

# Dr Tim M Conway BA MSci PhD

*Assistant Professor (Chemical Oceanography & Geochemistry)*

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## Education

**BA & MSci Natural (Geological) Sciences** – 1<sup>st</sup> Class Honours (October 2002 - June 2006).

**Cambridge University, Department of Earth Sciences & St Catharine's College.**

Included independent masters project and 1 first-author publication.

**PhD Earth Sciences (NERC Studentship)** (October 2006 - August 2010).

**Cambridge University, Department of Earth Sciences & British Antarctic Survey, UK.**

Thesis Title: “*Solubility and bioavailability of iron from dust in Antarctic ice cores*”.

Advisors: **Profs Eric Wolff and Harry Elderfield, Dr Regine Röthlisberger.**

## Research Experience and Employment

*25 peer-reviewed articles (4 in Nature Journals, 1 in PNAS, 1 in Geology); 2 in review,*

*Assistant Professor (January 2017 to present)*

**College of Marine Science & School of Geosciences, University of South Florida.**

Leading trace metal isotope biogeochemistry group at CMS and co-PI of USF Tampa Bay ICPMS facility (Element XR and Neptune Plus). Teaching and supervising undergraduate & graduate students.

Analysis of trace metal isotopes on GEOTRACES GA02, GP02, GA08 and GP15 sections.

*NWO-supported Visiting Scientist (October 2017)*

**Royal Netherlands Institute for Sea Research (NIOZ), Netherlands (with Rob Middag).**

Visiting for a project investigating dissolved  $\delta^{56}\text{Fe}$  and  $\delta^{66}\text{Zn}$  on the Dutch GA02 section.

*Postdoctoral Researcher (July 2014 – December 2016)*

**Department of Earth Sciences, ETH Zürich, Switzerland (with Derek Vance).**

Marine Isotope Geochemistry. Investigating dissolved  $\delta^{56}\text{Fe}$ ,  $\delta^{66}\text{Zn}$  and  $\delta^{114}\text{Cd}$  variability in modern seawater in the Antarctic-Equatorial Pacific (Japanese GP19 Section). Supervision of a PhD student.

*Postdoctoral Associate (October 2010 – June 2014)*

**Department of Earth & Ocean Sciences, University of South Carolina, USA (with Seth John).**

Marine Trace Metal Geochemistry. Method development and measurement of  $\delta^{56}\text{Fe}$ ,  $\delta^{66}\text{Zn}$  and  $\delta^{114}\text{Cd}$  in various materials, Atlantic GEOTRACES Transects (GA03 and GA10).

*Graduate Intern (June – August 2008)*

**Bermuda Institute of Ocean Sciences, Bermuda (with Peter Sedwick).**

Cruise experience and use of flow-injection systems for Fe in seawater analysis.

*Laboratory Analyst (Summer 2002 and Dec/Jan 2002 & 2003)*

**Rothamsted Research & Royal Agricultural University, UK.**

Soil chemical analyses, data collection and processing supporting 8 year DEFRA funded project.

## Teaching Experience

*2017 - Present. Academic Courses, College of Marine Science, University of South Florida.*

OCE 6050 CMS: Grad. Core Chemical Oceanography (Lecturer 2017-2019; Lead, Fall 2018).

OCE 6934 CMS: Grad. New Applications of Stable Isotopes in Ocean Chemistry (Lead, Spring 2018).

OCE 6934 CMS: Grad. Principles and Applications of ICPMS (Guest Lecturer, 2018-2019).

ANT 4183C/ANG 6100 Anthropology: Archaeological Science (Guest Lecturer, 2017-2019).

GLY 6825C Geosciences: Analytical Techniques in Geology (Guest Lecturer, 2017).

**2011 - 2014. Department of Earth and Ocean Sciences, University of South Carolina.**

MS 210 Undergraduate 'Oceans and Man' (Guest Lecturer - Ancient Oceans and Climate Change).

