

# **LIANG Xueyin**

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## **EDUCATION**

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**China University of Geosciences, Beijing**  
*M.Sc. in Geology (Orientation: Geochemistry)*

**September 2023 - July 2026**  
*Beijing, China*

- **Average Score: 90.42/100 | Rank: 3/137**
- Graduate School Applicant: Selected for the University's Outstanding Undergraduate Comprehensive Training Program (rank 1)

**Peking University**

*Minor in Economics, National School of Development*

**September 2021 - July 2024**  
*Beijing, China*

- GPA: 3.43/4.00, Awarded Outstanding Student Assistant (2024)
- Core Courses: Urban Economics (93), International Financial Organizations and Global Financial Governance (91), Advanced Research Seminar (Honor) (85)

**China University of Geosciences, Beijing**  
*B.S. in Geochemistry (Major)*

**September 2019 - July 2023**  
*Beijing, China*

- **Average Score: 90.96/100 | Rank: 6/217**
- Core Courses: Chemistry (96), Probability and Statistics (96.4) Crystallography and Mineralogy (94.5), Petrochemistry (95), Geochemistry (90.5), Geological Survey Field Trip in Zhoukoudian (95)

## **PUBLICATIONS**

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### **First-author:**

- **Liang, X.Y.**, Wang, W., Yao, J.C., Gao, L., Yang, W.B., Hu, J.C., He, X. Identification of modern-style plate subduction during the Archean: a perspective from metavolcanic rocks (in preparation, oral presentation in CGU-2025).

### **Co-author:**

- Gao, L., Wang, W., Liu, S.W., ...**Liang, X.Y.**, Wang, T.X., 2025. Convergence of two ancient continental nuclei induced by late Neoarchean multiple subduction systems. *GSA Bulletin*.
- Wang, W., Lu, Y.J., Gao, L., Sun, G.Z., Zhou, X.Z., Yao, J.C., Yang, W.B., **Liang, X.Y.**, 2024. Late Archean K-rich intermediate magmatism driven by deep supracrustal recycling. *Chemical Geology*, 122215.
- He, X., Gao, L., Wang, W., Yao, J.C., Yang, W.B., Sun, G.Z., Guo, R.R., Zhou, X.Z., Hu, J.C., **Liang, X.Y.**, 2024. Early to middle Neoarchean tonalite-trondhjemite-granodiorite (TTG) formation and outward continental growth in the North China Craton. *Precambrian Research*, 405, 107378.

## **ACADEMIC EXPERIENCE**

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### **Identification of modern-style plate subduction during the Archean:**

**a perspective from metavolcanic rocks**

*September 2023 - Present*

*Master Project, CUGB*

- Discovered late Neoarchean boninitic rocks from the Jiaobei terrane, North China Craton.
- Proposed initiation of a late Neoarchean plate subduction system in the Jiaobei terrane.
- Illustrated diachronous development of Archean modern-style plate subduction globally.

## **First-order control of basaltic sources on the diversity of Archean TTG magmatism**

*September 2023- Present*

*Main participant, CUGB*

- Simulated the P-T conditions for the formation of TTGs through partial melting of the thickened lower crust by PerpleX.
- Analyzed compositional variations and correlations of global Archean metabasalts and TTGs using the weighted bootstrap resampling method.
- Wang, W., Cawood, P.A., Liu, S.W., Lu, D.G., Liang, X.Y., ...Sun, G.Z., 2025. First-order control of basaltic sources on the diversity of Archean TTG magmatism. *Chemical Geology* (Under Review).

## **Petrogenesis and geodynamic regimes of Mesoarchean metavolcanic rocks in the Jiaobei terrane**

*October 2020 - May 2022*

*Undergraduate thesis, Provincial-level Innovation Training Program, CUGB*

- Based on comprehensive investigations of Mesoarchean metabasaltic rocks from the Jiaobei terrane, we proposed a tectonic setting related to plate subduction during the Mesoarchean.
- Awarded **Outstanding Undergraduate Thesis (top 5%)**, CUGB.

## **NSD-Baruch MFE (Master of Financial Engineering) Summer Camp**

*August 2022*

*Peking University and Baruch College, the City University of New York*

- Content: **Machine Learning** for Finance, Options Trading and Arbitrage, Relative entropy-regularized robust optimal order execution.
- Achieved Early Admission to Baruch College's MFE Program (Available After 2022) and GRE, written examination, and academic reference letters are not required for admission.

## **The Fourth Non-traditional Stable Isotope Geochemistry Summer School**

*August 2022*

*Nanjing University*

- Studied the applications of non-traditional stable isotopes in geology, environmental science, and archaeology, gaining insights into key research achievements and emerging trends.
- Completion with **distinction** academic performance.

## **SELECTED HONORS & AWARDS**

- **Honors:** National Scholarship (Undergraduate, top 0.2%), Outstanding Undergraduate Thesis (top 5%), Silvercorp Mining Scholarship (twice, top 2%), First/Second-Class Professional Scholarship (9 times, top 5%/top 10%), Merit Students (3 times).
- **Awards:** First Prize in the *Beijing Social Practice and Science Competition on Energy Conservation and Emission Reduction* for the College Student Competition, Second Prize in *Mathematical Modeling Competition*, CUGB.

## **SKILLS & LANGUAGES**

<b>Programming/Tools</b>	R, STATA, C++, Python, Matlab, SPSS, PerpleX, LATEX, Markdown
<b>Experiment</b>	Optical microscopy, X-ray fluorescence (XRF) analysis, Laser ablation inductively coupled mass spectrometry (LA-ICP-MS)
<b>Languages</b>	Mandarin (native), English (CET-6: 526)

## **EXTRACURRICULAR ACTIVITIES**

### **Key Laboratory of Earthquake Warning in Sichuan Province**

*January 2022*

*Institute of Care-life*

*Chengdu, China*

- Researched the impact of the *AI+Disaster Warning* emergency management system and the development of mega-disaster scenarios in urban applications on the advancement of the digital economy.

### **Academy of CUGB**

*April 2022 - June 2023*

- Peer tutor for *Probability and Statistics*