

## **Xiong Wang**

Ph.D. in Geology (A<sup>+</sup>)

Date of Birth: February 1992

Phone: (86)17673477597

Email: xiong.wang3781@outlook.com

Research Focus: Rock deformation and experimental petrology



### **Education**

---

Sep 2015 - Aug 2020

Doctor of Philosophy in Rock Rheology

China University of Geosciences (Wuhan), School of Earth Science

Advisor: Junfeng Zhang

Mar 2012 - Jul 2015

Bachelor of Science in Geology (Base Class)

China University of Geosciences (Wuhan), School of Earth Science

Sep 2011 - Feb 2012

Resource Prospecting Engineering,

China University of Geosciences (Wuhan), School of Resources

### **International Experience**

---

Dec 2024 - Oct 2024: Visiting scholar at the ENS, France, for 7 months. Collaborative mentor: Professor Alexandre Schubnel

Aug 2019 - Mar 2020: Visiting scholar at the University of Montpellier, France, for 7 months. Collaborative mentor: Professor Andrea Tommasi

Mar 2017 - Mar 2018: Visiting scholar at Macquarie University, Australia, for 12 months. Collaborative mentor: Associate Professor Tracy Rushmer

Jun 2015 - Aug 2015: Visiting scholar at the University of California, Riverside, USA, for 3 months. Collaborative mentor: Professor Harry Green

### **Professional Experience**

---

Jan 2024 - Present

Postdoctoral Researcher

School of Earth Sciences, China University of Geosciences (Wuhan)

Sep 2022 - Dec. 2023

Assistant Researcher  
Department of Earth and Space Sciences, Southern University of Science and Technology

Sep 2020 - Aug 2022  
Postdoctoral Researcher  
Department of Earth and Space Sciences, Southern University of Science and Technology

Sep 2015 - Aug 2020  
Research Assistant  
HTHP Deep Lab, China University of Geosciences (Wuhan)

## Teaching Experience

---

Sep 2018 - Jan 2019  
Teaching Assistant, Structural Geology  
School of Earth Science, China University of Geosciences (Wuhan)

Sep 2016 - Jan 2017  
Teaching Assistant, Structural Geology  
School of Earth Science, China University of Geosciences (Wuhan)

Mar 2016 - Jul 2016  
Teaching Assistant, Mineral Physics  
School of Earth Science, China University of Geosciences (Wuhan)

## Internships

---

Regional Geological Survey about High Pressure/Ultra-high Pressure Metamorphic Rock, Dabie Mountain, May 2019

Regional Geological Survey, eastern Himalayan syntaxis, Tibet, Oct 2016

Quaternary Fault Structural Geological Survey, Hubei, Jul-Aug 2014

Geological Survey on Ultra-high Pressure Jadeite Quartzite, Dabie Mountain, May 2014

Field Geological Internship, Beijing, Jul-Aug 2013

Field Geological Internship, Hebei, Jul 2012

## Key Skills

---

**LLM:** ChatGPT, Gemini, Grok, Deep seek.

**Software:** Python, Matlab

**Analytical Techniques:** Microscope, EMPA, SEM-EBSD, FTIR, LA-ICPMS, XRF.

**HTHP Experimental Instruments:** 5GPa modified Green-type deformation apparatus, 1000-ton Walker type multi-anvil press, End-loaded piston-cylinder press.

## Publications

---

**Wang X.**, Zhang, J.F., Tommasi, A., Lopez-Sanchez, M., Jing Z.C., Shi F., Liu W.L. and Barou F., 2023. Experimental Evidence for a Weak Calcic-Amphibole-Rich Deep Crust in Orogens. *Geophysical Research Letter*, 50, e2022GL102320. **Nature Index**

**Wang X.**, Zhang J.F., Tommasi A., Jing Z.C. and Yuan M.S., 2021. Microstructure and Seismic Properties of Amphibole-rich Rocks from the Deep Crust in Southern Tibet. *Tectonophysics*, 811: 228869.

**Wang, X.**, Zhang J.F., Rushmer T., Adam J., Turner S. and Xu W., 2019. Adakite-Like Potassic Magmatism and Crust-Mantle Interaction in a Postcollisional Setting: An Experimental Study of Melting Beneath the Tibetan Plateau. *Journal of Geophysical Research: Solid Earth*, 124(12): 12782-12798. **Nature Index**

Liu, T., **Wang, X.**, Pu, C., and Jing Z.C., 2024. Thermoelastic Properties of Seifertite at High Pressures and Temperatures: Implications for Negative Velocity Discontinuities in the D" Layer. *Geophysical Research Letter*, 51(23). **Nature Index**

Liu, Y., Yang, T., Wang, K., **Wang, X.**, and Li, Y., 2024. Influence of Grain Size Evolution on Mantle Plume and LLSVP Dynamics. *Geochemistry, Geophysics, Geosystems*, 25(11).

