y., Engelmann de Oliveira, C. H., Noda, A., Crundwell, M. P., Shepherd, C. L., Woodhouse, A. D., Harris, R. N., Wang, M., Henrys, S., Barker, D. H.N., **Petronotis, K. E.**, Bourlange, S. M., Clennell, M. B., Cook, A. E., Dugan, B. E., Elger, J., Fulton, P. M., Gamboa, D., Greve, A., Han, S., Hüpers, A., Ikari, M. J., Ito, Y., Kim, G. Y., Koge, H., Lee, H., Li, X., Luo, M., Malie, P. R., Moore, G. F., Mountjoy, J. J., McNamara, D. D., Paganoni, M., Screamton, E. J., Shankar, U., Shreedharan, S., Solomon, E. A., Wang, X., Wu, H., Pecher, I. A., LeVay, L. J., 2020. Slow slip source characterized by lithological and geometric heterogeneity. *Science Advances*, 6. doi:10.1126/sciadv.aay3314

Yang, T., Zhao, X., **Petronotis, K.**, Dekkers, M. J., and Xu, H., 2019. Anisotropy of magnetic susceptibility (AMS) of sediments from Holes U1480E and U1480H, IODP Expedition 362: sedimentary or artificial origin and implications for paleomagnetic studies. *Geochem., Geophys., Geosyst.*, 20: 5192–5215. <https://doi.org/10.1029/2019GC008721>

Backman, J., Chen, W., Kachovich, S., Mitchison, F., **Petronotis, K.**, Yang, T., and Zhao, X., 2019. Data report: revised age models for IODP Sites U1480 and U1481, Expedition 362. In McNeill, L.C., Dugan, B., Petronotis, K.E., and the Expedition 362 Scientists, *Sumatra Subduction Zone*. Proceedings of the International Ocean Discovery Program, 362: College Station, TX (International Ocean Discovery Program).

Katerina E. Petronotis

<https://doi.org/10.14379/iodp.proc.362.202.2019>

Fagereng, Å., Savage, H.M., Morgan, J.K., Wang, M., Meneghini, F., Barnes, P.M., Bell, R., Kitajima, H., McNamara, D.D., Saffer, D.M., Wallace, L.M., **Petronotis, K.**, LeVay, L., and the IODP Expedition 372/375 Scientists, 2019. Mixed deformation styles observed on a shallow subduction thrust, Hikurangi margin, New Zealand. *Geology*, 47:872-876. <https://doi.org/10.1130/g46367.1>

Gray, M., Bell, R. E., Morgan, J. V., Henrys, S., Barker, D. H. N., and the IODP **Expedition 372 and 375 science parties**, 2019. Imaging the shallow subsurface structure of the north Hikurangi subduction zone, New Zealand, using 2-D full-waveform inversion. *J. Geophys. Res.: Solid Earth*, 124. <https://doi.org/10.1029/2019JB017793>

Li, Y.-X., Zhao, X., Xie, S., Jovane, L., and **Petronotis, K.E.**, 2018. Paleomagnetism of IODP Site U1380: Implications for the Forearc Deformation in the Costa Rican Erosive Convergent Margin. *Scientific Reports*, 8:11430. doi: 10.1038/s41598-018-29243-7

S. Kutterolf, J.C. Schindlbeck, A. Robertson, A. Avery, A. Baxter, **K.E. Petronotis**, and K.-L. Wang, 2018. Tephrostratigraphy and Provenance from IODP Expedition 352, Izu-Bonin arc: tracing tephra sources and volumes from the Oligocene to the recent. *Geochem., Geophys., Geosyst.*, 19. doi:10.1002/2017GC007100

A. Robertson, S. Kutterolf, A. Avery, A. Baxter, **K.E. Petronotis**, G.D. Acton, Carvallo, C., and J.C. Schindlbeck, 2017. Role of Late Oligocene-Recent deep-sea hemipelagic and tuffaceous sediments overlying oceanic crust of the Izu-Bonin Forearc, NW Pacific (IODP Expedition 352) in the tectonic development of the NW Pacific region. *Int. Geology Rev.* doi: 10.1080/00206814.2017.1393634.

McNeill, L.C., Dugan, B., Backman, J., Pickering, K.T., Pouderoux, H.F.A., Henstock, T.J., **Petronotis, K.E.**, Carter, A., Chemale, F., Milliken, K.L., Kutterolf, S., Mukoyoshi, H., Chen, W., Kachovich, S., Mitchison, F.L., Bourlange, S., Colson, T.A., Frederik, M.C.G., Guérin, G., Hamahashi, M., House, B.M., Hüpers, A., Jeppson, T.N., Kenigsberg, A.R., Kuranaga, M., Nair, N., Owari, S., Shan, Y., Song, I., Torres, M.E., Vannucchi, P., Vrolijk, P.J., Yang, T., Zhao, X., and Thomas, E., 2017. Understanding Himalayan erosion and the significance of the Nicobar Fan. *Earth and Planetary Science Letters*, 475:134-142. <https://doi.org/10.1016/j.epsl.2017.07.019>.

Hüpers, A., Torres, M.E., Owari, S., McNeill, L.C., Dugan, D., Henstock, T.J., Milliken, K.L., **Petronotis, K.E.**, Backman, J., Bourlange, S., Chemale, F., Jr., Chen, W., Colson, T.A., Frederik, M.C.G., Guérin, G., Hamahashi, M., House, B.M., Jeppson, T.N., Kachovich, S., Kenigsberg, A.R., Kuranaga, M., Kutterolf, S., Mitchison, F.L., Mukoyoshi, H., Nair, N., Pickering, K.T., Pouderoux, H.F.A., Shan, Y., Song, I., Vannucchi, P., Vrolijk, P.J., Yang, T., and Zhao, X., 2017. Release of mineral-bound water prior to subduction tied to shallow seismogenic slip off Sumatra. *Science*, 356(6340):841–844. <https://doi.org/10.1126/science.aal3429>

M.K. Reagan, J.A. Pearce, **K. Petronotis**, R.R. Almeev, A.J. Avery, C. Carvallo, T. Chapman, G.L. Christeson, E.C. Ferré, M. Godard, D.E. Heaton, M. Kirchenbaur, W. Kurz, S. Kutterolf, H. Li, Y. Li, K. Michibayashi, S. Morgan, W.R. Nelson, J. Prytulak, M. Python, A.H.F. Robertson, J.G. Ryan, W.W. Sager, T. Sakuyama, J.W. Shervais, K. Shimizu, and S.A. Whattam, 2017. Subduction initiation and ophiolite crust: new insights from IODP drilling. *Int. Geology Rev.*, 59:1439-1450. doi: 10.1080/00206814.2016.1276482.

