

Curriculum Vitae

Mingsong Li

Institute of Prehistorical Life and Environmental Science
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Research Interests: Paleoclimatology; Astronomical Forcing; Chronostratigraphy;
Sedimentology; Coal basin evolution; Sea-level Change; Groundwater; Earth System
Modeling; Data Assimilation; Time-Series Analysis; Software Development

1. Education

2016	Ph.D., China University of Geosciences (Wuhan), Geology
2014–2016	Johns Hopkins University (Visiting Ph.D. Student, CSC Fellow)
2012	M.S., Jilin University, China, Paleontology and Stratigraphy
2009	B.S., Jilin University, China, Geology

2. Professional Experience

Assistant Professor, Peking University (2020 –)
Assistant Research Professor, Pennsylvania State University (2019 – 2020)
Postdoctoral Researcher, Pennsylvania State University (2017 – 2018)
Postdoctoral Researcher, George Mason University (2016 – 2017)
Research Assistant, School of Earth Sciences, China University of Geosciences (2012 – 2016)
Research Assistant, College of Earth Sciences, Jilin University (2009 – 2012)

3. SELECTED AWARDS AND HONORS

2020 Most Cited Article, *Computers & Geosciences*, Elsevier
2019 Top Peer Reviewer in Geosciences, Publons, Web of Science Group
2016 Li Siguang Excellent Student Award Nomination, The Foundation of Li Siguang
Geological Science Award
2016 Best Doctoral Dissertation, China University of Geosciences (Wuhan)
2016 Top 10 Talented Graduate Students Award, China University of Geosciences (Wuhan)
2016 CUG Student Award, China University of Geosciences (Wuhan)
2012 Outstanding Student Presentation Award, China University of Geosciences (Wuhan)
2012 First Place Graduate Student Oral Presentation Award, China University of Geosciences
(Wuhan)
2012 Excellent Graduate Student Award, Jilin University
2011 Outstanding Student Presentation Award, Paleontological Society of China
2010 First Place Graduate Student Oral Presentation Award, Symposium on hydrocarbon
resources investigation in Songliao Basin and adjacent area
2009 Excellent Student Award, Jilin University
2008 CNPC Scholarship, China National Petroleum Corporation (CNPC)
2007-2008 National Encouragement scholarship, Ministry of Education, China
2007 Outstanding Student Leader, Jilin University

4. Publications

Google Scholar: <https://scholar.google.com/citations?user=NYUXDW0AAAAJ>

Jan. 16, 2020: h-index: 11, citations: 489

= Student Advisee

26. Omid Falahatkah, Ali Kadkhodaie, Ali A. Ciabeghods, **Mingsong Li**, 2021. Cyclostratigraphy of the Lower Triassic Kangan Formation in the Salman gas field, eastern Persian Gulf, Iran. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 561, 110045. <https://doi.org/10.1016/j.palaeo.2020.110045>
25. Haocheng Yu, Kunfeng Qiu, **Mingsong Li**, M. Santosh, Z.G. Zhao, Y.Q. Huang, 2020. Record of the late Paleozoic ice age from Tarim, China. *Geochemistry, Geophysics, Geosystems*, e2020GC009237. <https://doi.org/10.1029/2020GC009237>
24. Zheng Gong, **Mingsong Li**. 2020. *Astrochronology of the Ediacaran Shuram Carbon Isotope Excursion, Oman. Earth and Planetary Science Letters*, 547, 116462. <https://doi.org/10.1016/j.epsl.2020.116462>
23. J. Fred Read, **Mingsong Li**, Linda A. Hinnov, Campbell S. Nelson, Steven Hood. 2020. Testing for astronomical forcing of cycles and gamma ray signals in outer shelf/upper slope, mixed siliciclastic-carbonates: Upper Oligocene, New Zealand. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 555, <https://doi.org/10.1016/j.palaeo.2020.109821>
22. Yang Zhang, James G. Ogg, Matthias Franz, Gerhard H. Bachmann, Michael Szurlies, Heinz-Gerd Röhling, **Mingsong Li**, Christian Rolf, Karsten Obst. 2020. Carnian (Late Triassic) magnetostratigraphy from the Germanic Basin allowing global correlation of the Mid-Carnian Episode, *Earth and Planetary Science Letters*, 541, 116275, <https://doi.org/10.1016/j.epsl.2020.116275>
21. Chao Ma, **Mingsong Li**. 2020. Astronomical time scale of the Turonian constrained by multiple paleoclimate proxies. *Geoscience Frontiers*. 11, 1345-1352, <https://doi.org/10.1016/j.gsf.2020.01.013>
- # 20. Meng Wang, Honghan Chen, Chunju Huang, David B. Kemp, Tianwu Xu, Hongan Zhang, **Mingsong Li**. 2020. Astronomical forcing and sedimentary noise modeling of lake-level changes in the Paleogene Dongpu Depression of North China. *Earth and Planetary Science Letters*, 535: 116116, <https://doi.org/10.1016/j.epsl.2020.116116>
19. Tan Zhang, Changmin Zhang, Tailiang Fan, Lei Zhang, Rui Zhu, Jinyu Tao, **Mingsong Li**. 2020. Cyclostratigraphy of Lower Triassic terrestrial successions in the Junggar Basin, northwestern China. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 109493. <https://doi.org/10.1016/j.palaeo.2019.109493>
18. **Mingsong Li**, Hubert L. Barnes. 2019. Astronomically forced sphalerite growth in the upper Mississippi Valley District. *Geochemical Perspectives Letters*, 12, 18-22, <https://doi.org/10.7185/geochemlet.1929> [Cover Story]
17. Peng Gao, Junsheng Nie, **Mingsong Li**, Pu Li. 2019. Confirmation of a late Miocene subchron C4n.2n-1r from the eastern Qaidam Basin in the NE Tibetan Plateau. *Journal of Geophysical Research: Solid Earth*, <https://doi.org/10.1029/2019JB017936>
16. Matthias Sinnesael, David De Vleeschouwer, Christian Zeeden, Sietske J. Batenburg, Da Silva Anne-Christine, Niels J. de Winter, Jaume Dinarès-Turell, Anna Joy Drury, Gabriele Gambacorta, Frits Hilgen, Linda Hinnov, Alexander J.L. Hudson, David B. Kemp, Margriet Lantink, Jiri Laurin, **Mingsong Li**, Diederik Liebrand, Chao Ma, Stephen Meyers, Johannes Monkenbusch, Sandro Montanari, Theresa Nohl, Heiko Pälike, Damien Pas, Micha Ruhl, Nicolas Thibault, Maximilian Vahlenkamp, Luis Valero, Sébastien Wouters, Huaichun Wu, Philippe Claeys. 2019. The Cyclostratigraphy Intercomparison Project (CIP): consistency, merits and pitfalls. *Earth-Science Reviews*, <https://doi.org/10.1016/j.earscirev.2019.102965>
15. Qingda Su, Junsheng Nie, Zeng Luo, **Mingsong Li**, Richard Heermance, Carmala Garziona. 2019. Detection of strong precession cycles from the late Pliocene sedimentary records of

