Qi Fu

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EDUCATION

2006	Ph.D., Geology, University of Minnesota, Twin Cities, MN
1997	M.S., Earth Sciences, Nanjing University, Nanjing, China
1994	B.S., Earth Sciences, Nanjing University, Nanjing, China

PROFESSIONAL EXPERIENCE

2019 – Present	Associate Professor, Dept. of Earth & Atmospheric Sciences, University of Houston, Houston, TX
2016 – Present	Courtesy joint appointment, Dept. of Chemistry, University of Houston, Houston, TX
2014 – 2023	Visiting Professor, Shandong University of Science and Technology, Qingdao, China
2013 – 2019	Assistant Professor, Dept. of Earth & Atmospheric Sciences, University of Houston, Houston, TX
2012 – 2013	Research Assistant Professor, Dept. of Earth & Atmospheric Sciences, University of Houston, Houston, TX
2011 – 2013	Research Scientist, NASA Johnson Space Center**,** Houston, TX
2008 – 2011	Postdoctoral Fellow, NASA Johnson Space Center & Lunar and Planetary Institute, Houston, TX
2006 – 2008	Postdoctoral Associate, Dept. of Geology and Geophysics, University of Minnesota, Twin Cities, MN

TEACHING EXPERIENCE

- **Courses Taught**
  1. GEOL 1303, Physical Geology
     Spring 2025, Fall 2024, Spring 2023, Spring 2022, Fall 2021, Spring 2020, Fall 2019, Fall 2018, Fall 2017, Fall 2016, Spring 2016, Fall 2014
  2. GEOL 3370, Mineralogy
     Fall 2025, Fall 2023, Fall 2022, Fall 2021, Fall 2020, Fall 2018, Fall 2016, Fall 2015
  3. GEOL 6343, Organic Geochemistry
     Spring 2023, Spring 2020, Spring 2018, Spring 2015, Spring 2014
  4. GEOL 6344, Light Stable Isotope Geochemistry
     Spring 2025, Spring 2021, Spring 2017, Fall 2014
  5. GEOL 6396, Graduate Seminar — Geochemistry/Petrology
     Spring 2016, Fall 2013
  6. GEOL 6396, Graduate Seminar — Surface Earth
     Fall 2018
- **Course Development**
  1. GEOL 6343, Organic Geochemistry. New Course in Graduate Catalog. Spring 2014 – present

2. GEOL 6344, Light Stable Isotope Geochemistry. New Course in Graduate Catalog. Fall 2014 – present

FUNDED PROJECTS

12/01/2024 – 02/28/2026 Q. Fu (subaward PI)
Abiotic formation of organic compounds during serpentinization in Tyrrhenian: IODP Expedition 402. (IODP Expedition 402: Tyrrhenian Continent-Ocean Transition Post-Expedition Activity Award)
$20,000 (OCE-1450528, subaward 83H(GG009393-04))
NSF International Ocean Discovery Program (IODP), via Columbia University, New York

06/01/2024 – 05/31/2026 John F. Casey (PI), Q. Fu, Yongjun Gao (Co-PIs)
Natural hydrogen: A hydrothermal experimental and analytical study of ultramafic rocks to simulate and understand processes for optimal rock-based hydrogen production
$353,748
A world-leading energy company (-name not disclosed due to NDA)

05/15/2024 – 11/15/2025 Q. Fu (PI), N. R. Voarintsoa (Co-PI)
Experimental investigations of Ca- and Mg-rich carbonates formation and their isotope fractionations: Implications for past environments on Mars
$39,541
University of Houston, Grants to Enhance and Advance Research (GEAR) Program

02/01/2024 – 01/31/2025 Q. Fu (subaward PI)
Participation of IODP Expedition 402: Tyrrhenian Continent-Ocean Transition
$52,379 (OCE-1450528, subaward 83G(GG009393-04))
NSF International Ocean Discovery Program (IODP), via Columbia University, New York

07/15/2022 – 06/30/2024 Q. Fu (PI), E. Beverly, N. R. Voarintsoa, J. Wellner (Co-PIs)
Acquisition of an isotope ratio mass spectrometer for research and education in geological and paleoclimate studies at the University of Houston
$500,000 (EAR-2104159)
NSF Earth Sciences: Instrumentation and Facilities (EAR/IF) Program

08/01/2022 – 07/31/2025 Q. Fu (PI), E. Beverly (Co-PI)
Renovation of the light stable isotope laboratory for research and education in geological and climate studies at the University of Houston
$547,747
University of Houston, Laboratory Renovation/New Lab Grant

05/01/2017 – 04/30/2022 Q. Fu (PI)
CAREER: Comprehensive chemical and isotopic characterization of abiotic organic synthesis: An experimental study and its implication for organic formation in hydrothermal systems.
$516,575 (OCE-1652481)
NSF Faculty Early Career Development (CAREER) Program

01/01/2016 – 12/31/2019 Q. Fu (Co-PI), W. Liu (PI)
Characterization of source rocks and assessment of hydrocarbon generation potential in gypsum-salt sequences in marine sedimentary basins
$65,000 (Grant U1663201)

National Natural Science Foundation of China (NSFC) and SINOPEC (through Shandong University of Science and Technology, Qingdao, China)

09/01/2014 – 08/31/2016 Q. Fu (PI)
Experimental study of carbon and hydrogen isotope equilibria among CO_2 and hydrocarbons in sedimentary basins
$110,000 (PRF# 54474-DNI2)
American Chemical Society Petroleum Research Fund (ACS PRF)

09/01/2014 – 05/31/2015 Q. Fu (PI)
Oxidation kinetics of organic compounds and evolution of carbon and hydrogen isotopes under Martian subsurface conditions: An experimental study
$6,000
University of Houston New Faculty Research Program

08/10/2010 – 04/24/2015 Q. Fu (PI)
Experimental investigations on reaction pathways and isotope signatures of abiotic organic synthesis in hydrothermal systems
$298,677 ($88,487.73 to UH), (Grant NNX10AR18G and NNX13AH75G)
NASA Astrobiology: Exobiology and Evolutionary Biology Program

PROFESSIONAL SERVICE

- **Guest Editor**
  Special Issue: "Paleolimnological archives": Unpacking secrets of ancient lakes through the lens of geochemistry, mineralogy and petrology. Minerals, 2022-2023. MDPI.