**Student Supervision, Teaching and Mentoring****2016 - Present. College of Marine Science, University of South Florida.**

- Internal Examiner for Thesis Defense of Matthias Sieber (March 2019).
- Main Professor – MS student, USF CMS, Brent Summers (2017-Present).
- Co-Supervisor – PhD student, NIOZ, Hung-An Tian (2017-Present).
- Co-Supervisor - PhD student, ETH Zurich, Switzerland, Matthias Sieber (2015-2019).
- Committee member – PhD student, USF CMS, Shannon Burns (2019-Present)
- Committee member – PhD student, USF CMS, Kara Vardman (2019-Present).
- Committee member – MS student, USF CMS, Catherine Prunella (2019-Present).
- Committee member – PhD Student, USF CMS, Imogen Browne (2019-Present).
- Committee member – MS student, USF CMS, Gabriel Browning (2018-Present).
- Committee member – PhD student, USF CMS, Travis Mellett (2018-Present).
- Committee member – PhD student, USF Geosciences, Sammy Tavaréz (2017-Present)
- Committee member – MS student, USF CMS, Adrienne Hollister (2018-2019).
- Committee member - PhD student, USF CMS, Cristina Subt (2017).
- Supervisor - Undergraduate Summer Intern, USF CMS, Ryan Schlaiss (2017, 2018).
- External Examiner - PhD student, Australian National University, Aus. (Moneesha Samanta, 2017).
- External Examiner - PhD student, University of Otago, NZ. (Ejin George, 2017).
- Mentored 1 REU undergraduate student at ASLO Meeting, Hawaii (2017).
- Mentored 3 Graduate students at Goldschmidt Meetings (Paris, 2017; Boston, 2018).

**2015 - 2016. Institute for Geochemistry and Petrology, Department of Earth Sciences, ETH Zürich.**

- Co-Supervisor for PhD student (Matthias Sieber; 2015-2016).
- Internal Examiner for Proposal Defence of Matthias Sieber (29<sup>th</sup> Jan 2016).
- Mentored 2 students at Goldschmidt Meeting, Yokohama (2016).

**2011 - 2014. Department of Earth and Ocean Sciences, University of South Carolina.**

- Mentored 1 MS student, 2 PhD students and several undergraduates.
- Taught trace-metal/clean lab technique to technicians and students, mass spectrometry and techniques for determination of stable isotope ratios to students.

**2006 – 2010. Undergraduate TA, Department of Earth Sciences, University of Cambridge**

- 1<sup>st</sup> Year (Crystallography & Mineralogy, Plate Tectonics, Sedimentology and Earth Processes, Paleobiology and UK Geological History), 2<sup>nd</sup> Year (Structural and Seismic Geology, Hydrosphere and Climate, Carbonate & Clastic Sedimentology and Invertebrate Palaeontology), 3<sup>rd</sup> & 4<sup>th</sup> Year (Long Term Climate and Rapid Climate Change) Practical Classes and 1<sup>st</sup> and 2<sup>nd</sup> Year Field Courses.

**Grants and Awards**

- **Current:** PI on NSF Award OCE1829643 '*Collaborative Research: Determining the isotopic signature of iron released via ligand-mediated dissolution of atmospheric dust in the surface ocean*'. (USF \$374,080; 9/01/18-8/31/21).
- **Current:** PI on NSF Award OCE1737136 '*Collaborative Research: US GEOTRACES PMT: Trace-metal concentrations and stable isotopes in the North Pacific*' (USF \$400,703; 8/15/17-7/31/20).
- **Current:** Co-I and Overseas Ph.D. Supervisor on NWO Grant '*Iron limitation and viral lysis, phytoplankton caught between a rock and a hard place*' with PI Rob Middag (April 2017; 4 years; €598,402).
- **Current:** PI on USF New Researcher proposal '*Investigating the influence of the Gulf Stream System on micronutrient cycling in the North Atlantic Ocean*' (USF \$9,975; 5/1/17-4/30/19).
- Co-PI on internal USF Equipment and Improvement Award with PI Kristen Buck '*Acquisition of a trace metal clean rosette sampling system*' (USF \$54,351; May 2018).