- northeastern Tibetan Plateau. *Geochemistry, Geophysics, Geosystems*, <https://doi.org/10.1029/2019GC008447>
14. **Mingsong Li**, Chunju Huang, James Ogg, Yang Zhang, Linda Hinnov, Huaichun Wu, Zhong-Qiang Chen, Zhuoyan Zou. **2019**. Paleoclimate proxies for cyclostratigraphy: Comparative analysis using a Lower Triassic marine section in South China. *Earth-Science Reviews*, 189, 125-146, <https://doi.org/10.1016/j.earscirev.2019.01.011>
 13. **Mingsong Li**, Linda Hinnov, Lee Kump. **2019**. *Acycle*: Time-series analysis software for paleoclimate research and education. *Computers & Geosciences*, 127, 12-22, <https://doi.org/10.1016/j.cageo.2019.02.011>
 12. **Mingsong Li**, Linda Hinnov, Chunju Huang, James Ogg. **2018**. Sedimentary noise and sea levels linked to land-ocean water exchange and obliquity forcing. *Nature Communications*, 9, 1004, <https://doi.org/10.1038/s41467-018-03454-y>
 11. **Mingsong Li**, Lee Kump, Linda Hinnov, Michael Mann. **2018**. Tracking variable sedimentation rates and astronomical forcing in Phanerozoic paleoclimate proxy series with evolutionary correlation coefficients and hypothesis testing. *Earth and Planetary Science Letters*, 501, 165-179, <https://doi.org/10.1016/j.epsl.2018.08.041>
 10. **Mingsong Li**, Chunju Huang, Weizhe Chen, Linda Hinnov, James Ogg, Wei Tian. **2018**. Astrochronology of the Anisian Stage (Middle Triassic) of Guandao section, South China. *Earth and Planetary Science Letters*. 482, 591-606, <https://doi.org/10.1016/j.epsl.2017.11.042>
 9. **Mingsong Li**, Yang, Zhang, Chunju Huang, James Ogg, Linda Hinnov, Yongdong Wang, Zhuoyan Zou, Liqin Li. **2017**. Astronomical tuning and magnetostratigraphy of the Xujiahe Formation in South China and Newark Supergroup in North America: implications for the Late Triassic time scale. *Earth and Planetary Science Letters*. 475, 207-223, <https://doi.org/10.1016/j.epsl.2017.07.015>
 8. **Mingsong Li**, Chunju Huang, Linda Hinnov, James Ogg, Zhong-Qiang Chen, Yang Zhang. **2016**. Obliquity-forced climate during the Early Triassic hothouse in China. *Geology*, 44(8), 623-726, <https://doi.org/10.1130/G37970> [Cover Story]
 7. **Mingsong Li**, James Ogg, Yang Zhang, Chunju Huang, Linda Hinnov, Zhong-Qiang Chen, Zhuoyan Zou. **2016**. Astronomical-cycle scaling of the End-Permian Extinction and the Early Triassic Epoch of South China and Germany. *Earth and Planetary Science Letters*, 441, 10-25, <https://doi.org/10.1016/j.epsl.2016.02.017>
 6. Zhuoyan Zou, Chunju Huang, **Mingsong Li**, Yang Zhang. **2016**. Climate response to astronomical forcing during the Oligocene-Miocene transition in the equatorial Atlantic (ODP Site 926), *Science China Earth Sciences*, 59(8), 1665-1673, <https://doi.org/10.1007/s11430-016-5311-y>
 5. Yang Zhang, **Mingsong Li**, James Ogg, Paul Montgomery, Chunju Huang, Zhong-Qiang Chen, Zhiqiang Shi, Paul Enos, Daniel J. Lehrmann. **2015**. Cycle-calibrated magnetostratigraphy of middle Carnian from South China: Implications for Late Triassic time scale and termination of the Yangtze Platform. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 436, 135-166, <https://doi.org/10.1016/j.palaeo.2015.05.033>
 4. Yuewu Sun, **Mingsong Li**, Wenchun Ge, Yanlong Zhang, Dejun Zhang. **2013**. Eastward termination of the Solonker–Xar Moron River Suture determined by detrital zircon U–Pb isotopic dating and Permian floristics. *Journal of Asian Earth Sciences*, 75, 243-250, <https://doi.org/10.1016/j.jseaes.2013.07.018>
 3. Yuewu Sun, **Mingsong Li**, Guowei Zhao. **2012**. A new terrestrial lithostratigraphic unit of the Cisuralian (Early Permian) in the Yanbian area, Jilin Province. *Journal of Stratigraphy*, 36, 89-96