- **Proposal Review**
  American Chemical Society Petroleum Research Fund (ACS PRF), 2025, 2018
  DoD Science, Mathematics And Research for Transformation (SMART) Scholarship for Service Program, January 2015
  NASA Exobiology Program, 2018
  NASA Mars Science Laboratory Participating Scientist Program (MSLPSP), 2015
  NASA Postdoctoral Program, 2024 (November), 2023 (March), 2021 (July), 2020 (November), 2019 (November, March), 2018 (November, July, March), 2017 (November, March), 2016 (November, July, March), 2015 (July)
  NSF Earth Sciences Instrumentation and Facilities (EAR/IF) program, 2024, 2023
  NSF Earth Sciences Postdoctoral Fellowships (EAR-PF) program, 2022, 2021
  NSF Geobiology and Low-Temperature Geochemistry program, 2022, 2021
  NSF Graduate Research Fellowship Program (GRFP), 2025, 2024, 2023, 2022, 2021, 2020, 2019, 2018, 2017
  NSF Marine Geology and Geophysics (MGG) program, 2019, 2017, 2015, 2014
  ORAU Ralph E. Powe Junior Faculty Enhancement Awards Program, 2025

- **Journal Review**
  Editorial board member: Energy Geoscience (September 2021 – present), Journal of Natural Gas Geoscience (January 2016 – present), PLOS ONE (September 2018 – present)
  Reviewer: AAPG Bulletin, Applied Geochemistry, Basin Research, Chemical Geology, Energy Exploration & Exploitation, Geobiology, Geochemical Transactions, Geochimica et Cosmochimica Acta, Geology, Geothermal Energy: Science, Society, and Technology,

Journal of Asian Earth Sciences, Journal of Geochemical Exploration, Journal of Geophysical Research – Atmospheres, Journal of Himalayan Earth Sciences, Journal of Petroleum Science and Engineering, Journal of South American Earth Sciences, Marine and Petroleum Geology, Organic Geochemistry, Petroleum Science, PLOS ONE, Scientific Reports

- **Textbook Review**
  Geology: Earth in Perspective (R. Wicander & J. S. Monroe), 3rd edition, Cengage Learning PTR. 2024
  Physical Geology Today (D. Nance & B. Murphy), 1st edition, Oxford University Press. 2015

- **Conferences**
  - Science program committee member
    Lunar and Planetary Science Conference XLII. Houston, TX. March, 2011.
  - Session chair/convener
    "Magmatic and hydrothermal processes at mid-ocean ridges", American Geophysical Union (AGU) Fall Meeting 2025. New Orleans, LA. December, 2025.
    "Origin and fate of organic compounds in hydrothermal systems", Goldschmidt Conference 2015. Prague, Czech. August, 2015.
    "Hydrothermal systems and organosynthesis processes: Origin and evolution of life", Astrobiology Science Conference 2010. Houston, TX. April, 2010.
  - Abstract reviewer
    AAPG Annual Convention & Exhibition 2019. San Antonio, TX. May, 2019.
  - Student awards committee member
    Volcanology, geochemistry, and petrology (VGP) section, American Geophysical Union (AGU), 2013 – 2015.
  - Student presentation judge
    1. Outstanding Student Paper Award (OSPA). American Geophysical Union (AGU) Fall Meeting, 2014, 2013.
    2. Student poster competition. Robert E. Sheriff Lecture, Dept. of Earth and Atmospheric Sciences, University of Houston, 2014, 2013.
    3. Student poster competition. Astrobiology Science Conference 2012. Atlanta, GA. April, 2012.
    4. Dwornik Student Presentation Award. Lunar and Planetary Science Conference XXXX. Houston, TX. March, 2009.

MENTORING EXPERIENCE

- **Postdocs**
  1. Rui Li, Postdoctoral Scientist, May 2025 – present, Lab/Project Advisor
- **Graduate Students**
  - Ph.D. Students
    1. Poorna Srinivasan, September 2023 – present
    2. Amna Afzal, January 2023 – present
    3. Daniella Gutiérrez (Ph.D.'24)
    4. Xiang Ling (Ph.D.'23)
    5. Claire Ong (Ph.D.'23)
    6. Bingyi Zhao (Ph.D.'20)

7. Xueze Chen (Ph.D.'20)

- M.S. Students
  1. Farzina Haque, September 2023 – present
  2. Christine Cornelius (M.S.'25)
  3. Gözde Aytaç Okyay (M.S.'18)
  4. Christopher Xiao (M.S.'18)
  5. Meri McCulley (M.S.'18)
  6. Nikole Robertson (M.S.'16)
  7. Hatice Başbuğ Alhan, Sept. 2016 – May 2017 (transferred to Ph.D. in Dept. of Chemistry, UH)

- **Undergraduate Students**
  1. Isabela Garcia, September 2023 – December 2023, Lab/Project Advisor
  2. Bailey Hodakievic, November 2022 – May 2023, Lab/Project Advisor
  3. Gabriel López, September 2021 – May 2022, Lab/Project Advisor
  4. Jeremy Hilfiger, January 2021 – May 2022, Lab/Project Advisor
  5. Darling Martinez, September 2018 – May 2019, Lab/Project Advisor
  6. Haley Thomas, January 2018 – December 2018, Lab/Project Advisor
  7. Claire Ong, January 2017 – May 2018, Undergraduate Thesis Advisor
  8. Maisha Mujib, September 2014 – May 2015, Lab/Project Advisor

- **Visiting Graduate Students/Postdocs**
  1. Tuo Lin, Postdoctoral scholar (China Geological Survey, China), February 2020 – August 2020, Lab/Project Advisor
  2. Faizan Ahmad, Ph.D. student (University of Peshawar, Pakistan), July 2017 – December 2017, Co-Thesis Advisor
  3. Yongbin Quan, Ph.D. student (China University of Geosciences, China), September 2016 – August 2017, Lab/Project Advisor
  4. Zhiwei Liao, Ph.D. student (Nanjing University, China), May 2015 – August 2015, Lab/Project Advisor
  5. Chao Chang, Ph.D. student (Nanjing University, China), September 2014 – April 2016, Co-Thesis Advisor

- **Other Mentoring Experience**
  1. Faculty advisor of student chapter, UH AAPG Wildcatters, Fall 2014 – Spring 2020
  2. UH PAL (Personal Access Liaison) member, Fall 2014 – Fall 2016: e-mail contact for each new Freshman student at UH
  3. UH Profs with Pride (PWP) member, Fall 2014 – Spring 2016: a group of faculty whose aim is to increase student knowledge of, participation and pride in UH
  4. Co-advisor, Summer intern program, NASA Johnson Space Center, Houston, TX. 2012.
  5. Co-advisor, Summer intern program, Lunar and Planetary Institute, Houston, TX. 2009, 2010.