- Antarctic Circumnavigation Expedition Grant (Co-Investigator) ‘Tracing the iron cycle in Southern Ocean waters’ with PI Michael Ellwood (March 2016; €260,000).
- NWO Visiting Scientist Travel Grant, Royal Netherlands Institute for Sea Research, 2017.
- Travel support to attend US GEOTRACES Pacific Planning Workshops at La Jolla (October 2016) and Old Dominion University, Norfolk (March 2018).
- Travel grant to attend GEOTRACES Workshop August 2016 (\$2000, accommodation & food).
- NSF Grant ‘Trace-metal isotopes in Atlantic seawater and particles from GEOTRACES transects A03 and A10’. OCE-1131387. (co-written with P.I. Seth G. John). 8/1/11-7/31/14. \$453,514.
- Funded at USC by NSF OCE-1131387 (\$453,514) and NSF OCE-1235150 (\$441,521), with both grants (P.I. Seth G. John) based on and supported by my original research and published methods.
- NERC Ph.D. Studentship at the British Antarctic Survey & University of Cambridge (2006-2010).
- Thomas Hobbs (1631) prize for academic performance in Geological Sciences at BA & MSci (St Catharine’s College, 2006).
- AGU Editors’ Citation for Excellence in Refereeing (2015) for *Global Biogeochemical Cycles*.

### Academic Responsibilities and Community Service

- **Journal Reviewer** (51): *Analytica Chimica Acta* (1), *Analytical Letters* (3), *Biogeosciences* (1), *Chemical Geology* (1), *Chemosphere* (1), *Earth & Planetary Science Letters* (11), *Ecohydrology & Hydrobiology* (2), *Environmental Pollution* (2), *Frontiers in Marine Science* (1), *Geochimica et Cosmochimica Acta* (7), *Geology* (1), *Geophysical Research Letters* (1), *Global Biogeochemical Cycles* (5), *Journal Analytical Atomic Spectrometry* (1), *Marine Chemistry* (5), *Nature* (1), *Nature Communications* (1), *Nature Geoscience* (2), *PNAS* (1), *Precambrian Research* (1), *Science* (1), *Science of the Total Environment* (1).
- **Journal Editor**: PLOS One Academic Editor; Chemical Geology Lead Guest Editor (24 manuscripts) for Special Edition: “Cycles of trace elements and isotopes in the ocean – GEOTRACES and beyond...”
- **Conference Session Convenor** (6): Goldschmidt 2014 Sacramento (16g), Goldschmidt 2016 Yokohama: (12d), Goldschmidt 2017 Paris (10i), Ocean Sciences 2018 Portland (BN11A), Goldschmidt 2018 Boston: (07i); Goldschmidt 2019 Barcelona (10j).
- **Proposal Reviewer for geochemical / chemical oceanographic research on behalf of**: *Actions Thématiques Stratégiques Federal University of Toulouse, France* (2015), *German Research Foundation* (2015, 2018), *European Research Council Starting Grants* (2016), *US National Science Foundation* (2016-2018), *Austrian Science Fund* (2017-2018), *UK NERC* (2018).
- **Contributed** full section data of dissolved Cd, Zn and Fe concentrations and  $\delta^{56}\text{Fe}$ ,  $\delta^{66}\text{Zn}$  and  $\delta^{114}\text{Cd}$  for the US GEOTRACES GA03 section, and dissolved Fe concentration and  $\delta^{56}\text{Fe}$  for the GA10 section to the *GEOTRACES Intermediate Data Products 2014 and 2017*, and to *eGEOTRACES - Electronic Atlas of GEOTRACES Sections and animated 3D Scenes*.
- **USF Committee Assignments**: CMS Student and Faculty Rights and Responsibilities (2017), CMS Chemical Oceanography Search (2018), CMS Student Admissions (2019), CMS Annual Review (2019), IMSE (2019).