J.G. Ryan, J.W. Shervais, Y. Li, M.K. Reagan, H.Y. Li, D. Heaton, M. Godard, M. Kirchenbaur, S. Whattam, J.A. Pearce, T. Chapman, W. Nelson, J. Prytulak, K. Shimizu, **K. Petronotis**, the IODP Expedition 352 Scientific Team, 2017. Application of a handheld X-ray fluorescence spectrometer for real-time, high-density quantitative analysis of drilled igneous rocks and sediments during IODP Expedition 352. *Chem. Geology*, 45:55-66. doi: 10.1016/j.chemgeo.2017.01.007.

Li, Y.-X., Zhao, X., Jovane, L., **Petronotis, K.E.**, Gong, Z., and Xie, S., 2015. Paleomagnetic constraints on the tectonic evolution of the Costa Rican subduction zone: new results from sedimentary successions of IODP drill sites from the Cocos Ridge. *Geochem., Geophys., Geosyst.*, 16. doi: 10.1002/2015GC006058.

Petronotis, K.E., Acton, G.D., Jovane, L., Li, Y., and Zhao, X., 2015. Data report: magnetic properties of sediments and basalts from the Costa Rica subduction margin (Expeditions 334 and 344). In Harris, R.N., Sakaguchi, A., Petronotis, K., and the Expedition 344 Scientists, *Proc. IODP*, 344: College Station, TX (Integrated Ocean Drilling Program). doi:10.2204/iodp.proc.344.206.2015

Petronotis, K.E., and R.G. Gordon, 1999. A Maastrichtian palaeomagnetic pole for the Pacific plate from a skewness analysis of marine magnetic anomaly 32. *Geophys. J. Int.*, 139:227-247. doi:10.1046/j.1365-

Katerina E. Petronotis

246X.1999.00901.x

Acton, G. D., **K.E. Petronotis**, D.C. Cape, S.L. Rotto Ilg, R.G. Gordon, and P.C. Bryan, 1996. A test of the geocentric axial dipole hypothesis from an analysis of the skewness of the Central marine magnetic anomaly, *Earth Planet. Sci. Lett.*, 144, 337-346. doi:10.1016/S0012-821X(96)00168-9

Petronotis, K.E., R.G. Gordon, and G.D. Acton, 1994. A 57-Ma Pacific plate paleomagnetic pole determined from a skewness analysis of crossings of marine magnetic anomaly 25r, *Geophys. J. Int.*, 118, 529-554. doi:10.1111/j.1365-246X.1994.tb03983.x

Acton, G.D. and **K.E. Petronotis**, 1994. Marine magnetic anomaly skewness data and oceanic plate motions, *Eos, Geophysical News*, 75, 49-52.

Bryan, P.C., T. Shoberg, R.G. Gordon, **K.E. Petronotis**, and D.D. Bergersen, 1993. A paleomagnetic pole and estimated age for Lo-En Guyot, Republic of the Marshall Islands, In Pringle, M.S., et al. (Eds.), *The Mesozoic Pacific: Geology, Tectonics and Volcanism*, Am. Geophys. Union Monogr. Ser., 77, 387-400.

Petronotis, K.E., R.G. Gordon, and G.D. Acton, 1992. Determining palaeomagnetic poles and anomalous skewness from marine magnetic anomaly skewness data from a single plate, *Geophys. J. Int.*, 109, 209-224. doi:10.1111/j.1365-246X.1992.tb00091.x

Petronotis, K.E. and D.M. Jurdy, 1990. Pacific plate reconstructions and uncertainties, *Tectonophysics*, 182, 383-391. doi:10.1016/0040-1951(90)90174-7

Petronotis, K.E. and R.G. Gordon, 1989. Age dependence of skewness of magnetic anomalies above seafloor formed at the Pacific-Kula spreading center, *Geophys. Res. Lett.*, 16, 315-318. doi:10.1029/GL016i004p00315

Non-Peer Reviewed & IODP Publications

Scott, L., Gamage, K., Davis, L., and **Petronotis, K.**, 2020. Integrating Research Experience into Introductory Geoscience Courses. *In the Trenches*, 10. https://nagt.org/nagt/publications/trenches/v10-n2/integrating_research_experience.html

Sager, W., Hoernle, K., and **Petronotis, K.**, 2020. *Expedition 391 Scientific Prospectus: Walvis Ridge Hotspot*. International Ocean Discovery Program. <https://doi.org/10.14379/iodp.sp.391.2020>

Wallace, L.M., Saffer, D.M., Barnes, P.M., Pecher, I.A., **Petronotis, K.E.**, LeVay, L.J., and the Expedition 372/375 Scientists, 2019. *Hikurangi Subduction Margin Coring, Logging, and Observatories*. Proceedings of the International Ocean Discovery Program, 372B/375: College Station, TX (International Ocean Discovery Program). <https://doi.org/10.14379/iodp.proc.372B375.2019>

Saffer, D.M., Wallace, L.M., **Petronotis, K.**, and the Expedition 375 Scientists, 2018. *Expedition 375 Preliminary Report: Hikurangi Subduction Margin Coring and Observatories*. International Ocean Discovery Program. <https://doi.org/10.14379/iodp.pr.375.2018>

McNeill, L.C., Dugan, B., **Petronotis, K.E.**, and the Expedition 362 Scientists, 2017. *Sumatra Subduction Zone*. Proceedings of the International Ocean Discovery Program, 362: College Station, TX (International Ocean Discovery Program). <https://doi.org/10.14379/iodp.proc.362.2017>

Dugan, B., McNeill, L., **Petronotis, K.**, and the Expedition 362 Scientists, 2017. *Expedition 362 Preliminary Report: Sumatra Subduction Zone*. International Ocean Discovery Program. <https://doi.org/10.14379/iodp.pr.362.2017>

Saffer, D., Wallace, L., and **Petronotis, K.**, 2017. *Expedition 375 Scientific Prospectus: Hikurangi Subduction Margin Coring and Observatories*. International Ocean Discovery Program. <http://dx.doi.org/10.14379/iodp.sp.375.2017>

McNeill, L., Dugan, B., and **Petronotis, K.**, 2016. *Expedition 362 Scientific Prospectus: the Sumatra subduction zone*. International Ocean Discovery Program. <http://dx.doi.org/10.14379/iodp.sp.362.2016>

Reagan, M.K., Pearce, J.A., **Petronotis, K.**, and the Expedition 352 Scientists, 2015. *Izu-Bonin-Mariana Fore Arc*. Proceedings of the International Ocean Discovery Program, 352: College Station, TX (International Ocean Discovery Program). <http://dx.doi.org/10.14379/iodp.proc.352.2015>