PUBLICATIONS (*: student under supervision**)**

- **Under review or in preparation**
  1. Filina I. Y., Loreto M. F., Shuck B. D., Abe N., Pezard P. A., Malinverno A., Estes E. R., Akizawa N., Bickert M., Cunningham E. H., Di Stefano A., **Fu Q.**, Gontharet S. B. L., Kearns L. E., Koorapati R. K., Lei C., Magri L., Menapace W., Morishita T., Pandey A., Pavlovics V. L., Poulaki E.M., Rodriguez-Pilco M. A., Sanfilippo A., Vannucchi P., Zhao

X., and Zitellini N. (2025) Physical properties of rocks recovered during IODP Exp. 402 in the Tyrrhenian Basin offshore Italy – trends, averages and observed heterogeneities. *Geochemistry, Geophysics, Geosystems* (under review).

2. Poulaki E.M., Bickert M., Vannucchi P., Shuck B. D., Akizawa N., Pandey A., Morishita T., Sanfilippo A., Cunningham E.H., Barnes J.D., Garber J.M., Nistor C., Bernard R., Tribuzio R., Loocke M., Abe N., Di Stefano A., Filina I. Y., **Fu Q.**, Gontharet S. B. L., Kearns L. E., Koorapati R. K., Lei C., Loreto M. F., Magri L., Menapace W., Pavlovics V. L., Pezard P. A., Rodriguez-Pilco M. A., Zhao X., Pérez-Gussinyé M., Garrido C.J., Ranero C.R., Estes E. R., Malinverno A., and Zitellini N. (2025) Granitic intrusions facilitate rapid mantle exhumation along an oceanic detachment fault. *Science Advances* (under review).
3. Li L., Casey J.F., Gao Y., and **Fu Q.** (2025) Li partitioning and isotope fractionation in basaltic glass, gabbroic rocks and synthetic seawater: New experimental constraints on Li behavior in oceanic crust. *Geochimica et Cosmochimica Acta* (under review).
4. Ong C.*, Afzal A.*, Gao Y., Goddard F., and **Fu Q.** (2025) PFAS in the Edwards aquifer in south central Texas: 1. Spatial and temporal distribution. *Science of The Total Environment* (to be submitted by August 2025).
5. Afzal A.*, Ong C.*, **Fu Q.**, Hussain A., Gao Y., and Fu M. (2025) PFAS in the Edwards aquifer in south central Texas: 2. New data and comparison with Neches River. *Science of The Total Environment* (to be submitted by August 2025).
6. Srinivasan P.*, **Fu Q.**, Sun T., Malloy T., and Radović J.R. (2025) Experimental evaluation of gas generation from kerogen and oil cracking in coals. *Organic Geochemistry* (to be submitted by August 2025).
7. Srinivasan P.*, **Fu Q.**, Sun T., and Radović J.R. (2025) Artificial maturation of coals to evaluate oil and gas generation potential: Experimental methods and systematic product assessment. *International Journal of Coal Geology* (in prep).
8. Srinivasan P.*, **Fu Q.**, Malloy T., and Radović J.R. (2025) Utilization of molecular markers to assess hydrocarbon generation and kinetics in Type III kerogen. *Organic Geochemistry* (in prep).
9. **Fu Q.**, Chen X., Ono S., and Sun T. (2025) Formation of abiotic methane in hydrothermal systems: Kinetic constraints. *Geochimica et Cosmochimica Acta* (in prep).
10. Gutiérrez D.*, Pepper A., Curiale J., López L., **Fu Q.**, Wright S., Mann P., Lo Mónaco S. (2025) The hydrocarbon source rock potential across northern South America: Reconstructions of depositional and generative geochemistry. *Marine and Petroleum Geology* (in prep).

- **Published or Accepted**

1. Sanfilippo A., Pandey A., Akizawa N., Poulaki E., Cunningham E., Bickert M., Lei C., Vannucchi P., Estes E. R., Malinverno A., Abe N., Di Stefano A., Filina I. Y., **Fu Q.**, Gontharet S. B. L., Kearns L. E., Koorapati R. K., Loreto M. F., Magri L., Menapace W., Pavlovics V. L., Pezard P. A., Rodriguez-Pilco M. A., Shuck B. D., Zhao X., Garrido C., Brunelli D., Morishita T., Zitellini N. (2025) Heterogeneous Earth's mantle drilled at an embryonic ocean. *Nature Communications* 16, 2016. https://doi.org/10.1038/s41467-025-57121-0.
2. Zitellini N., Malinverno A., Estes E.R., and the Expedition 402 Scientists (2025) Proceedings of the International Ocean Discovery Program: Tyrrhenian Continent–Ocean