### Analytical Skills and Field Experience

- Extensive experience with ICP-MS (9 years with Element XR and Neptune Plus Multi-collector) for analysis of dissolved elemental concentrations (Cu, Cd, Co, Fe, Ni, Mn, Pb, Zn) and stable isotope ratios ( $\delta^{56}\text{Fe}$ ,  $\delta^{66}\text{Zn}$  and  $\delta^{114}\text{Cd}$ ) in natural materials (aerosol dust, biological material, rain, rocks and seawater).
- ESI SeaFAST, microFAST and DX autosampler experience.
- Clean lab design/construction/running/management and operation in 8 different institutions.
- 16 Weeks field experience as part of undergraduate degree at the University of Cambridge, in a range of locations and geological settings including 8 weeks of independent geological mapping.
- Demonstrated 1<sup>st</sup> and 2<sup>nd</sup> Year Undergraduate field courses for the University of Cambridge in Scotland and South West England (geological mapping, sediments, paleontology, structural geology, oil rocks).
- Research cruise experience: R/V Atlantic Explorer (June 2008; May 2019), R/V John Strickland (March 2017), R/V Angari (Chief Scientist; March 2019).

**Publications** (Google Scholar as of 02/07/19: 915 citations, h-index 15, i10-index 19; \* supervised student)

1. \*Sieber, M., **Conway, T. M.**, de Souza, G. F., Obata, H., Takano, S., Sohrin, Y., and Vance, D. (2019). Physical and biogeochemical controls on the distribution of dissolved cadmium and its isotopes in the Southwest Pacific Ocean. *Chemical Geology*. In Press.
2. Hayes, C. T., Anderson, R. F., Cheng, H., **Conway, T. M.**, Edwards, L., Fleisher, M. Q., Huang, K.-F., John, S. G., Landing, W. M., Little, S. H., Lu, Y., Morton, P. L., Moran, B., Robinson, L. F., Shelley, R. U., Shiller, A. M., and Zheng, X. (2018). Oceanic residence times of a spectrum of elements based on Th supply. *Global Biogeochemical Cycles*. 32, 1294-1311.
3. **Conway, T. M.**, Palter, J. B., and de Souza, G. F. (2018). Gulf Stream rings as a source of iron to the North Atlantic subtropical gyre. *Nature Geoscience*. 11, 594-598.
4. Schlitzer *et al.* [including **Conway, T. M.**] (2018). The GEOTRACES Intermediate Data Product 2017. *Chemical Geology*. 493. 210-223.
5. Saito, M., Noble, A., Hawco, N., Twining, B. S., Ohnemus, D. C., John, S. G., Lam, P., **Conway, T. M.**, Johnson, R., Moran, D., and McIlvin, M. (2017). The Acceleration of Dissolved Cobalt's Ecological Stoichiometry due to Biological Uptake, Remineralization, and Scavenging in the Atlantic Ocean. *Biogeosciences*. 4637-4662.
6. Archer, C., Andersen, M., Cloquet, C., **Conway, T. M.**, Dong, S., Ellwood, M., Moore, R., Nelson, J., Rehkämper, M., Rouxel, O., Samanta, M., Shin, K.-C., Sohrin, Y., Takano, S., and Wasylenki, L. (2017). Inter-calibration of a proposed new primary reference standard AA-ETH Zn for Zn isotopic analysis. *Journal Anal. Atom. Spectrom.* 32. 415-419.
