ZIJIE GAO

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Education

University of Kansas **Expected Graduation: May 2025**
Ph.D. in Geology (Advisor: Dr. Mike Blum) Cumulative GPA: 4/4
Project: 1) Middle-Late Pleistocene Sediment Gravity Flow Deposits in the Distal Bengal Fan: Characteristics and Insights for the Propagation of Himalayan Climate Signals
*   2) SEM image analysis with AI*

University of Kansas **Aug 2019 – Dec 2021**
M.S. in Geology (Advisor: Dr. Jennifer Roberts) Cumulative GPA: 3.86/4

China University of Petroleum – Beijing (CUPB) **Sept 2015 – June 2019**
B.E. in Resource Exploration Engineering (Petroleum Geology) Cumulative GPA: 4.18/5 (3.72/4)

Publications

(5) **Gao, Z**. (2021). Investigating the Fate of Mg-Bearing Calcium Carbonates during Early Diagenesis. Master's Thesis, Available from ProQuest Dissertations & Theses Global Database. (UMI No. 28868559).

(4) Niu, H., Jiao, X., Xie, Q., Zhang, Y., Li, X., Wu, Z., Wang, B., Yang, X., Li, Y., & **Gao, Z.** (2020). Origin and Tectonic Implications of Granitoids from the Eastern Segment of the South Altyn Block, North-western China: Constraints from Petrogeochemistry, Zircon U–Pb Dating, and Lu–Hf Isotope Geochemistry. Geological Journal. DOI: 10.1002/gj.3863. Citation = 3.

(3) **Gao, Z.**, & Zhu, S. (2018). Controlling Factors of the Ordered Index of Dolomite. Science and Technology Innovation Herald, DOI: 10.16660/j.cnki.1674-098X.2018.08.033. [In Chinese]. National Journal in China. Citation = 12.

(2) Qin, Y., Zhu, S., Zhu, X., Jia, G., Tang, D., Chen, T., Zhang, W., & **Gao, Z.** (2017). Shallow Water Delta Sedimentation and Source to Sink Process in the South Slope Belt, Dongying Sag. Earth Science, DOI: 10.3799/dqkx.2017.000. [Core Journal in China]. Citation = 17.

(1) **Gao, Z.**, & Gao, T. (2017). Management Optimization of the University Volunteer Community. Environmental Education. [In Chinese]. National Journal in China. Citation = 1.

Sedimentology format, Citations current as of 6/5/2024, with citation counts sourced from Google Scholar and China National Knowledge Infrastructure (CNKI)

Conference

(2) **Gao, Z.,** Blum, M., Pickering, J., 2024, Unveiling Sedimentary Dynamics in the Distal Bengal Fan: Insights from IODP Expedition 354 Core Site U1454b: International Association of Sedimentologists, Aberdeen.

(1) Rodriguez-Colon, B.J., Roberts, J.A., and **Gao, Z.**, 2020, Assessing the Role of Solution Chemistry and Organic Matter in the Genesis of the Dengying Formation Dolostones at Sichuan Basin, China: Kansas Interdisciplinary Carbonates Consortium, Online.

Employment

Geology Intern | Occidental Oil and Gas Corporation (Oxy), Midland Basin Appraisal **May 2023 – Aug 2023**
- Mapped out reservoir properties, petrofacies, and pyrolysis data across the Midland Basin for four unconventional shale benches; leveraged **Python** for efficient QC and data integration
- Correlated 1,200 wells and picked 4,800 tops
- Worked with petrophysicist and reservoir engineer to calculate OIP and EUR
- Proposed the landing zone, frac range, and location of a test well in key acreage, with drilling anticipated in 2024

Geology Intern | Civitas Resources Inc., Reservoir Characterization Department **May 2022 – Aug 2022**

- Integrated 3D seismic volumes, completion design, strata information and treatment data into microseismic dataset with **python** and Transform.
- Built spotfire visualization and analytic tool to calculate optimal well spacing, evaluate completion design and approximate the growth of fracture network with time

Graduate Research Assistant | University of Kansas, Geology Department   **Aug 2019 - Present**
- Leading a machine learning application research in petrology segmentation with a computer scientist in KU EECS department and a geophysicist in Kansas Geological Survey, 2022 to present
- Described IODP 354 cores in Kochi, Japan, and assisted labmates' field work in Nebraska and Bangladesh, 2022-2023
- Set up instruments, made batch experiments and performed analyses (pH, alkalinity, XRD, and ICP-MS), 2019-2021

Graduate Teaching Assistant | University of Kansas, Geology Department   **Aug 2019 – Present**
- GEOL 542 Energy and Society Lab; 2019 Fall
- GEOL 541 Geomorphology Lab; 2023 Fall
- GEOL 311 Mineralogy Lab; 2022 Fall & 2023 Fall
- GEOL 302 Oceanography Lab; 2019 Fall
- GEOL 103 Geology Fundamentals Lab; 2020 Spring
- GEOL 101 The Way the Earth Works; 2020 Spring & 2022 Fall