Transition. International Ocean Discovery Program. Volume 402. https://doi.org/10.14379/iodp.proc.402.2025.
3. Malinverno A., Zitellini N., Estes E.R., and the Expedition 402 Scientists (2025) International Ocean Discovery Program Expedition 402 Preliminary Report. Tyrrhenian Continent–Ocean Transition: Tyrrhenian Magmatism and Mantle Exhumation (TIME). International Ocean Discovery Program. https://doi.org/10.14379/iodp.pr.402.2025.
4. Vielma A., Curiale J.A., Carvajal-Ortiz H., Radović J.R., **Fu Q.**, Malloy T.B., Bissada K.K. (2024) Paleoredox and lithofacies assessments in Deepwater intervals of the Monterey Formation, Santa Maria Basin, California: Insights from organic sulfur geochemistry. *International Journal of Coal Geology* 294, 104606. https://doi.org/10.1016/j.coal.2024.104606.
5. Liu Q., Xu H., Jin Z., Zhu D., Meng Q., Wu X., **Fu Q.**, and George S. C. (2023) Hydrothermal conversion of hydrocarbons to heterocyclic compounds by geological supercritical CO_2 volatiles. *Science Bulletin* 68, 1726–1729. https://doi.org/10.1016/j.scib.2023.07.013.
6. Meng Q., Li J., Liu W., **Fu Q.**, Wang X., and Wang J. (2022) Simulation study on the effect of gypsum-salt content on hydrocarbon generation in mature stage shale. *Special Oil and Gas Reservoirs* 29(5), 113-118. http://www.sogr.com.cn/EN/10.3969/j.issn.1006-6535.2022.05.016.
7. Ong C.*, Fowler A., Seyfried W. E., Jr., Sun T., and **Fu Q.** (2021) Organic compounds in vent fluids from Yellowstone Lake, Wyoming. *Organic Geochemistry* 159, 104275.
8. Xu H., Liu Q., Zhu D., Meng Q., Jin Z., **Fu Q.**, and George S. C. (2021) Hydrothermal catalytic conversion and metastable equilibrium of organic compounds in the Jinding Zn/Pb ore deposit. *Geochimica et Cosmochimica Acta* 307, 133-150.
9. Liu Q., Li P., Jin Z., Liang X., Zhu D., Wu X., Meng Q., Liu J., **Fu Q.**, and Zhao J. (2021) Preservation of organic matter in shale linked to bacterial sulfate reduction (BSR) and volcanic activity under marine and lacustrine depositional environments. *Marine and Petroleum Geology* 127, 104950.
10. Li J., Huang X.-L., **Fu Q.**, and Li W.-X. (2021) Tungsten mineralization during the evolution of a magmatic-hydrothermal system: Mineralogical evidence from the Xihuashan rare-metal granite in South China. *American Mineralogist* 106, 443-460.
11. Ahmad. F.*, Ahmad S., Khan S., **Fu Q.**, Jan I., Khan R.A., Gul S., and Alizai F.A. (2019) Hydrocarbon source rock potential of the Early Permian rocks in the Potwar Basin, Salt Range, Pakistan. *Journal of Himalayan Earth Sciences* 52, 129-144.
12. Chen X.*, Liu Q., Meng Q., Zhu D., Liu W., and **Fu Q.** (2019) Assessing effects of sulfate minerals on petroleum generation in sedimentary basins using hydrous pyrolysis: I. Light hydrocarbons. *Marine and Petroleum Geology* 110*,* 737-746.
13. Chang C.*, **Fu Q.**, and Wang X. (2019) Linear correlation of Ba and Eu contents by hydrothermal activities: A case study in Hetang Formation, South China. *Geofluids,* Volume 2019, Article ID 9797326, DOI: 10.1155/2019/9797326.
14. Liu Q., Wu X., Wang X., Jin Z., Zhu D., Meng Q., Huang S., Liu J., and **Fu Q.** (2019) Carbon and hydrogen isotopes of methane, ethane, and propane: A review of genetic identification of natural gas. *Earth-Science Reviews* 190, 247-272.
15. Liu Q., Zhu D., Meng Q., Liu J., Wu X., Zhou B., **Fu Q.**, and Jin Z. (2019) The scientific connotation of oil and gas formations under deep fluids and organic-inorganic interaction. *Science China Earth Sciences* 62, 507-528.

16. Chang C.*, Hu W., **Fu Q.**, Cao J., Wang X., Wan Ye, and Yao S. (2018) Characteristics and formation processes of (Ba, K, NH_4)-feldspar and cymrite from a lower Cambrian black shale sequence in Anhui Province, South China. *Mineralogical Magazine* 82, 1-21.
17. Chang C.*, Hu W., **Fu Q.**, Cao J., Wang X., and Yao S. (2016) Characterization of trace elements and carbon isotopes across the Ediacaran-Cambrian boundary in Anhui Province, South China: Implications for stratigraphy and paleoenvironment reconstruction. *Journal of Asian Earth Sciences* 125, 58-70.
18. Meng Q., Sun Y., Tong J., **Fu Q.**, Zhu J., Zhu D., and Jin Z. (2015) Distribution and geochemical characteristics of hydrogen in natural gas from the Jiyang Depression, eastern China. *Acta Geologica Sinica (English Edition)* 89, 1616-1624.
19. **Fu Q.**, Socki R. A., and Niles P. B. (2015) Evaluating reaction pathways of hydrothermal abiotic organic synthesis at elevated temperatures and pressures using carbon isotopes. *Geochimica et Cosmochimica Acta* 154, 1-17.
20. Qian Q., Parajuli B., **Fu Q.**, Yan K., Gossage J. L., Ho T. C. (2013) Assessment of acid deposition effects on water quality of the upper Rio Grande river section in Texas. *Journal of Water Resource and Protection* 5, 792-800.
21. Lu P., **Fu Q.**, Seyfried W. E. Jr., Hedges S. W., Soong Y., Jones K., and Zhu C. (2013) Coupled alkali feldspar dissolution and secondary mineral precipitation in batch systems: 2. New experiments with supercritical CO_2 and implications for carbon sequestration. *Applied Geochemistry* 30, 75-90.
22. Lu P., **Fu Q.**, Seyfried W. E. Jr., Hereford A., and Zhu C. (2011) Navajo Sandstone – brine – CO_2 interaction: implications for geological carbon sequestration. *Environmental Earth Sciences* 62, 101-118.
23. Seyfried W. E. Jr., Pester N., and **Fu Q.** (2010) Phase equilibria controls on the chemistry of vent fluids from hydrothermal systems on slow spreading ridges: Reactivity of plagioclase and olivine solid solutions and the pH-silica connection. In *Diversity of Hydrothermal Systems on Slow Spreading Ocean Ridges* (eds. P. Rona, C. Davey, J. Dyment, and B. Murton). Geophysical Monograph Series 188, pp.297-320. American Geophysical Union, Washington D.C.
24. **Fu Q.**, Lu P., Konishi H., Dilmore R., Xu H., Seyfried W. E. Jr., and Zhu C. (2009) Coupled alkali-feldspar dissolution and secondary mineral precipitation in batch systems: 1. New experiments at 200°C and 300 bars. *Chemical Geology* 258, 125-135.
25. **Fu Q.**, Foustoukos D. I., and Seyfried W. E. Jr. (2008) Mineral catalyzed organic synthesis in hydrothermal systems: An experimental study using time-of-flight secondary ion mass spectrometry. *Geophysical Research Letters* 35, L07612, doi:10.1029/2008GL033389.
26. **Fu Q.**, Sherwood Lollar B., Horita J., Lacrampe-Couloume G. and Seyfried W. E. Jr. (2007) Abiotic formation of hydrocarbons under hydrothermal conditions: Constraints from chemical and isotope data. *Geochimica et Cosmochimica Acta* 71, 1982-1998.
27. Seyfried W. E. Jr., Foustoukos D. I., and **Fu Q.** (2007) Redox evolution and mass transfer during serpentinization: An experimental and theoretical study at 200°C, 500 bar with implications for ultramafic-hosted hydrothermal systems at Mid-Ocean Ridges. *Geochimica et Cosmochimica Acta* 71, 3872-3886.
28. **Fu Q.**, Seyfried W. E. Jr., and Horita J. (2004) Hydrothermal carbon dioxide reduction with magnetite at 400°C and 500 bar. In *Proceedings of the 11th International Symposium on Water-Rock Interaction* (ed. R. B. Wanty and R. R. Seal II), pp. 1285-1288. London, Taylor & Francis Group.