7. Fitzsimmons, J. N., **Conway, T. M.**, Lee, J.-M., Kayser, R., Thyng, K. M., John, S. G. and Boyle, E. A. (2016). Dissolved iron and iron isotopes in the Southeastern Pacific Ocean. *Glob. Biogeochem. Cycles*. 30 (10). 1372-1395.
8. Homoky, W.B., Weber, T. S., Berelson, W. M., **Conway, T. M.**, Henderson, G. M., van Hulst, M., Jeandel, C., Severmann, S., and Tagliabue, A. (2016). Quantifying trace element and isotope fluxes at the ocean-sediment boundary - a review. *Phil. Trans. Roy. Soc. A*. 374: 20160246.
9. **Conway, T. M.**, Hoffmann, L. J., Breitbarth, E., Strzepek, R. F. and Wolff, E. W. (2016). The growth response of two diatom species to atmospheric dust from the Last Glacial Maximum. *PLoS ONE*. 11(7): e0158553.
10. **Conway, T. M.**, John, S. G. and Lacan, F. (2016). Intercomparison of dissolved iron isotope profiles from reoccupation of three GEOTRACES stations in the Atlantic Ocean. *Mar. Chem.* 183. 50-61.
11. Middag, R., Sefarian, R., **Conway, T. M.**, John, S. G., Bruland, K. W. and de Baar, H. J. W. (2015). GEOTRACES Intercomparison of Dissolved Trace Elements at the Bermuda Atlantic Time Series Station. *Mar. Chem.* 177 (3). 476-479.
12. Mawji, E., *et al.* [including **Conway, T. M.**] (2015). The GEOTRACES Intermediate Data Product 2014. *Mar. Chem.* 177 (1). 1-8.
13. **Conway, T. M.**, Wolff, E.W., Röthlisberger, R., Mulvaney, R., and Elderfield, H. (2015). Constraints on soluble aerosol Fe flux to the Southern Ocean at the Last Glacial Maximum. *Nat. Comm.* 6. 7850.
14. **Conway, T. M.** and John, S. G. (2015). The cycling of iron, zinc and cadmium in the North East Pacific Ocean - insights from stable isotopes. *Geochim. Cosmochim. Acta*. 164 (1). 262-283.
15. Revels, B. N., Ohnemus, D. C., Lam, P. J., **Conway, T. M.**, and John, S. G. (2015). The isotopic signature and distribution of particulate iron in the North Atlantic Ocean. *D.S.R. II*. 116. 321-331.
16. Fitzsimmons, J. N., Carrasco, G. G., Wu, J., Roshan, S., Hatta, M., Measures C. I., **Conway T. M.**, John, S. G. and Boyle, E. A. (2015). Partitioning of dissolved iron and iron isotopes into soluble and colloidal phases along the U.S. GEOTRACES North Atlantic Transect. *D.S.R. II*. 116. 130-151.
17. **Conway, T. M.** and John, S. G. (2015). Biogeochemical cycling of cadmium isotopes along a high-resolution section through the North Atlantic Ocean. *Geochim. Cosmochim. Acta*. 148 (1). 269-283.
18. **Conway, T. M.** and John, S. G. (2014). The biogeochemical cycling of zinc and zinc isotopes in the North Atlantic Ocean. *Glob. Biogeochem. Cycles*. 28 (10). 1111-1128.
19. **Conway, T. M.** and John, S. G. (2014). Quantification of dissolved iron sources to the North Atlantic Ocean. *Nature*. 511. 212-215.
20. Janssen, D., **Conway, T. M.**, John, S. G., Christian, J., Kramer, D. L., Pederson, T. F. and Cullen, J. T. (2014). An undocumented water column sink for cadmium in open ocean oxygen deficient zones. *Proc. Nat. Acad. Sci. USA*. 111 (19). 6888-6893.