Undergraduate Researcher| National Key Lab of Oil & Gas Exploration   **Dec 2018 - Jun 2019**
- Undergraduate thesis titled '*Characterization of Chang 9&10 Reservoir of Yanchang Formation in Ordos Basin, China*'
- Concluded general petrography, reservoir property, diagenesis of target reservoir with *Python 3*
- Implied the controlling factors during reservoir evolution and predicted area where may good reservoirs developed
- Helped colleagues extract and calculate desired data from well-logging dataset more efficiently with *Python 3*

Awards & Honors

International Association of Sedimentologists (**IAS**) Post-graduate Research Grant	2024
Geological Society of America (**GSA**) Research Grant	2024
The Geological Society, London - Research Grant	2024
American Association of Petroleum Geologists (**AAPG**) R. Dana Russell Memorial Grant	2024
International Ocean Discovery Program (**IODP**) Schlanger Fellowship	2024
Society for Sedimentary Geology (**SEPM**) Graduate Student Research Grant	2023
Jackson Fellowship	2023
D.A. McGee Scholarship	2023
Angino-Ferry Geochemistry Scholarship	2022& 2021 & 2020
University of Kansas Graduate Fellowship	2021
Kansas Geological Foundation Research Scholarship	2021
Geological Society of America (**GSA**) Graduate Research Award	2020
Angino-Ferry Geochemistry Scholarship	2020
Dean's list	2019
Nomination for Li Siguang Excellent Undergraduate Award	2018
First place of **National** Geological Competition – Field work section	2018
Top ten Undergraduate Technology Innovation Star	2018
Beijing Merit Student (**Top 0.5%**)	2018
Outstanding Undergraduate Leader	2018
First Prize Scholarship of CUPB	2018
Champion of Geological Skill Competition in CUPB	2018
First place of Comprehensive Geoscience Knowledge Competition in CUPB	2018
First place of CUPB Geoscience Undergraduate Academic Forum	2017
Second place of Asia and Pacific Mathematical Contest in Modeling	2017
Second place of May Day Mathematical Contest in Modeling	2017
Second place of Comprehensive Geoscience Knowledge Competition in CUPB	2017
National Scholarship (**Top 1%**)	2016 & 2017
First place of CUPB Mathematical Contest in Modeling	2016
Third prize of Calculus Contest in CUPB	2016

Field Trips and Short Courses

Deep Water Clastics (Taught by Adam McArthur)	June 2024
Digital Outcrop Methodology (Taught by John Howell)	June 2024
Geology Field Safety Training (Taught by Kevin Bohacs)	Aug 2023
Source to Sink Field Trip, Arkansas (Taught by Mike Blum)	Mar 2023
Deep Water Short Course (Taught by Brad Prather)	Dec 2022
Reginal Structural Geology of Grand Canyon, Arizona (Taught by Mike Talyor)	July 2022
Fluvial Processes and Systems, Colorado, Wyoming and Utah (Taught by Mike Blum)	May 2021 & 2023
Modern Geomorphology and Records in Outcrops, Nebraska and Colorado (Taught by Mike Blum)	Oct 2021
River Process Regime Recognized in Outcrops, Book cliffs, Utah (Taught by Ron Steel and Cornel Olariu)	Aug 2018

Campus and Community Involvement

Co-chair | Deep Water Session #1 of 2024 Annual Meeting of International Association of Sedimentology   **June 2024**
- Introduced speakers and wrapped out the session

Secretary | Association For Women Geoscientists (AWG) - Osage Chapter   **Sept 2020 – Sept 2021**
- Took charge of social media and recorded weekly meetings

Lecturer | Li Siguang GeoTeachers Team   **Jun 2017 - Jun 2018**
- Taught basic sedimentary geology to students in four primary schools
- Collaborated with the teaching team to develop fun geology courses at primary school level

Minster |Organizational Department in Volunteers Association   **Jun 2016 - Jun 2017**
- Organized various volunteering or teaching activities for primary schools
- Led the team win the second place of the Best Volunteer Organizations in CUPB

Professional Societies

The Geological Society, London - Fellow	2024-2025
International Association of Sedimentologists – Student member	2023 - present
Society for Sedimentary Geology (**SEPM**) – Student member	2023 - 2024t
American Association of Petroleum Geologists – Student member	2019 - present
Geological Society of America – Student member	2019-2020; 2023-present
Association of Women Geologists – Student member	2019-2020

Computer Skills

Machine learning, Visual Studio Code, Jupyter Notebook, Pycharm, Spotfire, Petrel, Transform, CorelDraw, Adobe Illustrator, Matlab, SPSS, C language