Expedition 352 Scientists, 2015. *Expedition 352 Preliminary Report: Izu-Bonin-Mariana Fore Arc*. International Ocean Discovery Program. <http://dx.doi.org/10.14379/iodp.pr.352.2015>

Katerina E. Petronotis

- Pearce, J.A., Reagan, M.K., Stern, R.J., and **Petronotis, K.**, 2013. Izu-Bonin-Mariana fore arc: testing subduction initiation and ophiolite models by drilling the outer Izu-Bonin-Mariana fore arc. *IODP Sci. Prosp.*, 352. doi:10.14379/iodp.sp.352.2013
- Harris, R.N., Sakaguchi, A., **Petronotis, K.**, and the Expedition 344 Scientists, 2013. *Proc. IODP*, 344: College Station, TX (Integrated Ocean Drilling Program). doi:10.2204/iodp.proc.344.2013
- Expedition 344 Scientists**, 2013. Costa Rica Seismogenesis Project, Program A Stage 2 (CRISP-A2): sampling and quantifying lithologic inputs and fluid inputs and outputs of the seismogenic zone. *IODP Prel. Rept.*, 344. doi:10.2204/iodp.pr.344.2013
- Harris, R., Sakaguchi, A., and **Petronotis, K.**, 2012. Costa Rica Seismogenesis Project, Program A Stage 2 (CRISP-A2): sampling and quantifying lithologic inputs and fluid inputs and outputs of the seismogenic zone. *IODP Sci. Prosp.*, 344. doi:10.2204/iodp.sp.344.2012
- Fisher, A.T., Tsuji, T., **Petronotis, K.**, Wheat, C.G., Becker, K., Clark, J.F., Cowen, J., Edwards, K., Jannasch, H., and the IODP Expedition 327 and Atlantis Expedition AT18-07 Shipboard Parties, 2012. IODP Expedition 327 and Atlantis Expedition AT 18-07: observatories and experiments on the eastern flank of the Juan de Fuca Ridge. *Sci. Drill.*, 13:4–11. doi:10.2204/iodp.sd.13.01.2011
- Fisher, A.T., Tsuji, T., **Petronotis, K.**, and the Expedition 327 Scientists, 2011. *Proc. IODP*, 327: Tokyo (Integrated Ocean Drilling Program Management International, Inc.). doi:10.2204/iodp.proc.327.2011
- Expedition 327 Scientists**, 2010. Juan de Fuca Ridge-flank hydrogeology: the hydrogeologic architecture of basaltic oceanic crust: compartmentalization, anisotropy, microbiology, and crustal-scale properties on the eastern flank of Juan de Fuca Ridge, eastern Pacific Ocean. *IODP Prel. Rept.*, 327. doi:10.2204/iodp.pr.327.2010
- Jaeger, J., Gulick, S., Mix, A., and **Petronotis, K.**, 2011. Southern Alaska margin: interactions of tectonics, climate, and sedimentation. *IODP Sci. Prosp.*, 341. doi:10.2204/iodp.sp.341.2011
- Davis, E., and **Petronotis, K.E.**, 2010. Cascadia subduction zone ACORK observatory. *IODP Sci. Prosp.*, 328. doi:10.2204/iodp.sp.328.2010
- Petronotis, K.**, 2005. Careers in scientific ocean drilling. In Smith, M.J., and Peart, L. (Eds.), *The Earth Scientist*, 29(3):10–12.

Recent Conference Abstracts

Petronotis, K.E., Dugan, B., McNeill, L., and the Expedition 362 Science Team, 2020. Sedimentary Evolution and Seismogenic Slip at the Sumatra Subduction Zone. AGU Fall Meeting, 2020.

Heeschen, K., S. Schrömer, M. Torres, A. Cook, E. Scratto, A. Georgioupolou, I. Pecher, S. Mayanna, P. Barnes, L. LeVay, E. Salomon, D. Saffer, L. Wallace, and K., Petronotis, 2020. Distribution and fractionation of light hydrocarbons related to gas hydrate occurrence and biogenic production at Hikurangi Margin (IODP Site U1517), New Zealand. EGU General Assembly, May 2020, Virtual Meeting.

Petronotis, K., Edwards, P., Foster, P., Hastedt, M., Hesse, J., Houpt, D., LeVay, L., Novak, B., McWilliams, A., Percuoco, V., Peters, L., and Williams, T., 2019. Making Scientific Ocean Drilling Data Discoverable. AGU Fall Meeting, San Francisco, CA, 9-13 December 2019.

Kars, M., Greve, A., Zerbst, L., and IODP Expedition 375 Scientists, 2019. Occurrence of greigite in gas hydrate-bearing frontal thrust sediments of the Hikurangi margin, New Zealand at Site U1518, IODP Expedition 375. AGU Fall Meeting, San Francisco, CA, 9-13 December 2019.

B. Couvin, A. Georgioupolou, J. Mountjoy, G. Crutchley, and IODP Expedition 372 and 375 participants. Investigating the morphology of large landslide deposits on the Hikurangi margin, offshore New Zealand. EGU General Assembly, 8-13 April 2019, Vienna, Austria.

A.M. Eijsink, M.J. Ikari, L.M. Wallace, D.M. Saffer, P.M. Barnes, I.A. Pecher, K.Petronotis, L.J. Levay, and the IODP Expedition 375 and 372 Scientists. Frictional behavior of sediment inputs to the Hikurangi subduction margin (New Zealand) at plate-rate and slow slip velocities. EGU General Assembly, 8-13 April 2019, Vienna, Austria.

Katerina E. Petronotis

I. Pecher, P. Barnes, K. Heeschen, M. Torres, A. Cook, G. Moore, B. Dugan, J. Mountjoy, G. Crutchley, and the Expedition 372&375 Scientific Party. Gas hydrates beneath the Tuaheni Landslide Complex, New Zealand. First results from IODP Expedition 372. EGU General Assembly, 8-13 April 2019, Vienna, Austria.

A.M. Eijsink, M.J. Ikari, L.M. Wallace, D.M. Saffer, P.M. Barnes, I.A. Pecher, K. Petronotis, L.J. Levay, and the IODP Expedition 375 and 372 Scientists, 2019. Plate-rate frictional behavior of sediment inputs to the Hikurangi subduction margin: which lithologies cause slow slip events? IODP/ICDP Kolloquium, 18-20 March 2019, Köln, Germany.

Heeschen, K., I. Pecher, S. Schrömer, M. Torres, E. Scraton, A. Georgioupolou, J. Mountjoy, S. Mayanna, J. M. Schicks, P. Barnes, L. LeVay, and Expedition 372 and 375 Science Parties, 2019. IODP Site U1517: Insights from hydrocarbon measurements into the gas-hydrate bearing slope sediments at the Toaheni Landslide Complex (TLC) offshore New Zealand. IODP/ICDP Kolloquium, 18-20 March 2019, Köln, Germany.