2. **Mingsong Li**, Yuewu Sun, Guowei Zhao. 2011. Discovery of Early Permian Cathaysia flora from Daxinggou of Wangqing County, Yanbian area, Jilin Province, China and its geological significance. *Advances in Earth Science*, 26, 339-346
1. Shuqin Zhang, Yuying Liu, **Mingsong Li**. 2010. Eocene-Miocene palynological assemblages in Wanchang area of Jilin and their stratigraphic significance. *Global Geology*, 29, 357-362

5. Conference Abstracts

2021

- # 59. Meng Wang, **Mingsong Li**, David B. Kemp, Slah Boulila. 2021. Glacial-driven sea-level changes in the Late Triassic. vEGU General Assembly. EGU21-6117.

2020

59. Peng Gao, Junsheng Nie, **Mingsong Li**, Pu Li. 2020. Confirmation of a Late Miocene Subchron C4n.2n-1r from the Eastern Qaidam Basin in the NE Tibetan Plateau. Geological Society of America Annual Meeting.
- # 58. Meng Wang, **Mingsong Li**. 2020. Reconstruction of high-resolution lake level and its astronomical forcing during the Paleogene. GeoUtrecht Virtual 2020.
57. **Mingsong Li**, Hubert L. Barnes. 2020. Astronomically forced sphalerite growth and groundwater circulation in the Upper Mississippi Valley District, USA. GeoUtrecht Virtual 2020.
56. **Mingsong Li**, Hubert L. Barnes. 2020. Orbitally forced groundwater circulation and sphalerite growth in the Upper Mississippi Valley District. Goldschmidt Virtual 2020.
55. **Mingsong Li**, Lee R. Kump, Oluwaseyi Ajayi, Daniel Amrhein, Gregory J. Hakim, Steven B. Malevich, Chris Poulsen, Andy Ridgwell, Robert Tardif, Jessica E. Tierney, Fuqing Zhang, Jiang Zhu. 2020. Impact of new observations on improved understanding of the Paleocene-Eocene Thermal Maximum. Goldschmidt Virtual 2020.
54. Thomas Wonik, Arne Ulfers, Matthias Sinnesael, **Mingsong Li**, Christian Zeeden. 2020. Detecting and using Milankovic cycles in borehole logging data: Comparing methods and application to Lake Ohrid. EGU General Assembly. Vienna, Austria.
53. Christian Zeeden, Matthias Sinnesael, **Mingsong Li**, Arne Ulfers, Thomas Wonik. 2020. Systematically probing for Milanković cycles in borehole logging data. The 36th International Geological Congress, Delhi, India.

2019

52. Christian Zeeden, Matthias Sinnesael, **Mingsong Li**, Arne Ulfers, and Thomas Wonik. Borehole log cyclostratigraphy: Towards systematic probing for Milankovic cycles in logging data. vol. 21. *Geophysical Research Abstracts*, 2019.
51. J. Fred Read, **Mingsong Li**, Linda A. Hinnov, Campbell S. Nelson, Steven D. Hood. 2019. Are Milankovitch cycles evident in the gamma ray logs of Late Oligocene mixed siliciclastic-carbonates of Tikorangi Formation, Taranaki Peninsula, New Zealand? In: P.J.J. Kamp and A. Pittari eds. Abstract Volume: Geosciences 2019, Hamilton, New Zealand. Geoscience Society of New Zealand Miscellaneous Publication 154A. p. 144.
50. **Mingsong Li**, Lee R. Kump, Fuqing Zhang, Andy Ridgwell, Gregory J. Hakim, Jessica E. Tierney. 2019. Assessing the impact of new observations on improved understanding of the Paleocene-Eocene Thermal Maximum. AGU Fall Meeting, San Francisco, USA.