29. Hu W., Zhou H., Gu L., Zhang W., Lu X., **Fu Q.**, Pan J., and Zhang H. (2000) New evidence of microbe origin for ferromanganese nodules from the East Pacific deep sea floor. *Science in China, Series D: Earth Sciences* 43 (2), 187-192.
30. Hu W., Jin Z., Qiu N., **Fu Q.**, Lu X., and Sun R. (1999) Boiling process of low temperature formation water in petroleum system, Qaidam Basin. *Chinese Science Bulletin* 44 (Suppl. 2), 77-78.
31. Lu X., Hu W., **Fu Q.**, Miao D., Zhou G., and Hong Z. (1999) Study of combination pattern of soluble organic matters and clay minerals in the immature source rocks in Dongying depression, China. *Chinese Journal of Geology* (*Scientia Geologica Sinica)* 34 (1), 69-77.
32. Lu X., Hu W., **Fu Q.**, Zhang W., Zhou G., Hong Z., and Chen Z. (1998) Study of salinity evolution of geofluids during syngenesis and diagenesis using composition of carbonate minerals: An example of the immature source rocks of Shasi member in Dongying depression. *Acta Sedimentologica Sinica* 16 (1), 120-126.
33. **Fu Q.**, Hu W., and Lu X. (1997) Effect of CO_2 on the solubility of CH_4 using the equation of state for the CH_4-bearing fluids. *Journal of Nanjing University (Natural Sciences)* 33**,** Geofluid Issue, 123-128.
34. Hu W., **Fu Q.**, Lu X., and Duan Z. (1996) Study of pressure and phase transition of gas (oil)-bearing fluids system. *Geological Journal of China Universities* 2(4), 458-465.

CONFERENCE PRESENTATIONS (*: student under supervision)

1. Afzal A.*, Malloy T., **Fu Q.**, and Radović J.R. (2025) Microplastic detection in complex environmental matrices: Comparative study of thermal degradation methods. *AGU Fall Meeting 2025.*
2. **Fu Q.**, Voarintsoa N.R.G., Sun T., and Raza A. (2025) Carbonate formation in mantle peridotites in the Tyrrhenian Sea. *AGU Fall Meeting 2025.*
3. Srinivasan P.*, **Fu Q.**, Sun T., and Radović J.R. (2025) Evaluation of gas compositions and compound-specific isotopes from hydrous pyrolysis of coal. International Meeting for Applied Geoscience and Energy (IMAGE) 2025.
4. Radović J.R., Srinivasan P.*, **Fu Q.**, Zheng Y., and Han Y. (2025) Hydrogen generation and reactivity in organic-rich sedimentary rocks. International Meeting for Applied Geoscience and Energy (IMAGE) 2025.
5. Afzal A.*, Radović J.R., Malloy T., and **Fu Q.** (2025) Microplastic detection in complex environmental matrices: Comparative study of thermal degradation methods. *UH Energy Plastics Circularity Symposium 2025.*
6. Filina I.Y., Loreto M.F., Shuck B., Abe N., Pezard P.H., Zitellini N., Malinverno A., Estes E.R., Akizawa N., Bickert M., Cunningham E., Di Stefano A., **Fu Q.**, Gontharet S.B.L., Kearns L.E., Koorapati R.K., Lei C., Magri L., Menapace W., Morishita T., Pandey A., Poulaki E.M., Pavlovics V.L., Rodriguez-Pilco M.A., Sanfilippo A., Vannucchi P., and Zhao X. (2024) Summary of physical properties of rocks collected during the IODP Expedition 402 in the back-arc Tyrrhenian Basin. *AGU Fall Meeting 2024*, Abstract # T31E-3172.
7. Poulaki E.M., Bickert M., Vannucchi P., Morishita T., Sanfilippo A., Pandey A., Akizawa N., Cunningham E., Shuck B., Lei C., Tribuzio R., Barnes J., Bernard R.E., Abe N., Di Stefano A., Filina I.Y., **Fu Q.**, Gontharet S.B.L., Kearns L.E., Koorapati R.K., Loreto M.F., Magri L., Menapace W., Pavlovics V.L., Pezard P.H., Rodriguez-Pilco M.A., Zhao X., Estes E.R., Malinverno A., and Zitellini N. (2024) Felsic intrusions facilitate mantle

exhumation along detachment faults at a continent-ocean transition drilled in the Tyrrhenian Sea. *AGU Fall Meeting 2024*, Abstract # T24B-06.

8. Srinivasan P.*, **Fu Q.**, Radović J.R., and Malloy T.B. (2024) Holistic geochemical evaluation of resultant solids, oil, water, and gases from artificial maturation of coals. International Meeting for Applied Geoscience and Energy (IMAGE) 2024.
9. Vielma A., Curiale J.A., Carvajal-Ortiz H., Radović J.R., **Fu Q.**, Malloy T.B., and Bissada K.K. (2024) Challenging the paradigm: Paleoredox and lithofacies revelations from organic sulfur in deepwater Monterey Formation, Santa Maria Basin, California. *Geological Society of America Abstracts with Programs*. Vol. 56, No. 5. doi: 10.1130/abs/2024AM-404628.
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12. Ong C.*, Gao Y., Goddard F., **Fu Q.**, and Lopez G. (2022) Analysis of PFAS in the Edwards Aquifer. *AGU Fall Meeting 2022*, Abstract # H32M-1066.
13. **Fu Q.**, Chen X., Ono S., and Sun T. (2022) Isotopic characterization of abiotic methane in hydrothermal systems: An experimental study. *Goldschmidt conference 2022.*
14. Ong C.*, Gao Y., Goddard F., and **Fu Q.** (2022) Analysis of PFAS in the Edwards-Trinity aquifer system. *Fate of PFAS: From Groundwater to Tap Water (Conference #5010), National Ground Water Association.*
15. Ong C.*, Gao Y., Goddard F., and **Fu Q.** (2022) Analysis of PFAS in the Edwards-Trinity aquifer system. *Geological Society of America Abstracts with Programs*, Vol. 54, No. 1, https://doi.org/ 10.1130/abs/2022SC-373906.
16. **Fu Q.**, Chen X., and Ong C. (2021) Experimental evaluation of formation kinetics for abiotic methane in hydrothermal systems. *Goldschmidt conference 2021.*
17. **Fu Q.**, Chen X., and Ong C. (2020) Kinetic evaluation of abiotic hydrocarbon formation in hydrothermal systems: An experimental study. *Goldschmidt conference 2020.*
18. Xu H., Liu Q., Zhu D., Meng Q., Jin Z., and **Fu Q.** (2020) Organic – inorganic interaction of hydrocarbons with the Lanping Zn/Pb ore deposit, near the Indo-Eurasian collisional margin, Southeastern Tibetan Plateau. *Goldschmidt conference 2020.*
19. Ong C.*, Fowler A., Seyfried W. E., Jr., and **Fu Q.** (2019) Characterization of organic compounds in vent fluids from Yellowstone Lake. *AGU Fall Meeting 2019*, Abstract # V33D-0208.
20. Liu Q., Zhu D., Meng Q., Liu J., Wu X., Zhou B., **Fu Q.**, and Jin Z. (2018) Organic-inorganic interaction and their effects on deep petroleum systems. *AAPG Geoscience Technology Workshop, Deep and Ultra Deep Petroleum Systems*, Beijing, China, October 26-28, 2018.
21. **Fu Q.**, Chen X., and Seyfried W. E., Jr. (2018) Experimental study of generation kinetics for abiotic methane in hydrothermal systems. *Goldschmidt conference 2018.*
22. Chen X.*, Liu Q., Meng Q., Zhu D., Liu W., and **Fu Q.** (2018) Light alkane generation in hydrous pyrolysis with gypsum. *Goldschmidt conference 2018.*