S. Kutterolf, M.J. Ikari, A. Huepers, and Expedition 372 and 375 scientists, 2019. Unlocking the secrets of slow slip by integrating core data, seismic and mechanical experiments, as well as borehole observatories at the offshore Hikurangi subduction zone, IODP Expeditions 372 & 375 (ca. 1000 words). IODP/ICDP Kolloquium, 18-20 March 2019, Köln, Germany.

E. Behboudi, D.D McNamara, J. Murray, L. Wallace, D. Saffer, P. Barnes, I. Pecher, H. Lee, G. Kim, W. Hung-Yu, K. Petronotis, L. LeVay, and Expedition 372 and 375 Scientists, 2019. The link between stress, pore pressure, and subduction dynamics: Implications for offshore geohazards and resource development. Irish Geological Research Meeting, 1-3 March 2019, Dublin, Ireland.

B. Couvin, A. Georgioupolou, J. Mountjoy, G. Crutchley, and IODP Expeditions 372 and 375 participants, 2019. Exploring the characteristics of the Tuaheni Landslide Complex, Hikurangi Margin, offshore New Zealand. Irish Geological Research Meeting, 1-3 March 2019, Dublin, Ireland.

P.M. Barnes, D.M. Saffer, L.M. Wallace, I.A. Pecher, K. Petronotis, L. Levay, and the Expedition 372 and 375 Science Parties, 2018. Drilling and coring the northern Hikurangi Subduction Margin to unlock the secrets of slow slip: International Ocean Discovery Program Expeditions 372 and 375. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

R. Bell, M. Gray, J. Morgan, S. Henrys, D. Barker, N. Bangs, P. Barnes, L. Wallace, D. Saffer, K. Petronotis and the IODP Expedition 375 and Expedition 372 shipboard scientists, 2018. Validating a full-waveform inversion velocity model at the north Hikurangi subduction margin using IODP drilling data. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

B. Dugan, I.A. Pecher, M.A. Nole, J. Mountjoy, P.M. Barnes, L.J. LeVay, Expedition 372 Shipboard Scientists, and Expedition 375 Shipboard Scientists, 2018. Formation Pore Pressure through the Tuaheni Landslide Complex and the Gas Hydrate Stability Zone at IODP Expedition 372 Site U1517. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

Fagereng, A., Savage, H., Morgan, J., Wang, M., Meneghini, F., Barnes, P., Bell, R., Kitajima, H., McNamara, D., Saffer, D., Wallace, L.M., Petronotis, K., and the Exp. 375 and 372 Science Parties, 2018. Brittle-ductile deformation and fault slip behavior of a shallow subduction thrust, Hikurangi margin, New Zealand. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

D. Gamboa, P Barnes, R.E. Bell, G.F. Moore, J.J. Mountjoy, M. Paganoni, M.B. Clennell, A. Cook, D.D. McNamara, M. Underwood, H. Rabinowitz, A. Noda, F. Meneghini, S. Kutterolf, Y. Hashimoto, C. Engelmann de Oliveira, I.A. Pecher, L.M. Wallace, D.M. Saffer, L. LeVay, K.E. Petronotis, IODP Expedition 372 Scientists, and IODP Expedition 375 Scientists, 2018. Revisiting the giant Ruatoria Debris Flow on the Hikurangi Margin, New Zealand: results from IODP Expeditions 372 and 375, Site U1520. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

A. Greve, T. Kanamatsu, A. Fagereng, J. Morgan, H. Savage, M. Kars, L. Wallace, D. Saffer, K. Petronotis and the IODP Expedition 372 and 375 Scientists, 2018. Magnetic fabrics of deformed soft sediments at the deformation front of the Hikurangi subduction margin. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

Katerina E. Petronotis

Heeschen, K., M. Torres, I. Pecher, S. Schlömer, S. Owari, P. Rose, K. Machado, J. M. Schicks, G. Hu, J. Mountjoy, P. Barnes, L. LeVay and Expedition 372 and 375 Science Parties, 2018. Occurrence and fractionation of light hydrocarbons in the gas-hydrate bearing sediments of IODP Site U1517, Hikurangi Margin, New Zealand. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

T.N. Jeppson, H. Kitajima, M. Ikari, H. Lee, Y. Ito, R. Harris, S. Shreedharan, P. Malie, M. Luo, A. Hupers, E. Solomon, D. Saffer, L. Wallace, P. Barnes, I. Pecher, K. Petronotis, L. Levay, and Exp. 372/375 Science Party, 2018. Lithology and cement controls on the evolution of compressional wave velocity and porosity in input materials at northern Hikurangi and other subduction zones. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

H. Koge, D.D. McNamara, D.A. Da Costa Gamboa, H.-Y. Wu, G.Y. Kim, U. Shankar, S. Cardona Meneses, P.M. Barnes, A. Noda, J. Morgan, J. Ashi, A. Yamaguchi, Y. Yamada, Y. Hamada, Expedition 372 Scientists, Expedition 375 Scientists, 2018. Constraining the deformation history of the frontal wedge of Hikurangi Subduction Margin with analog modeling and bedding trends from borehole logging of IODP Expedition 372. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

H. Leah, A. Fagereng, F. Meneghini, J. Morgan, H. Savage, M. Wang, D. Saffer, L. Wallace, K. Petronotis and the IODP Expedition 375 and 372 Science Parties, 2018. Subduction-Related Strain in a Calcareous-Pelagic Shear Zone: Insights on Deformation at the Hikurangi Margin Plate Interface from the Input Sequence at Site U1520 and the Llanddwyn Island Shear Zone, Anglesey, U.K. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

McNamara, D.D., Wu, H.-Y., Kim, G., Lee, H., Heeschen, K., Elger, J., Wallace, L., Saffer, D.M., Barnes, P., Pecher, I., Expedition 372 Scientists, Expedition 375 Scientists, 2018. Borehole stress indicators across the Hikurangi Subduction Margin: Preliminary insights from IODP Expedition 372. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

F. Meneghini, C. Boschi, A. Fagereng, J. Morgan, M. Underwood, Y. Hashimoto, C. de Oliveira, S. Kutterolf, A. Noda, H. Rabinowitz, H. Savage, M. Wang, D.M. Saffer, L., Wallace, K. Petronotis and the Exp. 375 and 372 Science Parties, 2018. Lithification of volcanioclastic deposits in the Hikurangi subduction zone: Preliminary characterisation of fluid circulation in the incoming plate, and volatiles entering the trench. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