- # 49. **Meng Wang**, Honghan Chen, **Mingsong Li**. 2019. Tracking Paleogene lake level change and its long-term cyclicities by using sedimentary noise. AGU Fall Meeting, San Francisco, USA.
48. Daniel Amrhein, Gregory Hakim, Lee Kump, **Mingsong Li**, Steven Malevich, Chris Poulsen, Andy Ridgwell, Robert Tardif, Jessica Tierney, Jiang Zhu. 2019. Tropical Variability from the Last Glacial Maximum to Present. AGU Fall Meeting, San Francisco, USA.
47. Jessica Tierney, Steven Malevich, Jiang Zhu, Jonathan King, Chris Poulsen, Andy Ridgwell, **Mingsong Li**, Lee Kump, Robert Tardif, Greg Hakim. 2019. Glacial cooling and climate sensitivity revisited. AGU Fall Meeting, San Francisco, USA.
46. Jessica Tierney, Jiang Zhu, Jonathan King, **Mingsong Li**, Steven Malevich, Chris Poulsen, Andy Ridgwell, Greg Hakim, Robert Tardif, Lee Kump. 2019. A new view of the Eocene greenhouse world from paleoclimate data assimilation. AGU Fall Meeting, San Francisco, USA.
45. Christian Zeeden, Matthias Sinnesael, **Mingsong Li**, Arne Ulfers, and Thomas Wonik. 2019. Towards systematic probing for Milankovic cycles in borehole logging data and complex settings. AGU Fall Meeting, San Francisco, USA.
44. Hwei Duan, Jiyong Jiang, Mingsong Li. 2019. Bridging Chinese Landscape Painting and geosciences. AGU Fall Meeting, San Francisco, USA.
43. Dongyang Liu, Chunju Huang, David Kemp, **Mingsong Li**, Meiyi Yu, William Foster. 2019. Orbital forcing in the Middle Triassic of the eastern Tethys: implications for paleoclimate and eustasy. AGU Fall Meeting, San Francisco, USA.
42. Tan Zhang, Changmin Zhang, **Mingsong Li**, Tailiang Fan. 2019. Cyclostratigraphy of the Lower Triassic terrestrial successions in the Junggar Basin, northwestern China. AGU Fall Meeting, San Francisco, USA.
41. Naihua Xue, Wei Wang, **Mingsong Li**. 2019. Astrochronology and Geochemistry for the Doushantuo Formation of Ediacaran of Yichang in South China. AGU Fall Meeting, San Francisco, USA.
40. Yan Chen, Yang Zhang, James G Ogg, Haishui Jiang, Zhiming Sun, **Mingsong Li**. 2019. Integrated Early Triassic time scale of geomagnetic polarity, cyclostratigraphy, biostratigraphy and geochemical excursions from South China and its global correlation. AGU Fall Meeting, San Francisco, USA.
39. Ying Cui, Els van Soelen, **Mingsong Li**, Wolfram Kürschner. 2019. Permian-Triassic global marine and terrestrial carbon cycle records from the Finnmark platform in Norway. Geological Society of America Annual Meeting, Phoenix, USA.
38. Jessica E. Tierney, Jonathan King, Steven Brewster Malevich, Tripti Bhattacharya, Ran Feng, Jiang Zhu, **Mingsong Li**, Chris J. Poulsen, Alan M. Haywood, Bette Otto-Bliesner, Andy Ridgwell, Greg Hakim, Robert Tardif, Lee R. Kump. 2019. New Views of Warm Worlds from Paleoclimate Data Assimilation. Goldschmidt 2019, Barcelona, Spain.
37. Christian Zeeden, Matthias Sinnesael, **Mingsong Li**, Arne Ulfers, and Thomas Wonik. 2019. Towards systematic probing for Milankovic cycles in borehole logging data and complex settings. STRATI, 3rd International Congress on Stratigraphy. Milano, Italy.
36. Christian Zeeden, Matthias Sinnesael, **Mingsong Li**, Arne Ulfers, and Thomas Wonik. 2019. EGU2019-3284: Borehole log cyclostratigraphy: towards systematic probing for Milankovic cycles in logging data. EGU General Assembly. Vienna, Austria.

2018

35. **Mingsong Li**, Chunju Huang, James Ogg, Linda Hinnov, Yang Zhang, Weizhe Chen, Wei Tian. 2018. Astrochronology of the end-Permian extinction and the Early-Middle Triassic. Goldschmidt 2018, Boston, USA. [Invited Oral]
34. **Mingsong Li**, Linda Hinnov, Chunju Huang, James Ogg. 2018. Sedimentary noise and Early Triassic sea levels linked to land–ocean water exchange and obliquity forcing. International Symposium on Deep-time Environmental & Climatic Extremes and Biotic Responses, Wuhan, China. [Invited Oral]
33. **Mingsong Li**, Linda Hinnov, Lee Kump. 2018. A time-series analysis software package (*Acycle*) for paleoclimate research and education. AGU Fall Meeting, Washington DC, USA. [Poster]
32. Naihua Xue, Chengguo Guan, Bo Wang, **Mingsong Li**. 2018. Astronomical Time Scale of the Ediacaran Period of South China. AGU Fall Meeting, Washington DC, USA. [Poster]
31. **Mingsong Li**, Lee R. Kump, Linda A. Hinnov, Michael E. Mann, Andy Ridgwell. 2018. New methods for astrochronological calibration of paleoclimate proxies and significance for deep time data assimilation. The 3rd DeepMIP meeting, Bristol, UK. [Oral]