23. Liu Q., Zhu D., Meng Q., Liu J., Wu X., **Fu Q.**, Zhou B., and Jin Z. (2018) Oil and gas formation under organic-inorganic interaction in crust-mantle system. *Goldschmidt conference 2018.*
24. **Fu Q.** and Chen X. (2017) Experimental assessment of carbon isotopes of light hydrocarbons under different redox conditions. *AGU Fall Meeting 2017*, Abstract # B32A-01.
25. Cino C., Seyfried W. E., Jr., Tan C., and **Fu Q.** (2017) Geochemistry of high temperature vent fluids in Yellowstone Lake: Dissolved carbon and sulfur concentrations and isotopic data. *AGU Fall Meeting 2017*, Abstract # V11A-0324.
26. **Fu Q.**, Chen X., Chang C., Hu W., Liu Q., and Meng Q. (2017) The effect of redox conditions on carbon isotopes of hydrocarbons during hydrous pyrolysis. *AAPG annual convention 2017, Houston, Texas.*
27. **Fu Q.**, Chang C., Hu W., Liu Q., and Meng Q. (2016) The effect of redox conditions on carbon isotopes of alkanes from Type-I oil shale: A hydrous pyrolysis experiment. *Goldschmidt conference 2016,* Abstract #3343.
28. **Fu Q.**, Locke D. R., and Niles P. B. (2015) Experimental study of carboxylic acid oxidation under Martian conditions: Chemical and isotope characterization. *Goldschmidt conference 2015*, Abstract #3881.
29. Mujib M. Z. and **Fu Q.** (2015) Carbon isotopes of evolved CO_2 during acetic acid oxidation by different oxidizing agents. *46th Lunar Planet. Sci. Conf.*, Abstract #2954.
30. **Fu Q.**, Haynie K. L., Gong C., Darnell M., and Khan S. (2015) Tar balls on Elmer's Island, Louisiana: Identifying technology and geochemical characterization. *2015 Gulf of Mexico Oil Spill and Ecosystem Science Conference, Houston, Texas.*
31. **Fu Q.**, Darnell M., and Bissada K. K. (2014) Maturation of Green River shale kerogen with hydrous pyrolysis: Characterization of geochemical biomarkers and carbon isotopes. *AGU Fall Meeting 2014*, Abstract #V51D-4810.
32. Socki R., Pernia D., Bissada K. K., Curiale J. A., Evans M., **Fu Q.**, and Niles P. (2014) Hydrogen (H) isotope composition of Type II kerogen extracted by Pyrolysis-GC-MS-IRMS: Terrestrial shale deposits as Martian analogs. *AGU Fall Meeting 2014, Abstract #V51D-4811.*
33. **Fu Q.**, Darnell M., Szymczyk E., and Bissada K. K. (2014) Chemical speciation and carbon isotope systematics during kerogen maturation: An experimental study. *AAPG annual convention 2014, Houston, Texas.*
34. Socki R. A., Niles P. B., Sun T., **Fu Q.,** Romanek C., and Gibson E. K. (2014) Martian cryogenic carbonate formation: Stable isotope variations observed in laboratory studies. *Lunar Planet. Sci.* XXXXV, Abstract #2757.
35. **Fu Q.**, Socki R. A., Niles P. B., Romanek C., Datta S., Darnell M., and Bissada K. K. (2013) The origin of carbon-bearing volatiles in Surprise Valley Hot Springs in the Great Basin: Carbon isotope and water chemistry characterizations. *AGU Fall Meeting 2013*, Abstract #B13E-0561.
36. Socki R., Niles P. B., Sun T., **Fu Q.**, Romanek C. S., and Gibson E. K. (2013) Carbonate mineral formation on Mars: Clues from stable isotope variations seen in cryogenic laboratory studies of carbonate salts. *AGU Fall Meeting 2013*, Abstract #V21A-2702.
37. Socki R., Pernia D., Evans M., **Fu Q.**, Bissada K., Curiale J., and Niles P. (2013) Compound specific hydrogen isotope composition of Type II and III kerogen extracted by Pyrolysis-GC-MS-IRMS. *AAPG annual convention 2013.*