J.K. Morgan, A. Fagereng, H. Savage, M. Wang, F. Meneghini, P.M. Barnes, R. Bell, H. Kitajima, B. Dugan, D. Saffer, L. Wallace, K. Petronotis and Shipboard Scientists from IODP Expeditions 372 and 375, 2018. Seafloor overthrusting causes ductily deformed fault rocks in marine sediments at the Hikurangi Margin: Implications for fault zone evolution and mechanics at IODP Site U1518. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

M. Nole, H. Daigle, B. Dugan, B. Clennell, M. Paganoni, P. Barnes, I. Pecher, L LeVay, the Expedition 372 Shipboard Scientific Party, and the Expedition 375 Shipboard Scientific Party, 2018. Pore morphology, permeability, and constraints on gas hydrate accumulation in sediments from the Tuaheni Landslide Complex, NZ. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

Pecher, I.A., P.A. Oluwunmi, A. Djeffal, N. Bangs, G.J. Crutchley, J.J. Mountjoy, H. Villinger, P. Barnes, K. Heeschen, M. Torres, B. Dugan, M.T. Reagan, G.J. Moridis, R. Archer, D.M. Saffer, L.M. Wallace, L. LeVay, K. Petronotis, Expedition 372 Scientists, Expedition 375 Scientists, 2018. Response of gas hydrate systems to subduction-zone processes on the northern Hikurangi Margin, New Zealand. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

H.S. Rabinowitz, H.M. Savage, S. Shreedharan, M. Ikari, F. Meneghini, Y. Ito, H. Kitajima, L. Wallace, D.M. Saffer, K. Petronotis, Expedition 372/375 Shipboard Scientists, 2018. Frictional behavior of incoming sediment in the Hikurangi subduction zone at in-situ PT conditions. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

D.M. Saffer, R. Bell, P. Barnes, L.M. Wallace, H. Kitajima, G. Moore, S. Han, I. Pecher, K. Petronotis, L. LeVay, Expedition 372 Scientists, Expedition 375 Scientists, 2018. Elastic moduli and physical properties of fault rock and protolith associated with SSEs at the Northern Hikurangi margin, NZ. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

Katerina E. Petronotis

H.M. Savage, G. Coffey, S. Shreedharan, P.J. Polissar, A. Fagereng, F. Meneghini, J. Morgan, M. Wang, Y. Hashimoto, L. Wallace, D. Saffer, K. Petronotis and Exp 375/372 Scientists, 2018. Signatures of Brittle Deformation in a Shallow Fault in the Hikurangi Subduction Margin, IODP Expedition 375. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

E. Screamton, M. Torres, I. Pecher, B. Dugan, J. Mountjoy, P. Rose, S. Owari, K. Heeschen, and Expeditions 372 and 375 Science Parties, 2018. Impact of sea-level and bottom water temperature change on methane-hydrate stability: IODP Site U1517, Hikurangi Margin. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

E.A. Solomon, A. Hüpers, M. Luo, P. Malié, D. Saffer, M. Torres, L. Wallace, K. Petronotis, P. Barnes, I. Pecher, L. Levay, Expedition 375 Scientists, Expedition 372 Scientists, 2018. Geochemical Constraints on Fluid-Rock Reactions, Fluid Sources, and Flow Pathways Along the IODP Expedition 375 Transect; Northern Hikurangi Margin. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

M. Underwood, H.S Rabinowitz, A. Noda, F. Meneghini, S. Kutterolf, Y. Hashimoto, C. Engelmann de Oliveira, D.M Saffer, L.M Wallace, P. Barnes, I.A. Pecher, K.E. Petronotis, Leah LeVay, and Expedition 375 Scientists and Expedition 372 Scientists, 2018. Lithostratigraphy of the Hikurangi Subduction Inputs: Results of Coring During IODP Expedition 375. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

L.M. Wallace, E.A. Solomon, P.M. Fulton, D. Saffer, K.E. Petronotis, H.W. Jannasch, E.E. Davis, W. Rhinehart, J. Van Hyfte, K. Grigar, P. Barnes, R.E. Bell, I.A. Pecher, Leah LeVay, and the IODP Expedition 372 and 375 Science parties, 2018. IODP borehole observatories to monitor slow slip at the offshore Hikurangi subduction zone. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

L.M. Wallace, P. Barnes, D.M. Saffer, Stuart Henrys, Dan Barker, Dan Bassett, Fabio Caratori-Tontoni, Yoshihiro Kaneko, Yoshihiro Ito, Kimihiko Mochizuki, Spahr Webb, Kate Clark, Ursula Cochran, Nicola Litchfield, Charles Williams, Susan Ellis, Bill Fry, Erin Todd, R. Bell, K. Petronotis, I. Pecher, Leah LeVay, and the IODP Expedition 372 and 375 Science parties, 2018. The dynamics of shallow plate interface slip at the offshore Hikurangi subduction margin, New Zealand. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

M. Wang, P.M. Barnes, Julia K. Morgan, R. Bell, A. Fagereng, H. Savage, D. Saffer, L. Wallace, and Shipboard Scientists from IODP Expeditions 372 and 375, 2018. Structure and evolution of the compactive structures in the sedimentary basin of Hikurangi Margin, New Zealand. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

X.J. Wang, I. Pecher, M. Clennell, A. Cook, Paganoni, D. McNamara, P. Barnes, G.W. Hu, Jin Qian, B. Liu, Expedition 372 and 375 Scientists, 2018. Occurrence and saturation of free gas and gas hydrate at complex tectonic and interbedded reservoir in the Hikurangi Margin, New Zealand. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

Li Wei, Ann E. Cook, M. Nole, Alberto Malinverno, Hugh Daigle, Aggeliki Georgiopoulou, Phillip Barnes, I. Pecher, Leah LeVay and the Expedition 372 and 375 Scientists, 2018. Gas hydrate accumulations in thin sands. AGU Fall Meeting, Washington, D.C., 10-14 December 2018.

P.M. Barnes, D.M. Saffer, L.M. Wallace, I.A. Pecher, K.E. Petronotis, L.J. Levay, Expedition 372 Scientists, Expedition 375 Scientists., 2018. Drilling and Coring the Northern Hikurangi Subduction Margin to Unlock the Secrets of Slow Slip: International Ocean Discovery Program Expeditions 372 and 375. Geoscience Society of New Zealand Annual Meeting, 27-30 November 2018, Napier, New Zealand.

K.M. Marsaglia, A.M. Franco, A. Adedeji, A. Noda, G.H. Browne, L.M. Wallace, D.M. Saffer, P.M. Barnes, I. Pecher, K. Petronotis, L. LeVay, and the IODP Expediton 372 and 375 Science Parties, 2018. Sand sources and routing options along the Hikurangi Margin: Using MARGINS source-to-sink results from the Waipaoa Sedimentary System to interpret Quaternary forearc and trench successions drilled on IODP Expeditions 372 and 375. Geoscience Society of New Zealand Annual Meeting, 27-30 November 2018, Napier, New Zealand.