2017

30. **Mingsong Li**, Yang Zhang, Chunju Huang, James Ogg, Linda Hinnov, Yongdong Wang, Zhuoyan Zou, Liqin Li, Stephen Grasby, Yijiang Zhong, Keke Huang. 2017. Astrochronology and magnetostratigraphy of the Xujiatahe Formation of South China and Newark Supergroup of North America: implications for the Late Triassic time scale. AGU Fall Meeting, New Orleans, USA. [Poster]
29. Lee Kump, **Mingsong Li** (presenter), Linda Hinnov. 2017. Tracking variable sedimentation rates in orbitally forced paleoclimate proxy series. AGU Fall Meeting, New Orleans, USA. [Poster]
28. **Mingsong Li**, Yang Zhang, James Ogg, Chunju Huang, Linda Hinnov, Zhong-Qiang Chen. 2017. Triassic Time Scale from Astronomical-tuned Magnetostratigraphy. Geological Society of America Abstracts with Programs. 49(6), doi: 10.1130/abs/2017AM-302748. [Oral]
27. Yan Chen, Yang Zhang, James Ogg, **Mingsong Li**, Zhong-Qiang Chen, Chengyi Tu, Daoliang Chu. 2017. Magnetostratigraphy of the continental reference section for latest Permian through Early Triassic of North China at Dayulin (Henan province). Geological Society of America Abstracts with Programs. 49(6), doi: 10.1130/abs/2017AM-301904. [Oral]
26. **Mingsong Li**, Yang Zhang, James Ogg (presenter), Chunju Huang, Zhong-Qiang Chen, Linda Hinnov. 2017. Triassic TimeScale from Astronomical-tuned Magnetostratigraphy. The 4th International Conference of Geobiology. Wuhan, China [Oral]
25. **Mingsong Li**, Chunju Huang, James Ogg, Linda Hinnov, Yang Zhang, Zhong-Qiang Chen. 2017. Cyclo-magnetostratigraphy of the global Triassic. The First CUG Forum for Overseas Young Scholars. China University of Geosciences (Wuhan) [Oral]
24. Wei Liu, Huaichun Wu, Linda Hinnov, Chao Ma, **Mingsong Li**. 2017. Astronomically forced deposition in the Early Cretaceous Songliao synrift basin, China and its paleoclimatic implications. Joint 52nd Northeastern Annual Section / 51st North-Central Annual Section Meeting – 2017, Geological Society of America Abstracts with Programs. 49(2), doi: 10.1130/abs/2017NE-290749. [Oral]

2016

23. Linda Hinnov, **Mingsong Li**, Chunju Huang. 2016. Bio-cyclo-magneto-stratigraphy solves longstanding problems of the global Triassic: astronomically paced aquifer-eustasy,

interregional platform correlation, and geologic time. AGU Fall Meeting, San Francisco, USA. [Invited oral]

22. **Mingsong Li**, Chunju Huang, Linda Hinnov, James Ogg, Yang Zhang. 2016. On the timescale controversy of the Spathian substage (Early Triassic) in South China. Geological Society of America Annual Meeting, Denver, USA. [Poster]
21. **Mingsong Li**, Chunju Huang, Linda Hinnov, Weizhe Chen, Wei Tian. 2016. Astronomical-cycle scaling of the Anisian Stage in South China: implications for biotic recovery following the end-Permian mass extinction. Geological Society of America Annual Meeting, Denver, USA. [Oral]
20. Yang Zhang, **Mingsong Li**, James Ogg, Linda Hinnov, Chunju Huang, Zhong-Qiang Chen. 2016. Cycle-calibrated magnetostratigraphy and time scales for the Early and early-Late Triassic. International Geological Congress, Cape Town, South Africa. [Oral]

2015

19. **Mingsong Li**, Chunju Huang, Linda Hinnov. 2015. Testing multiple paleoclimatic proxies in a Triassic marine record from China. AGU Fall Meeting, San Francisco, USA. [Poster]
18. **Mingsong Li**, Chunju Huang, Linda Hinnov. 2015. Intermittent obliquity-forced climate during the Early Triassic. Geological Society of America Annual Meeting in Baltimore, MD, USA. [Oral]
17. **Mingsong Li**, Chunju Huang, Linda Hinnov, James Ogg, Yang Zhang, Zhong-Qiang Chen, Zhuoyan Zou. 2015. An astronomical time scale for Triassic ecosystem recovery in South China. Geological Society of America Annual Meeting in Baltimore, MD, USA. [Poster]
16. Yang Zhang, **Mingsong Li**, James Ogg, Paul Montgomery, Chunju Huang, Zhong-Qiang Chen, Zhiqiang Shi, Paul Enos, Daniel J. Lehrmann, 2015. Cycle-calibrated Magnetostratigraphy of middle Carnian from South China: Implications for Late Triassic Time Scale and Termination of the Yangtze Platform. Geological Society of America Annual Meeting in Baltimore, MD, USA. [Oral]
15. **Mingsong Li**, Linda Hinnov, Chunju Huang, James Ogg, Zhong-Qiang, Chen, Yang Zhang. 2015. Cyclostratigraphy and Integrated Time Scale of the Early Triassic. 2nd Boreal Triassic Conference and 12th International Workshop on the Permo-Triassic, Svalbard, Norway. [Oral]
14. **Mingsong Li**, Chunju Huang, Linda Hinnov. 2015. Multiple proxies of ancient climate and sea-level change: A Permian-Triassic transition example. Geological Society of America Southeastern Section - 64th Annual Meeting. Chattanooga, Tennessee, USA. [Oral]