38. **Fu Q.**, Socki R., and Niles P. B. (2012) Evaluating reaction pathways of hydrothermal abiotic organic synthesis at elevated conditions using carbon isotopes. *The Organic Geochemistry Gordon Research Conference*.
39. **Fu Q.**, Niles P. B., and Socki R. (2012) Carbon isotopes of evolved CO_2 during oxidation of carboxylic acids by hydrogen peroxide. *Ab. Sci. Con 2012*, Abstract #2045.
40. Socki R. A., **Fu Q.,** Niles P. B., and Gibson E. K. (2012) C and H isotope measurements of alcohols and organic acids by online Pyroprobe-GC-IRMS. *Ab. Sci. Con 2012*, Abstract #4411.
41. **Fu Q.,** Socki R. A., Niles P. B., Romanek C., Datta S., and Darnell M. (2012) The origin of carbon-bearing volatiles in a continental hydrothermal system in the Great Basin: Water chemistry and isotope characterizations. *Lunar Planet. Sci.* XXXXIII, Abstract #2481.
42. Socki R. A., **Fu Q.,** Niles P. B., and Gibson E. K. (2012) Hydrogen isotope measurements of organic acids and alcohols by Pyrolysis-GC-MS-TC-IRMS: Application to analysis of experimentally derived hydrothermal mineral-catalyzed organic products. *Lunar Planet. Sci.* XXXXIII, Abstract #2483.
43. Socki R., **Fu Q.**, and Niles P. B. (2011) Hydrogen isotope measurements of organic acids and alcohols by Pyrolysis-GC-MS-TC-IRMS. *AGU Fall Meeting 2011*, Abstract #V31B-2524.
44. **Fu Q.**, Socki R., and Niles P. B. (2011) Carbon isotope systematics in mineral-catalyzed hydrothermal organic synthesis processes at high temperatures and pressures. *Lunar Planet. Sci.* XXXXII, Abstract #1057.
45. Socki R. A., **Fu Q.**, and Niles P. B. (2011) Carbon isotope measurements of experimentally-derived hydrothermal mineral-catalyzed organic products by Pyrolysis-Isotope ratio mass spectrometry. *Lunar Planet. Sci.* XXXXII, Abstract #2311.
46. **Fu Q.**, Socki R., and Niles P. B. (2010) Experimental study of abiotic organic synthesis at high temperature and pressure conditions: Carbon isotope and mineral surface characterizations. *AGU Fall Meeting 2010*, Abstract #V51B-2191.
47. Socki R., **Fu Q.**, and Niles P. B. (2010) Carbon isotope characterization of organic intermediaries in hydrothermal hydrocarbon synthesis by Pyrolysis-GC-MS-C-IRMS. *AGU Fall Meeting 2010*, Abstract #V51B-2189.
48. **Fu Q.**, Socki R., and Niles P. B. (2010) Carbon isotopes of alkanes in hydrothermal abiotic organic synthesis processes at high temperatures and pressures: An experimental study. *Ab. Sci. Con 2010*, Abstract #5572.
49. **Fu Q.** and Niles P. B. (2010) Kinetic isotope fractionation processes during experimental formation of Ca- and Mg-rich carbonates: Implications for ALH84001. *Lunar Planet. Sci.* XXXXI, Abstract # 2474.
50. Socki R., Niles P. B., **Fu Q.**, and Gibson E. K., Jr. (2010) Cryogenic carbonate formation on Mars: Clues from stable isotope variations seen in experimental studies. *Lunar Planet. Sci.* XXXXI, Abstract # 2526.
51. Zhu C., Lu P., **Fu Q.**, and Seyfried W. E. Jr., (2009) New experimental data and modeling results of coupled alkali feldspar dissolution and secondary mineral precipitation. *Geochimica et Cosmochimica Acta* **73 (13)**, A1530-A1530. Suppl. 1, JUNE 2009.
52. **Fu Q.** and Seyfried W. E. Jr. (2009) Experimental study of abiotic synthesis processes in a hydrothermal flow system: Implications for organic matter formation in extraterrestrial environments. *Lunar Planet. Sci.* XXXX, Abstract #2504.

53. Seyfried W. E. Jr., Ding K., Pester N.**,** and **Fu Q.** (2008) Geochemical controls on the composition of hydrothermal vent fluids at EPR 9°N: pH and redox constraints from *in situ* chemical sensor deployments and experimental and theoretical model results. *Eos Trans. AGU,* 89 (47), Fall Meet. Suppl., Abstract V44B-04.
54. Lu P., **Fu Q.**, Seyfried W. E. Jr., and Zhu C. (2008) Navajo sandstone-brine-CO_2 interactions: Implications for geological carbon sequestration. In *2008 joint meeting of GSA, SSSA, ASA, CSSA, GCAGS with GCSSEPM*, Houston, Texas.
55. Lu P., **Fu Q.**, Seyfried W. E. Jr., Strazisar B. R., Hedges S. W., Zheng Z., and Zhu C. (2007) Experimental determination of reaction rates and modeling of the long-term fate of CO_2 in deep geological formations. In *AAPG Eastern Section Meeting*, Lexington, Kentucky.
56. Lu P., **Fu Q.**, Seyfried W. E. Jr., Strazisar B. R., Hedges S. W., Zheng Z., and Zhu C. (2007) Experimental determination of reaction rates and modeling of the long-term fate of CO_2 in deep geological formations. In *AAPG Annual Meeting*, Long Beach, California.
57. Seyfried W. E. Jr., Ding K., **Fu Q.**, and Foustoukos D. I. (2006) Chemistry of seafloor hydrothermal vent fluids at mid-ocean ridges: Perspectives on organic synthesis from laboratory and field investigations. In *The 58th Southeastern regional meeting of the American Chemical Society*, Paper #36229. Augusta, Georgia.
58. **Fu Q.**, Sherwood Lollar B., Horita J., Lacrampe-Couloume G., and Seyfried W. E. Jr. (2005) Hydrogen and carbon isotope compositions of hydrocarbons in hydrothermal carbon reduction processes. *Geochimica et Cosmochimica Acta* 69 (10), A558-A558. Suppl. S, MAY 2005.
59. Sherwood Lollar B., Telling J., Lacrampe-Couloume G., **Fu Q.**, Seyfried W. E. Jr., Horita J., and McCollom T. M. (2005) Carbon and hydrogen isotope measurements in abiogenic hydrocarbon synthesis. *Geochimica et Cosmochimica Acta* 69 (10), A557-A557. Suppl. S, MAY 2005.
60. **Fu Q.**, Foustoukos D. I., and Seyfried W. E. Jr. (2005) Formation of intermediate carbon phases in hydrothermal abiotic organic synthesis. *Eos Trans. AGU,* 86 (52), Fall Meet. Suppl., Abstract B31B-0989.
61. Seyfried W. E. Jr., **Fu Q.,** and Foustoukos D. I. (2005) The Rainbow hydrothermal system: Experimental and theoretical controls on vent fluid chemistry and subseafloor alteration processes. *Eos Trans. AGU,* 86 (52), Fall Meet. Suppl., Abstract OS21C-07.
62. Seyfried W. E. Jr., Foustoukos D. I., and **Fu Q.** (2005) Temperature effects on phase relations in ultramafic-hosted hydrothermal systems. *Eos Trans. AGU,* 86 (52), Fall Meet. Suppl., Abstract V43C-04.
63. Foustoukos D. I., **Fu Q.**, and Seyfried W. E. Jr. (2004) Abiotic Synthesis of Methane Under Hydrothermal Conditions: the Effect of pH in Heterogeneous Catalysis. *Eos Trans. AGU,* 85 (47), Fall Meet. Suppl., Abstract B13A-0212.
64. Seyfried W. E. Jr., **Fu Q.**, Foustoukos D. I., and Allen D. E. (2004) Processes and Rates of Mass Transfer in Ultramafic-Hosted Hydrothermal Systems: An Experimental Study with Implications for Dissolved Inorganic and Organic Components in High-Temperature Vent Fluids. *Eos Trans. AGU,* 85 (47), Fall Meet. Suppl., Abstract V23C-02.
65. **Fu Q.** and Seyfried W. E. Jr. (2003) Hydrothermal Reduction of Carbon Dioxide at 250°C and 500bar. *Eos Trans. AGU,* 84 (46), Fall Meet. Suppl., Abstract OS31C-0216.