I Pecher, P.A. Oluwunmi, A. Djeffal, N. Bangs, G.J. Crutchley, J.J. Mountjoy, H. Villinger, P. Barnes, K. Heeschen, B. Dugan, M.T. Reagan, G.J. Moridis, R. Archer, D.M. Saffer, L.M. Wallace, L. LeVay, K. Petronotis, Expedition 372 Scientists, Expedition 375, 2018. Response of gas hydrate systems to tectonics, sedimentation, and fluid flow –

Katerina E. Petronotis

Hikurangi Margin, New Zealand. Geoscience Society of New Zealand Annual Meeting, 27-30 November 2018, Napier, New Zealand.

L.M. Wallace, E. Solomon, P. Fulton, D.M. Saffer, K. Petronotis, H. Jannasch, E. Davis, B. Rhinehart, J. Van Hyfte, K. Grigar, P.M. Barnes, R. Bell, I. Pecher, L. LeVay, and the IODP Expedition 375 and 372 Science parties, 2018. IODP borehole observatories to monitor slow slip at the offshore Hikurangi subduction zone. Geoscience Society of New Zealand Annual Meeting, 27-30 November 2018, Napier, New Zealand.

Woodhouse, A.D., Malié, P., Crundwell, M.P., Shepherd, C.L., Rabinowitz, H.S., Aze, T.A., Wallace, L.M., Saffer, D.M., Pecher, I., Barnes, P., Petronotis, K., LeVay, L., IODP Expedition 375 Scientists, and IODP Expedition 372 Scientists, 2018. High southern latitude record of the Cenomanian-Turonian boundary section in the Hikurangi Plateau (Southwest Pacific). GSA Annual Meeting, 4-7 November 2018, Indianapolis, USA.

M. Wang, P.M. Barnes, J.K. Morgan, R. Bell, A. Fagereng, H. Savage, D. Saffer, L. Wallace, K. Petronotis, and Shipboard Scientists from IODP Expeditions 372 and 375, 2018. Structure analysis of compactive deformation in the incoming sedimentary section of Hikurangi Subduction Margin, New Zealand and its implications for subduction process. Deep Earth Exploration and Practices, 24-26 October 2018, Beijing, China.

M. Nole, H. Daigle, B. Dugan, B. Clennell, M. Paganoni, P. Barnes, I. Pecher, L. LeVay, and the Expedition 372 Shipboard Scientific Party. Pore morphology, permeability, and constraints on gas hydrate accumulation in sediments from the Tuaheni Landslide Complex, NZ. 14th International Conference on Gas in Marine Sediments (GIMS 14), Haifa, Israel, 14-20 October, 2018.

Pecher, I.A., Crutchley, G.J., Mountjoy, J.J., Villinger, H., Oluwunmi, P., Reagan, M.T., Moridis, G.J., Archer, R., and the Expedition 372 Shipboard Scientific Party. Dynamic Gas Hydrate Systems on the Northern Hikurangi Subduction Margin, New Zealand. 14th International Conference on Gas in Marine Sediments (GIMS 14), Haifa, Israel, 14-20 October, 2018.

R. Bell, M. Gray, J. Morgan, S. Henrys, D. Barker, P. Barnes, L. Wallace, D. Saffer, K. Petronotis, Pecher, I., Levay, L., and the IODP Expedition 375 and Expedition 372 shipboard scientists, 2018. Unlocking the secrets of slow slip using next-generation seismic experiments and IODP drilling at the north Hikurangi margin, New Zealand. UK IODP - Celebrating 50 years of scientific ocean drilling, September 2018, London, UK.

Woodhouse, A.D., Malié, P., Crundwell, M.P., Shepherd, C.L., Rabinowitz, H.S., Hollis, C.J., Aze, T.A., Wallace, L.M., Saffer, D.M., Pecher, I., Barnes, P., Petronotis, K., LeVay, L., IODP Expedition 375 Scientists, and IODP Expedition 372 Scientists, 2018. High southern latitude record of the Cenomanian-Turonian boundary section in the Hikurangi Plateau (Southwest Pacific). UK IODP Celebrating 50 years of scientific ocean drilling, September 2018, London, UK.

A. Fagereng, H. Savage, J. Morgan, M. Wang, F. Meneghini, P. Barnes, R. Bell, H. Kitajima, D. McNamara, D. Saffer, L. Wallace, I. Pecher, K. Petronotis, L. LeVay, and IODP Expedition 372/375 Scientists, 2018. Mixed deformation styles and fault slip behaviour of a shallow subduction thrust, Hikurangi margin, New Zealand. International Joint Workshop on Slow Earthquakes, 21-23 September 2018, Fukuoka, Japan.

L.M. Wallace, D.M. Saffer, P.M. Barnes, I. Pecher, K. Petronotis, L. LeVay, and the IODP Expediton 372 and 375 science parties, 2018. Using scientific drilling to unlock the secrets of slow slip events at the Hikurangi subduction zone. International Joint Workshop on Slow Earthquakes, 21-23 September 2018, Fukuoka, Japan.

R. Bell, M. Gray, J. Morgan, S. Henrys, D. Barker, P. Barnes, L. Wallace, D. Saffer, K. Petronotis, and the IODP Expedition 375 and Expedition 372 shipboard scientists, 2018. Unlocking the secrets of slow slip using next-generation seismic experiments and IODP drilling at the north Hikurangi margin, New Zealand. Young Researchers in Structural Geology and Tectonics Conference (YORSGET), 2-6 July 2018, Montgenvre, France.

A. Woodhouse, P. Barnes, M. Crundwell, A. Greve, X. Li, K. Petronotis, D. Saffer, C. Shepherd, L. Wallace, and IODP expedition 375 shipboard scientists, 2018. IODP Expedition 375 – Scientific objectives and biostratigraphic outputs of ocean drilling. Progressive Palaeontology 2018, 7-9 June 2018, Manchester, UK.

A. Greve, X. Li, K. Petronotis, M. Crundwell, C. Shepherd, A. Woodhouse, P. Barnes, L. Wallace, D. Saffer, and the IODP expedition 375 shipboard scientists, 2018. IODP Expedition 375: Hikurangi Subduction Margin – first

Katerina E. Petronotis

chronostratigraphic constraints derived from shipboard palaeomagnetic analyses. Japan Geoscience Union Meeting, 20-24 May 2018, Chiba, Japan.

Y. Hashimoto, C.H.E. de Oliveira, S.O. Kutterolf, F. Meneghini, A. Noda, H.S. Rabinowitz, M.B. Underwood, D.M. Saffer, L.M. Wallace, K.E. Petronotis, and IODP Expedition 375 Shipboard Scientists, 2018. Preliminary results of lithostratigraphy in IODP Expedition 375: Hikurangi subduction margin coring and observatories. Japan Geoscience Union Meeting, 20-24 May 2018, Chiba, Japan.