2014

13. **Mingsong Li**, James Ogg, Chunju Huang, Yang Zhang, Zhong-Qiang Chen, Linda Hinnov, 2014. Astrochronology of the Early Triassic from South China, IsoAstro Geochronology Workshop: The integration and intercalibration of radioisotopic and astrochronologic time scales, Madison, USA. [Oral]
12. **Mingsong Li**, Chunju Huang, James Ogg, Yang Zhang, Zhong-Qiang Chen, Linda Hinnov, 2014. Cyclostratigraphy of the Early Triassic from South China. The Third Conference on Earth Systems Science, Shanghai, China. [Oral]
11. **Mingsong Li**, Chunju Huang, Zhong-Qiang Chen, Yang Zhang, Linda Hinnov, James Ogg, 2014. Astrochronology of the Early Triassic from South China and the Earth system model, The 3rd International Conference of Geobiology – Combining ancient records with the present day observations. Wuhan, China. 100-101. [Oral]

2013

10. **Mingsong Li**, Chunju Huang, Yang Zhang, Zhuoyan Zou, James Ogg, 2013. Astronomical calibration of the duration of the Induan Stage (Early Triassic), The 11th National Congress of the Palaeontological Society of China (PSC) and the 27th Annual Conference of PSC, Dongyang, China, p. 119. [Oral]
9. **Mingsong Li**, Chunju Huang, Yang Zhang, Zhuoyan Zou, Shifeng Tian, Xiaoqing Liu, 2013. High-resolution rock color series of the Permian-Triassic succession at Xiakou section, Yichang, Hubei Province and its response to orbital forcing, Abstract of the 5th National Symposium on Sedimentology, Hangzhou, China, 431-432. [Oral]
8. **Mingsong Li**, Chunju Huang, Yang Zhang, Shifeng Tian, Zhuoyan Zou, Xiaoqing Liu, 2013. Astrochronology of the Griesbachian substage (Lower Triassic) from Xiakou section, Hubei Province, South China, in Zhong-Qiang Chen, Hao Yang, Genming Luo. (Eds.), World Summit on P-Tr Mass Extinction & Extreme Climate Change, Wuhan, China, 42-43. [Oral]
7. **Mingsong Li**, Yuewu Sun, Wenchun Ge, Xingzhou Zhang, Fengxu Zhang, Shuqin Zhang, Yanlong Zhang, Guowei Zhao, Dejun Zhang, 2013. Eastward termination of the Xar Moron River Suture in Jilin Province, The 6th National Symposium on Structure Geology & Geodynamics, Changchun, China, pp. 242-243. [Poster]

2012-2010

6. **Mingsong Li**, Yuewu Sun, Xingzhou Zhang, Wenchun Ge, 2012, Gaya River - Tumen River: closed place of the Paleo-Asian Ocean. The Second Conference on Deep-Sea Research and Earth Systems Science, Shanghai, 53-54. [Poster]
5. **Mingsong Li**, Yuewu Sun, Wenchun Ge, Yanlong Zhang, 2011, Age of the Kaishantun Flora in Yanbian area, Jilin: constrained by detrital zircon U-Pb geochronology. 26th Annual Conference of Palaeontological Society of China, Guanling, 99-100. [Poster]
4. Yuewu Sun, Xingzhou Zhang, **Mingsong Li**, 2011, New material on Permian phytogeography in the Yanbian area, eastern Jilin Province, China: Proceedings of the Proc Russian Sci Conference with foreign participants on Geological processes in the lithospheric plates subduction, collision, and slid environments, Dalnauka, Vladivostok, 153. [Oral]
3. Yuewu Sun, Shuqin Zhang, **Mingsong Li**, Dejun Zhang, 2011, Carboniferous-Permian stratigraphy in Northeastern North China Plate. 26th Annual Conference of Palaeontological Society of China, Guanling, 91-92. [Oral]
2. **Mingsong Li**, Yuewu Sun, Guowei Zhao, 2010, Permian Phytogeography in Yanbian area, Jilin. Annual Conference of Paleobotany sub-society of China, Jinghong, 32. [Oral]
1. **Mingsong Li**, Guowei Zhao, Chengwen Wang, Yuewu Sun, 2010, Eastern extension of the Xar Moron River Suture: evidence from Cathaysia flora from Daxinggou town, Wangqing County, NE China. Symposium on Hydrocarbon Resources Investigation in Songliao Basin and adjacent area, Songyuan, 69-70. [Oral]

6. Speaking Engagements

13. Virginia Tech. Blacksburg, Virginia, USA. Mar. 18, 2021. **Invited Speaker.**
13. Virginia Tech. Blacksburg, Virginia, USA. Mar. 11, 2021. **Invited Speaker.**
12. Pennsylvania State University. State College, USA. Feb. 14, 2020.
11. Lehigh University. Department of Earth and Environmental Sciences, Bethlehem, USA. Sept. 5, 2019. **Invited Speaker.**
10. George Mason University. Department of Atmospheric, Oceanic and Earth Sciences, Geology Seminar Series. Fairfax, Virginia, USA. Mar. 28, 2019. **Invited Speaker.**
9. Pennsylvania State University. State College, Pennsylvania, USA. Sept. 21, 2018.

8. Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences. Nanjing, Jiangsu, China. May 11, 2018. **Invited Speaker.**
7. Nanjing University. Nanjing, Jiangsu, China. May 9, 2018. **Invited Speaker.**
6. China University of Geosciences. Wuhan, Hubei, China. Mar. 26, 2018. **Invited Speaker.**
5. Purdue University. West Lafayette, Indiana, USA. Jan. 18, 2018. **Invited Speaker.**
4. Peking University. Beijing, China. Oct. 19, 2017. **Invited Speaker.**
3. Pennsylvania State University. State College, Pennsylvania, USA. Apr. 14, 2017
2. China University of Geosciences. Wuhan, Hubei, China. Mar. 19, 2017. **Invited Speaker.**
1. George Mason University. Department of Atmospheric, Oceanic and Earth Sciences, Geology Seminar Series. Fairfax, Virginia, USA. Oct. 8, 2015

7. Teaching Experience

Fall 2019 Interim Instructor, Pennsylvania State University

GEOSC 204-Geobiology: Co-designing and teaching lectures on paleoclimate and mass extinctions.

Sept. 2019 Invited Short Course, Lehigh University

Acycle: Time-series analysis software for paleoclimate research and education.

Spring 2016 Interim Instructor, George Mason University

GEOL304-Sedimentary Geology: Analysis and interpretation of sediment, sedimentary rocks and strata: Taught 10+ students to implement chronostratigraphic analysis using MATLAB and Excel to understand cyclical patterns of climate change in the Newark Basin.

Spring 2016 Interim Instructor, George Mason University

GEOL565/CLIM759-Paleoceanography: Investigation of ocean evolution through geologic time: Taught 10+ students to understand the basics of geologic time.

2014 Teaching assistant, China University of Geosciences (Wuhan)

Astronomical Forcing of the Paleoclimate System: Guided 25+ students to understand astronomical forcing of the climate and cyclostratigraphy via hands-on astrochronological lab work and the interpretation of chronostratigraphic information.

8. Student Mentorship

Peking University

Haotian Zhang: Ph.D. student, since Sept. 2021; supervisor

Asbar Abbasi: Ph.D. student from Islamic Azad University, Tabriz Branch, Iran, since Sept. 2020; associate supervisor

Pennsylvania State University

Meng Wang: visiting Ph.D. student from China University of Geosciences, Wuhan, China, July 2019 – Sept. 2020; host and advisor

9. Projects

Jan. 2021 – Dec. 2024, National Natural Science Foundation of China (No. 42072040) “Study on the mechanism of lake level and sea level changes in the Early Triassic of China and Germany based on sedimentary noise modelin”, PI

Mar. 2017 – Dec. 2020, Heising-Simons Foundation award (No. 2016-011), “Paleoclimate Data Assimilation for Deep Time”, took part

Sept. 2016 – Feb. 2017, NSF-Standard Grant-OCE-1303605, “Collaborative Research: The relationship between multi-year droughts in California, coupled ocean-atmosphere climate oscillations and climate forcing”, took part

- Sept. 2014 – Aug. 2016 China Scholarship Council (Grant No. 201406410029)
 “Astrochronology of Triassic Type Stratigraphic Sections in South China”, PI
- Jan. 2014 – Dec. 2016, National Science Fund of China for Excellent Young Scholars (No. 41322013), “Astronomical cycles and Deep-time Global Change”, took part
- Jan. 2014 – Dec. 2016, National Science Foundation for Young Scientists of China (No. 41302113), “Recognition of Milankovitch cycles from the Xujiahe Formation in the Western Sichuan basin and the establishment of astronomical time scale”, took part
- Jan. 2012 – Dec. 2014, National Science Foundation for Young Scientists of China (No. 41102004), “Study of the Carboniferous conodont in the central Jilin area”, took part
- Sept. 2012 – Dec. 2014 The National Basic Research Program (973 Program), “Climate and Environment Evolution in the late Mesozoic Greenhouse” (No. 2012CB822000-G), took part
- 2011 – 2012 Program of Key Laboratory of Ministry of Education, China, “Late Paleozoic Phytogeography of Yanbian area, Jilin”, Co-PI
- 2011 – 2012 China Geological Survey. “Stratigraphic Correlation of the Carboniferous-Permian in Tianshan-Xingmeng Tectonic Region”, took part
- 2011 – 2012 Institute of Mineral Resources, Chinese Academy of Geological Sciences. “Stratigraphy of the Devonian-Carboniferous in the Northeastern China and Prospects of Hydrocarbon Resources”, took part
- Sept. 2009 – June 2012 National Strategic Research Center of Oil & Gas. “Hydrocarbon Resources Investigation in the Late Paleozoic in Songliao Basin and adjacent area” (14B09XQ1201), took part

10. Software Package

Acycle: Time-series analysis software for paleoclimate research and education

<https://github.com/mingsongli/acycle/wiki> or <https://mingsongli.com/acycle>

A comprehensive and easy-to-use desktop application on MacOS and Windows
Facilitating research of 200+ scientists at Yale, Princeton, Columbia University, University of Calgary, Australian National University, Chinese Academy of Sciences, Utrecht University, University of Padova, University of Zaragoza, National Observatory (Brazil), etc.