Li W.J, Zhang, J.F., **Wang X.**, Wang Y., Wu X. and Hu Z.C., 2020. Petrofabrics and Seismic Properties of Himalayan Amphibolites: Implications for a Thick Anisotropic Deep Crust Beneath the Tibetan Plateau. *Journal of Geophysical Research: Solid Earth*, 124(12): 12782-12798. **Nature Index**

## Conference Abstracts

---

**Wang, X.**, Zhang, J., Tommasi, A., 2019. Strength of amphibole-rich rocks at deep crustal condition. Talk, Seminar Geosciences Montpellier, France.

**Wang, X.**, Zhang, J., Rushmer, T., Adam, J., Turner, S. and Xu, W., 2019. Adakite-Like Potassic Magmatism and Crust-Mantle Interaction in a Postcollisional Setting: An Experimental Study of Melting Beneath the Tibetan Plateau. Poster, Goldschmidt meeting, Barcelona, Spain.

**Wang, X.**, Zhang, J., Liu, W.L. and Shi, F., 2018. Dissolution-Precipitation Induced Strong CPO of Jadeite in UHP Jadeite Quartzite from Shuanghe, Dabie Mountains, China. Poster, AGU Fall Meeting, Washington, D.C., USA.

**Wang, X.**, Zhang, J., Rushmer, T., 2017. Experimental investigation on the rheology and deformation fabrics of garnet amphibolite at high temperature and pressure. Poster&talk, Specialist Group in Geochemistry, Mineralogy and Petrology (SGGMP) Meeting, Victoria, Australia.

Wang, X., Zhang, J., Liu, C.J., 2016. The water content and deformation characteristics of Jadeite Quartzite/Coesitite. Poster, Geophysical Union Conference, Beijing, China.

## Funding Projects

---

China Postdoctoral Science Foundation, General Program, 2024M753023, Experimental Study on the Rheological Properties of Plagioclase at High-Temperature and High-Pressure, Jun 2024 – present, 80,000 RMB, Ongoing, **Principal Investigator**

National Natural Science Foundation of China, Youth Fund, 42302242, Experimental Study on the Rheological Properties of Calcic-amphibole at High-Temperature and High-Pressure, Jan 2024 - Dec 2026, 300,000 RMB, Ongoing, **Principal Investigator**

China Postdoctoral Science Foundation, General Program, 2021M701563, Experimental Study on the Rheological Properties of Calcic-amphibole in the Deep Crust of the Tibet Plateau, Oct 2021 - Aug 2022, 80,000 RMB, Completed, **Principal Investigator**

National Natural Science Foundation of China, General Fund, 42472277, Microstructural and Seismic Velocity Studies of Antigorite Dehydration in Subduction Zones, Jan 2025 - Dec 2028, 500,000 RMB, Ongoing, **Participating**

Shenzhen Natural Science Fund, General Program, Experimental Study on the Sound Velocity and Seismic Anisotropy of Partially Melted Amphibolite in the Deep Continental Crust, Sep 2022 - Sep 2024, 500,000 RMB, Ongoing, **Participating**

## Ongoing Research

---

- Experimental studies focusing on the rheological properties of amphibolite.
- Deformation mechanisms and seismic anisotropy of mantle peridotite xenoliths from Northeast China.
- Experimental investigations pertaining to the origin of lunar basalts under high-temperature and high-pressure.
- The partition coefficients of trace elements between olivine, orthopyroxene, clinopyroxene, and basaltic melt at lunar mantle condition.

## Workshops

---

MTEX online workshop, Mar 21-30, 2022

Doctoral training school for Solid Earth in Barcelonette, France, Oct 2019

## Honors and Awards

---

University-level Outstanding Doctoral Thesis, Aug 2020

Excellent Graduate Student, Earth Science College, 2017-2018

Third Prize, POSTER Design and Presentation Contest, May 2018

Outstanding Graduate Student Cadre, China University of Geosciences (Wuhan), 2016-2017

Second Prize, Yifu Museum Volunteer Explainer Contest, China University of Geosciences (Wuhan), 2014

National Encouragement Scholarship, 2011-2012

## **Social Experience**

---

Volunteer, Yifu Museum, China University of Geosciences (Wuhan), 2013-2014

## **Interests**

---

Badminton, Swimming, Museums, Hiking