M. Brunet, K. Huhn, D. Schetcher, A. Sharif, J., and the IODP 372 shipboard scientific party (2018) Investigation of creeping mechanics of the Tuaheni Landslide Complex (TLC) in the Hikurangi Margin, New Zealand, using micro-4D-XCT measurements on cores from the IODP Expedition 372. 8th International Symposium on Submarine Mass Movements and Their Consequences. Victoria, BC. Canada. 7-9 May 2018.

D. Gamboa, P. Barnes, G. Moore, M. Paganoni, M. Clennell, A. Cook, D. McNamara, I. Pecher and the Expedition 372 Scientific Party (2018). Drilling through the giant Ruatoria Debris Flow on the Hikurangi Margin, New Zealand: preliminary results from IODP Expedition 372 Site U1520. 8th International Symposium on Submarine Mass Movements and Their Consequences. Victoria, BC. Canada. 7-9 May 2018.

J. Mountjoy, I. Pecher, J. Howarth, A. Orpin, G. Crutchley, P. Barnes, J. Bialas, C. Bottner, D. Bowden, M. Brunet, S. Cardona, B. Dugan, S. Fitzsimons, D. Gamboa, A. Georgiopoulou, M. Gerstenberger, F. Gross, C. Holden, H. Horgan, K. Huhn, T. Kane, S. Krastel, J. Kuhlman, G. Lamarche, A. Micallef, G. Moore, S. Nodder, A. Pallentin, J. Patton, W. Power, A. Rowden, A. Schimel, X. Wang, S. Woelz and the Expedition 372 Scientists (2018). Preconditioning and triggering dynamics of subaqueous landslides. Observations from New Zealand's active landscape. Eight International Symposium on Submarine Mass Movements and their Consequences. Victoria, BC. Canada. 7-9 May 2018.

I. Pecher and Expedition 372 Shipboard Science Party. Gas hydrates beneath the Tuaheni Landslide Complex. First results for IODP Expedition 372. Natural Gas Hydrate Systems, Gordon Research Conference, Galveston, Texas, 25 February-2 March, 2018.

Petronotis, K.E., Acton, G.D., Zhao, X., Yang, T., and Chemale, F., 2018. Paleomagnetic Evidence from IODP Site U1480 of Relatively Recent Sediment Alteration Linked to the Generation of Large Sumatra Earthquakes [Abstract presented at Expedition 362 Science Postcruise Meeting, Matsue, Japan, August 2018].

S. K Cooper, K. E Petronotis, C. Ferraro, K. T M Johnson, and K. Yarincik, 2017. Bringing cutting-edge Earth and ocean sciences to under-served and rural audiences through informal science education, Abstract ED22B-01 presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.

G. D. Acton, A. Morris, R. J Musgrave, X. Zhao, B. M Clement, H. F Evans, M. Hastedt, D. Houpt, B. Mills, B. Novak, and K. E Petronotis, 2017. Paleomagnetism Onboard the IODP Research Vessel JOIDES Resolution: Recent Advances, Best Practices, and Pitfalls, Abstract GP43B-0976 presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.

A. T Baxter, S. Kutterolf, J. C. Schindlbeck, M. I. Sandoval, U. Barckhausen, Y.-X. Li and K. E Petronotis, 2017. An Integrated Age Model for the Cocos Plate using IODP CRISP Drilling Data, Abstract PP33B-1332 presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.

Y.-X. Li, X. Zhao, S. Xie, L. Jovane and K. E Petronotis, 2017. Paleomagnetic Constraints on the Forearc Deformation History of the Costa Rican Convergent Margin, Abstract GP52A-08 presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.

McNeill, L., Dugan, B., Petronotis, K., and Expedition 362 Scientists, 2017. How do input materials control the nature of seismogenic slip at a subduction zone with thick sedimentary input? Initial results from drilling the Sumatran subduction zone inputs (IODP Expedition 362). Subduction Interface Processes, 18-21 April 2017, Barcelona.

P. Vannucchi, M. Hamahashi, A. Kenigsberg, Y. Shan, P. Vrolijk, and IODP Exp. 362 Scientific Party, 2017. The Indo-Australian intraplate stress defined in the northern Wharton Basin and its relationship with the Himalayan front. Subduction Interface Processes, 18-21 April 2017, Barcelona.

McNeill, L., Dugan, B., Petronotis, K., and Expedition 362 Scientists, 2017. The role of input materials in shallow

Katerina E. Petronotis

seismogenic slip at subduction zones: Initial results from IODP Expedition 362, North Sumatra. Japan Geoscience Union Meeting, 20-25 May 2017, Chiba, Japan.

M. Hamahashi, A. Kenigsberg, Y. Shan, P. Vannucchi, P. Vrolijk, and IODP Expedition 362 Scientists, 2017.

Preliminary Results from International Ocean Discovery Program (IODP) Expedition 362 Sumatra Seismogenic zone: Insights on Structure and Deformation in the Input Section. Japan Geoscience Union Meeting, 20-25 May 2017, Chiba, Japan.

S. Owari, M. Torres, A. Hüpers, L. McNeill, B. Dugan, K. Petronotis and IODP Expedition 362 scientists, 2017.

Preliminary results of interstitial water geochemistry from IODP Expedition 362: Subduction inputs to the Sumatra subduction zone. Japan Geoscience Union Meeting, 20-25 May 2017, Chiba, Japan.

K. Pickering, K. L. Milliken, F. Chemale, S. Kutterolf, H. Mukoyoshi, H. Pouderoux, and IODP Expedition 362 Scientists, 2017. Nicobar Fan and underlying sediments: Preliminary results from IODP Expedition 362, Indian Ocean. Land-Ocean Interactions Across the Indian Ocean: Toward Regional Integration of Recent Drilling Results Workshop, 10-12 July 2017, Narragansett, Rhode Island.

K. L. Milliken, K. Pickering, F. Chemale, S. Kutterolf, H. Mukoyoshi, H. Pouderoux, and IODP Expedition 362 Scientists, 2017. Petrologic aspects of the Nicobar Fan and underlying pre-fan sediments: Preliminary results from IODP Expedition 362, Sumatra Seismogenic Zone. Land-Ocean Interactions Across the Indian Ocean: Toward Regional Integration of Recent Drilling Results Workshop, 10-12 July 2017, Narragansett, Rhode Island.