21. John, S. G. and **Conway, T. M.** (2014). A role for scavenging in the marine biogeochemical cycling of zinc and zinc isotopes. *Earth Planet. Sci. Lett.* 394. 159-167.
22. Homoky, W. B., John, S. G., **Conway T. M.**, and Mills, R. A. (2013). Distinct iron isotopic signatures and supply from marine sediment dissolution. *Nature Comm.* 4, 2143.
23. **Conway, T. M.**, Rosenberg, A. D., Adkins, J. F. and John, S. G. (2013). A new method for precise determination of iron, zinc and cadmium stable isotope ratios in seawater by double-spike mass spectrometry. *Anal. Chim. Acta.* 793. 44-52.
24. **Conway, T. M.** and Botting, J. P. (2012). A new Middle Ordovician (Llanvirn) odontopleurid trilobite from the Builth Inlier of Mid-Wales, and a review of the genus Meadowtownella. *Geol. Mag.* 149 (3). 397-411.
25. Li, G., Chen, J., Ji, J., Yang, J., and **Conway, T. M.** (2009). Natural Sources of East Asian Dust. *Geology.* 37 (8). 727-730

### Published Abstracts

1. **Conway, T. M.**, Shelley, R., Aguilar-Islas, A. M., Landing, W. M., Mahowald, N. M., and John, S. (2016). Tracing anthropogenic aerosol Fe sources in the North Atlantic Ocean using dissolved Fe isotope ratios. *AGU Fall Abstracts.* AGU, Fall General Assembly 2016, abstract #CT11A-04.
2. **Conway T. M.** and John S. G. (2013). Sources of Fe to the North Atlantic: Insights from Fe Isotopes. *Mineralogical Magazine*, 77(5) 912.
3. John, S.G., **Conway, T. M.**, Casciotti, K., Sigman D., Rafter P. and Marconi, D. (2013). Quantifying Nitrogen Fixation in the North Atlantic Using Paired Analyses of Cd and N Stable Isotopes. *Mineralogical Magazine.* 77(5), 1396.
4. Fitzsimmons, J. N., **Conway, T. M.**, John, S. G. and Boyle, E. A. (2013). Iron Isotopes in Seawater from the Southeast Pacific and North Atlantic Oceans. *Mineralogical Magazine.* 77(5), 1092.
5. Aquilina, A., Homoky, W. B., Hepburn, L. E., John, S. G., **Conway, T. M.**, Lyons, T. and Mills, R. A. (2013). Diagenetic Mobilisation of Fe and Mn in Hydrothermal Sediments. *Mineralogical Magazine.* 77(5), 604.
6. **Conway, T. M.**, John, S. G. and Rosenberg, A. D. (2012). Iron isotopes in the eastern North Atlantic. *Mineralogical Magazine.* 76, 1595.

### Workshop Participation

1. *Gulf of Mexico RCRV Science Planning Workshop.* Gulfport, MS, USA. January 2019.
2. *US GEOTRACES GP15 PMT Planning Workshop.* ODU, Norfolk, VA, USA. March 2018.
3. *US GEOTRACES Pacific Meridional Transect planning meeting,* La Jolla, CA, USA. October 2016.
4. *Biogeochemical cycling of trace elements within the ocean: A synthesis workshop.* GEOTRACES & OCB. Lamont Doherty Earth Observatory, NY, USA. August 2016.
5. *GEOTRACES Indian Ocean Planning Workshop.* Yokohama, Japan. June 2016.
6. *Quantifying fluxes and processes of trace-metal cycling at ocean boundaries.* Royal Society. Chicheley Hall, Buckinghamshire, UK. December 2015.
7. *Stable isotopes of biologically important trace metals.* Imperial College, London, UK. September 2013.
8. *US GEOTRACES North Atlantic Section data workshop.* ODU, Norfolk, VA, USA. March 2013.
9. *US GEOTRACES North Atlantic Section data workshop.* ODU, Norfolk, VA, USA. February 2011.