66. **Fu Q.**, Horita J., and Seyfried W. E. Jr. (2002) Isotopic fractionation in magnetite-catalyzed hydrothermal carbon dioxide reduction processes. *Eos Trans. AGU,* 83 (47), Fall Meet. Suppl., Abstract P71C-0473.
67. **Fu Q.** and Seyfried W. E. Jr. (2001) Hydrothermal reduction of carbon dioxide using magnetite. In *Eleventh Annual V. M. Goldschmidt Conference*, Abstract #3581. LPI Contribution No. 1088, Lunar and Planetary Institute, Houston.
68. Foustoukos D.I., Allen D.E., **Fu Q.,** and Seyfried W.E. Jr. (2001) Experimental study of $CO_{2(aq)}/CO_{(aq)}$ redox equilibria at elevated temperatures and pressures: The effect of pH on reaction relations. In *Eleventh Annual V. M. Goldschmidt Conference*, Abstract #3855. LPI Contribution No. 1088, Lunar and Planetary Institute, Houston.

INVITED LECTURES

1. Experimental assessment of reaction pathways in organic reactions: Implications for generation and transformation of light hydrocarbons. Shandong University of Science and Technology, Qingdao, China. June 28, 2019.
2. Experimental investigations of hydrocarbon formation and transformation in sedimentary basins: Implications for petroleum exploration. China University of Geosciences, Beijing, & China Geological Survey, Beijing, China. June 25, 2019.
3. Experimental assessment of reaction pathways in organic reactions: Implications for generation and transformation of light hydrocarbons. Lamont-Doherty Earth Observatory, Columbia University, Palisades, New York. Mar 27, 2019.
4. Reaction pathways of organic reactions: Implications of using isotope geochemistry for petroleum exploration. Petroleum Exploration and Production Research Institute, SINOPEC, Beijing, China. June 30, 2016.
5. Assessment of reaction pathways in organic reactions: Implications for generation and transformation of organic compounds. Baylor University, Waco, Texas. November 6, 2015.
6. Experimental study of generation and transformation of organic compounds in hydrothermal systems. Shandong University of Science and Technology, Qingdao, China. July 1, 2014.
7. Understanding hydrocarbon formation and interaction with laboratory experiments. Nanjing University, Nanjing, China. June 18, 2014.
8. Experimental investigations of hydrocarbon formation and transformation in sedimentary basins. Petroleum Exploration and Production Research Institute, SINOPEC, Beijing, China. June 11, 2014.
9. Experimental investigations on abiotic formation of hydrocarbons under hydrothermal conditions. Lunar and Planetary Institute, Houston, TX. September 5, 2008.

SERVICE to DEPARTMENT, COLLEGE, AND UNIVERSITY

- **Department**
  1. Material and Planning Committee (Chair, September 2017 – present): Collect and evaluate funding requests for materials that are necessary for teaching and research facilities
  2. Annual Faculty Performance Review Committee (Chair, 2023): Review the performance (research, teaching, and service) of each tenured, tenure-track, and promotion eligible non-tenure track faculty member
  3. Search Committee: Recruit, evaluate, and recommend the most qualified candidates for each open position at the department

One tenure-track position in Planetary Science (2024–2025)
One tenure-track position in Earth Surface Processes (2023–2024)
Two tenure-track positions in Planetary Geology/Cosmochemistry and Igneous Petrology/Geochemical Dynamics (2022–2023), Chair
One non-tenure track research position in Petroleum Geochemistry (2022)

4. Space and Lab Safety Committee (September 2019 – June 2023): Report/evaluate any safety issues in lab and office spaces
5. Seminar Committee (September 2013 – August 2020): Provide suggestions on seminar speaker candidates and schedule arrangement
6. Ph.D. Qualifying Exam Committee (January 2018 – present): Evaluate each doctoral student's qualification in the field of Petrology/Geochemistry
7. Faculty liaison of the department Student Research Conference (2022)

- **College**
  1. Building Committee (September 2016 – present): Report any issues (safety, infrastructure, etc.) of the 3rd floor in the Science and Research Building 1 (SR1)

COMMUNITY SERVICE

- **Outreach Activities**
  1. Participating outreach activities (including live ship-to-shore broadcasts to a number of countries) during IODP Expedition 402, February 9 – April 8, 2024
  2. Host two STEM teachers from Grantham Academy, Aldine Independent School District, for science experience. July 17–21, 2023.
  3. Host lab tour for students from Dulles High School (Sugar Land, TX), Fort Bend Independent School District. NSM "Day of Discovery", November 15, 2019.
  4. Keynote speaker. Life on Mars? NASA High School Aerospace Scholars (HAS) program, NASA Johnson Space Center and UH STEM Center, University of Houston, Houston, TX. June 9, 2019.
  5. Host lab tour for students from Carnegie Vanguard High School, Houston Independent School District, and give a short lecture on hydrothermal vents. March 8, 2019.
  6. Host lab tour for students from Heights High School, Houston Independent School District. NSM "Day of Discovery", November 30, 2018.
  7. Host lab tour for students in the AP Environmental Science class at Jack Yates High School. March 28, 2018.
  8. Present a lecture on "Ocean Floor and Hydrothermal Vents" at Jack Yates High School, Houston Independent School District. February 20, 2018.

WORKSHOPS

TOUGH Training Course, Lawrence Berkeley National Laboratory (2006)
The Geochemist's Workbench (GWB) Training Course, RockWare Inc. (2002)
MODFLOW Training Course, Missimer International Inc. (1998)

SCHOLARSHIPS

Dennis Graduate Fellowship, University of Minnesota (2003-2004)
Maximillion Lando Scholarship, University of Minnesota (2004)
Gibson Scholarship, University of Minnesota (2002, 2003)
Guang Hua Graduate Fellowship, Nanjing University (1995)
Ying Song Scholarship, Nanjing University (1993)

Nanjing University Scholarship, Nanjing University (1992-1994)

PROFESSIONAL AFFILIATIONS

American Association of Petroleum Geologists (AAPG)
American Geophysical Union (AGU)
Geochemical Society (GS)