H. Pouderoux, K. Pickering, K. Milliken, S. Kutterolf, F. Chemale, H. Mukoyoshi, L. McNeill, B. Dugan, K. Petronotis, and IODP Expedition 362 Scientists, 2017. The Nicobar Submarine Fan and relationship with the Bengal Fan: Preliminary results from IODP Expedition 362, Indian Ocean. International Meeting of Sedimentology, 10-12 October 2017, Toulouse.

Song, K. L. Milliken, B. Dugan, S. Bourlange, T. A. Colson, M. C.G. Frederik, T. N. Jeppson, M. Kuranaga, N. Nair, T. Henstock, and IODP Expedition 362 Scientists, 2017. Chemical diagenesis, porosity reduction, and rock strength, IODP Site U1480: Influences on great earthquakes at shallow depths. European Geosciences Union General Assembly, Vienna, 23-28 April 2017.

A. Robertson, S. Kutterolf, K.E. Petronotis, A. Avery, A. Baxter, J.C. Schindlbeck, K.-L. Wang, and G. Acton, 2016. Geological Development of the Izu-Bonin Forearc Since the Eocene Based on Biostratigraphic, Rock Magnetic, and Sediment Provenance Observations from IODP Expedition 352 Drill Cores. AGU Fall Meeting, San Francisco, 12-16 December 2016.

L.C. McNeill, B. Dugan, K.E. Petronotis, and IODP Expedition 362 Scientists, 2016. IODP Expedition 362: Initial results from drilling the Sumatra subduction zone – the role of input materials in shallow seismogenic slip and forearc plateau development. AGU Fall Meeting, San Francisco, 12-16 December 2016.

G. Acton, C. Richter, Y. Yamamoto, C. Ohneiser, T. Yamazaki, J.E.T. Channell, H.F.Evans, K.E. Petronotis, and E.P. Guidry, 2016. Paleolatitudinal Constraints from Eocene to Recent Sediments Cored in the Equatorial Pacific on IODP Expeditions 320 and 321. AGU Fall Meeting, San Francisco, 12-16 December 2016.

G.L. Christeson, S. Morgan, S. Kodaira, M. Yamashita and IODP Expedition 352 Scientists, 2015. Physical Properties and Seismic Structure of Izu-Bonin-Mariana Fore Arc crust: Results from IODP Expedition 352 and Comparison with Oceanic Crust. AGU Fall Meeting, San Francisco, 14-18 December 2015.

M. Godard, 2015. Geochemistry of the Bonin Fore-arc Volcanic Sequence: Results from IODP Expedition 352. AGU Fall Meeting, San Francisco, 14-18 December 2015.

W. Kurz, E. C. Ferré, A. Robertson, A. Avery, G. Christeson, S. Morgan, S. Kutterolf, W. Sager, C. Carvallo, and the Scientific Party of IODP Expedition 352, 2015. Post-magmatic tectonic deformation of the outer Izu-Bonin-Mariana forearc system: initial results of IODP Expedition 352. European Geosciences Union General Assembly, Vienna, 12-17 April 2015.

W. Kurz, E.C. Ferre, A.H.F. Robertson, A.J. Avery, S. Kutterolf, and IODP Expedition 352 Scientists, 2015. Tectonic evolution of the outer Izu-Bonin-Mariana fore arc system: initial results from IODP Expedition 352. AGU Fall Meeting, San Francisco, 14-18 December 2015

P. Micheuz, W. Kurz, E.C. Ferre and IODP Expedition 352 Scientists, 2015. Meso- and microscale structures related to post-magmatic deformation of the outer Izu-Bonin-Mariana fore arc system: preliminary results from IODP

Katerina E. Petronotis

- Expedition 352. AGU Fall Meeting, San Francisco, 14-18 December 2015.
- Petronotis, K.E., Acton, G.D., Jovane, L., Li, Y., and Zhao, X., 2015. Magnetic properties of sediments and basalts from IODP Exp. 334/344 sites [Abstract presented at Expedition 344 Science Postcruise Meeting, Shanghai, China, 22-24 June 2015].
- M. Power and IODP Expedition 352 Scientists, 2015. Pleistocene to Miocene Calcareous Nannofossil Biostratigraphy from IODP Expedition 334 Hole U1381A and Expedition 352 Hole U1439A. AGU Fall Meeting, San Francisco, 14-18 December 2015.
- M. Reagan, J Pearce, K Shimizu, R Almeev, K Petronotis, and the IODP Exp. 352 Scientists, 2015. The Evolution of Magma Compositions and Melting Regimes During Early Subduction in the Western Pacific: First Results from IODP Expedition 352. Asia Oceanic Geosciences Society Annual Meeting, Singapore, 2-7 August 2015.
- M. Reagan, J. Pearce, K. Shimizu, J. Shervais, and IODP Expedition 352 Scientific Team, 2015. Source Evolution After Subduction Initiation as Recorded in the Izu-Bonin-Mariana Fore-arc Crust. AGU Fall Meeting, San Francisco, 14-18 December 2015.
- A. Robertson, A. Avery, C. Carvallo, G. Christeson, E. Ferré, W. Kurz, S. Kutterolf, S. Morgan, J. Pearce, M. Reagan, W. Sager, J. Shervais, S. Whattam, and the Scientific Party of International Ocean Discovery Program Expedition 352, 2015. Origin of ophiolite complexes related to intra-oceanic subduction initiation: implications of IODP Expedition 352 (Izu-Bonin fore arc). European Geosciences Union General Assembly, Vienna, 12-17 April 2015.
- J.C. Schindlbeck, S. Kutterolf, IODP Expedition 350 and 352 Science Parties, 2015. Izu-Bonin-Arc tephrostratigraphy - evolution, provenance, cyclicity (IODP Exp. 350 & 352). German IODP Colloquium, Bonn, 2-4 March 2015.
- K. Shimizu, K. Michibayashi, T. Sakuyama, M. Python and IODP Expedition 352 Scientists, 2015. Overview of IODP Expedition 352 - Testing subduction initiation and ophiolite models by drilling IBM fore-arc. Japan Geoscience Union Meeting, Chiba-city, 24-28 May 2015.
- J. Pearce, M. Reagan, R. Stern, K. Petronotis, and IODP Expedition 352 Scientific Team, 2014. IODP Expedition 352 (Bonin Forearc): First Results. AGU Fall Meeting, San Francisco, 15-19 December 2014.
- M. Reagan, J. Pearce, R. Stern, O. Ishizuka, K. Petronotis, and Scientific Team of IODP Expedition 352, 2014. The Ophiolite - Oceanic Fore-Arc Connection. AGU Fall Meeting, San Francisco, 15-19 December 2014.
- S. Whattam, and IODP Expedition 352 Scientific Team, 2014. Testing subduction initiation and ophiolite models by deep sea drilling: Preliminary results, IODP Expedition 352. Annual Meeting of the Geological Society of Korea.