### Invited Conference Presentations and Seminars (\* supervised student)

1. **Conway, T. M.** (2019). *TBD.* IAPSO Symposium, IUGG General Assembly, Montréal. (upcoming).
2. **Conway, T. M.** (2019). *Recent developments in our understanding of the iron cycle in the oceans, from an iron isotope perspective.* Dept. Geological Sciences, University of Florida. (01.10.19).
3. **Conway, T. M.** (2018). *Recent developments in our understanding of the iron cycle in the oceans, from an iron isotope perspective.* College of Geosciences, Texas A&M. (11.05.18).
4. **Conway, T. M.** (2017). *New insights into trace metal cycling in the oceans from the GEOTRACES program.* Colloquium, School of Geosciences, USF. (11.05.17).
5. \*Sieber, M., **Conway, T. M.**, Takano, S., Sohrin, Y., and Vance, D. (2017). *The role of the Antarctic oceans in controlling the distribution of Cd isotopes at lower latitudes in the South West Pacific.* Plasma Seminar, College of Marine Science, USF. (09.17).

6. **Conway, T. M.** (2017). *Gulf Stream Interactions and mesoscale trace element biogeochemistry*. Faculty Seminar, College of Marine Science, USF. (09.01.17)
7. **Conway, T. M.** (2017).  $\delta^{66}\text{Zn}$  and  $\delta^{114}\text{Cd}$  as Paleoproductivity Proxies: Where do They fit on the 'Elderfield' Proxy Curve? An Assessment with Insight from GEOTRACES Datasets. Session 17g, Goldschmidt Conference 2017, Paris.
8. **Conway, T. M.** (2017) *Investigating the role of dust in the marine Fe cycle with iron isotopes?* TAO Seminar, Department of Earth and Sciences, University of Victoria (03.16.17).
9. **Conway, T. M.**, Palter, J. B., and de Souza, G. F. (2016). *One ring to rule them all - or there and back again? - the importance of gulf stream rings for Fe biogeochemistry in the North Atlantic Ocean*, Tuesday Biogeochemistry Seminar, ETHZ, Zurich (11.01.16).
10. Weber, T. S., DeVries, T., John, S. G., Bianchi, D., Deutsch, C. A., Tagliabue, A., Janssen, D., **Conway, T. M.** (2016). *Inverse modelling of GEOTRACES datasets – new insights into trace metal scavenging*. GEOTRACES and OCB workshop (Biogeochemical cycling of trace elements within the ocean: A synthesis workshop), Lamont Doherty Earth Observatory, NY, USA (08.01.16).
11. **Conway, T. M.** (2016). *Stable Metal Isotopes in the Ocean: Results from the International GEOTRACES Program - Investigating the role of dust in the marine iron cycle using iron isotopes*. Institutskolloquium, Institute für Geologie und Mineralogie, University of Cologne (07.20.16).
12. **Conway, T. M.** (2016). *Investigating the role of dust in the marine iron cycle using iron isotopes*. Seminar, Department of Chemistry, University of Kyoto (07.08.16).
13. **Conway, T. M.**, Archer, C., Rosenberg, A. D., Adkins, J. F., John, S. G. and Vance, D. (2016). *Rapid-throughput MC-ICPMS techniques for analysis of multiple transition metal isotope ratios in seawater, and case studies from recent GEOTRACES cruises*. Session 17a, Goldschmidt Conference 2016, Yokohama (06.28.16).
14. **Conway, T. M.** (2016). *Chalk Talk*. School of Oceanography, University of Washington (05.17.16).
15. **Conway, T. M.** (2016). *Climate Change: lessons from the past*. Teaching Seminar, School of Oceanography, University of Washington (05.17.16).
16. **Conway, T. M.** (2016). *Enhancing our understanding of the marine iron cycle (the role of dust) using iron isotopes*. Research Seminar, School of Oceanography, University of Washington (05.16.16).
17. **Conway, T. M.** (2016) *How do Fe isotopes help us understand the role of atmospheric Fe in the marine Fe cycle?* Seminar, Department of Earth Sciences, University of Cambridge (05.06.16).
18. **Conway, T. M.** (2016). *Enhancing our understanding of the marine iron cycle (the role of dust) using iron isotopes*. Seminar, College of Marine Science, University of South Florida (04.14.16).
19. **Conway, T. M.** (2016). *How do Fe isotopes help us understand the role of atmospheric Fe in the marine Fe cycle?* Seminar, Center for Elemental Mass Spectrometry, Department of Earth Sciences, University of South Carolina. (02.19.16).
20. Little, S. H., Vance D., Bridgestock, L. J., **Conway, T. M.**, Rehkämper, M., Van der Flierdt, T., John, S. G., McManus, J. F., and Severmann, S. (2015). *Isotope tracing of boundary fluxes*. Royal Society Workshop, UK (12.09.15).
21. **Conway, T. M.** (2015). *Fe, Zn and Cd and their isotopes in the oceans*. Symposium, Institute of Geochemistry and Petrology, Department of Earth Sciences, ETH Zürich (10.26.15)
22. **Conway, T. M.** (2015). *Using seawater Fe isotopes as a tracer*. Isochat Seminar, Institute of Geochemistry and Petrology, Department of Earth Sciences, ETH Zürich (02.19.15).
23. **Conway, T. M.** and John, S. G. (2014). *Quantification of dissolved Fe sources to the North Atlantic Ocean*. Seminar, Department of Earth Sciences, University of Oxford (10.28.14).
24. Janssen, D. J. **Conway, T. M.**, John, S. G. and Cullen, J. T. (2013). *An Undocumented Sink for Cd in Oceanic Oxygen Deficient Zones*. MPIC Seminar, Max-Planck Institute, Germany.
25. **Conway, T. M.** (2013) *Sources of Fe to the North Atlantic: Insights from Fe isotopes*. Seminar, Woods Hole Oceanographic Institute. (10.18.13).
26. **Conway, T. M.** (2013) *Sources of Fe to the North Atlantic: Insights from Fe isotopes*. Geobiology and
27. Oceanography Seminar, Department of Earth, Atmospheric and Planetary Sciences. Massachusetts Institute of Technology. (10.17.13).
28. **Conway, T. M.** (2013) *Sources of Fe to the North Atlantic: Insights from Fe isotopes*. Marine Science Departmental Seminar, Earth and Ocean Sciences, University of South Carolina. (09.06.13).
29. **Conway, T. M.** (2012) *Marine Trace Metals - Motivation and Methodology*. CEMS Seminar, Center for Elemental Mass Spectrometry, University of South Carolina. (10.28.12).
30. **Conway, T. M.** (2012) *Iron Isotopes in the North Atlantic*. Geology Departmental Seminar, Earth and Ocean Sciences, University of South Carolina. (10.25.12).