11. Professional Activities

(1) Conference chair and convener

- 2021 Virtual European Geosciences Union General Assembly. **Co-Convener**, *CL1.8/SSP2.4: Climate response to orbital forcing*
- 2020 AGU Fall Meeting. **Chair and Primary Convener**, *Topical Session: Astronomical Forcing and Past Climate Cycles*
- 2020 Goldschmidt Conference. **Co-chair and co-convener**, *Topical Session: New Developments in Deep-Time Paleoceanography: Geochemical Proxies, Cyclostratigraphy & Data Analysis*
- 2019 AGU Fall Meeting. **Chair and Primary Convener**, *Topical Session: Cyclostratigraphy and Astronomical Forcing of Past Climates*
- 2019 AGU Fall Meeting. **Chair and Primary Convener**, *Topical Session: Chronostratigraphy using Magnetic Methods*
- 2018 AGU Fall Meeting. **Chair and Primary Convener**, *Topical Session: Cyclostratigraphy and Astrochronology in Deep Time*

- 2018 International Symposium on Deep-time Environmental & Climatic Extremes and Biotic Responses, Wuhan, China. **Co-Chair**, *Session: Triassic*
- 2018 European Geosciences Union General Assembly 2018. **Co-Convener**, *Session CL1.31: Climate response to orbital forcing*
- 2017 AGU Fall Meeting. **Co-chair and co-convener**, *Topical Session PP42B: Cyclostratigraphy and Astronomical Forcing of Past Climates*
- 2017 GSA Annual Meeting. **Co-chair and co-convener**, *Topical Session T47: Recent Developments in Cyclostratigraphy*

(2) Proposal Referee

US National Science Foundation, Deutsche Forschungsgemeinschaft (German Research Foundation, DFG), Polish National Science Centre

(3) Journal Referee (64+ review reports):

Publons: <https://publons.com/researcher/1455928/mingsong-li/peer-review/>

(23) *Palaeogeography, Palaeoclimatology, Palaeoecology*, (5) *Journal of Asian Earth Sciences*, (4) *Marine and Petroleum Geology*, (3) *Earth and Planetary Science Letters*, (3) *Geology*, (2) *Computers & Geosciences*, (2) *Cretaceous Research*, (2) *Geological Journal*, (2) *Geophysical Research Letters*, (2) *Global and Planetary Change*, (2) *Journal of King Saud University - Science*, (1) *Arabian Journal of Geosciences*, (1) *Earth-Science Reviews*, (1) *GSA Bulletin*, (1) *Geoscience Frontiers*, (1) *Gondwana Research*, (1) *Journal of Ocean University of China*, (1) *Nature Communications*, (1) *Paleoceanography*, (1) *Paleoceanography and Palaeoclimatology*, (1) *Precambrian Research*, (1) *Quaternary Science Reviews*, (1) *Science*, (1) *Scientific Reports*, (1) *Sedimentology*

(4) Judge

2019 *Outstanding Student Presentation Award (OSPA), AGU*
 2018 *Outstanding Student Presentation Award (OSPA), AGU*
 2017 *Tenth Annual Postdoc Research Exhibition, Penn State*

12. Selected News & Interviews

- Mar 2020 Newsweek: “Days on Earth When Dinosaurs Lived Were Half an Hour Shorter Than They Are Now, Ancient Fossil Reveals” <https://www.newsweek.com/days-earth-dinosaurs-half-hour-shorter-ancient-fossil-1491422>
- Oct 2019 Penn State Today, Science Daily, Physics News: “Ancient rain gauge: New evidence links groundwater, climate changes in deep time” <https://phys.org/news/2019-11-ancient-gauge-evidence-links-groundwater.html>
- April 2018 Penn State Today, Science Daily, Physics News, and EurekAlert: “*Connection of sea level and groundwater missing link in climate response*” <https://www.sciencedaily.com/releases/2018/04/180403120002.htm>
- April 2018 Europa Press: “*La inclinación terrestre altera el nivel del mar sin hielo en los polos*” <http://www.europapress.es/ciencia/habitat-y-clima/noticia-inclinacion-terrestre-altera-nivel-mar-hielo-polos-20180403143840.html>
- Sept 2017 Chinese Academy of Sciences: “*A Step Toward A Complete Triassic Time Scale: Proposal from China*” http://english.cas.cn/newsroom/research_news/201709/t20170905_182756.shtml
- Sept 2017 Xinhua News Agency: “*New evidence for the Geological Time Scale from China*” http://news.xinhuanet.com/tech/2017-09/06/c_1121616041.htm

- Sept 2017 People.cn and China University of Geosciences (Wuhan): *“Scientists make progress in the area of the Triassic timescale”*
<http://hb.people.com.cn/n2/2017/0903/c337099-30687078.html>
<http://www.cug.edu.cn/info/10506/88848.htm>
- July 2016 Science Daily: *“Researchers of the China University of Geosciences: Astronomically forced catastrophes during the Early Triassic”*
http://news.sciencenet.cn/dz/dznews_photo.aspx?id=25812
- July 2016 People.cn: *“Status of Earth's time: 22-hour length-of-day and a 398-day year 250 million years ago”*
<http://hb.people.com.cn/n2/2016/0702/c337099-28599380.html>