31. **Conway, T. M.** (2009) *Aerosol Iron Solubility at the Last Glacial Maximum*. Departmental Seminar, Department of Chemistry, University of Otago, NZ. (08.09)
32. **Conway, T. M.** (2007). *The Iron Hypothesis - Insights from Dust in Antarctic Ice Cores*. Departmental Seminar, Department of Earth Sciences, University of Cambridge, UK

#### Contributed Conference and Workshop Presentations (\* supervised student)

1. **Conway, T. M.** (2019). *Title TBD*. GRC Chemical Oceanography 2019, Plymouth, NH.
2. \*Summers, B. A., Homoky, W. B., Mills, R. A., John, S. G., and **Conway, T. M.** (2019). *Investigating the isotopic signature and release of iron sourced from sediments to the UK South Atlantic GEOTRACES GA10 Section*. USF CMS Graduate Student Symposium.
3. Hayes C. T., Anderson, R. F., Cheng, H., **Conway, T. M.**, Edwards, L., Fleisher, M. Q., Huang, K.-F., John, S. G., Landing, W. M., Little, S. H., Lu, Y., Morton, P. L., Moran, B., Robinson, L. F., Shelley, R. U., Shiller, A. M., and Zheng, X. (2018). *Replacement times of the rare earth elements in the North Atlantic Ocean based on thorium supply*. AGU Conference 2018, Washington DC.
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