

# Curriculum Vitae

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**Chao Qi**

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## Professional Preparation

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<b>University of Pennsylvania</b> <i>Postdoctoral Scholar</i> Mentor: Dr. David Goldsby	Philadelphia, PA <i>2014-present</i>
<b>University of Minnesota</b> <i>Ph.D. Geophysics</i> Adviser: Dr. David Kohlstedt	Minneapolis, MN <i>2009-2014</i>
<b>Peking University</b> <i>B.S. Geophysics</i> Thesis Adviser: Dr. Yong-hong Zhao	Beijing, China <i>2004-2008</i>

## Additional Research Experience

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<b>University of Otago</b> <i>Visiting Scholar</i> Worked with Dr. David Prior to collect crystallographic orientation data on water ice using the newly developed cryo-EBSD technique. Obtained the very first high-quality, high-resolution crystallographic orientation data for experimentally deformed ice.	Dunedin, New Zealand <i>January, 2016</i>
<b>University of Cambridge</b> <i>Visiting Student</i> Worked with Dr. John Rudge to reconcile their results from numerical stimulations to our observations from laboratory experiments on the development of pressure shadows in sheared partially molten rocks.	Cambridge, UK <i>September, 2013</i>
<b>University of Oxford</b> <i>Visiting Student</i> Discussed potential collaboration with Dr. Richard Katz on the experimental examination of the viscous anisotropy hypothesis.	Oxford, UK <i>May, 2012</i>

## Teaching Experience

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<b>Earth and its Environments</b> <i>Lab Instructor</i> Gave a short lecture at the beginning of each lab to cover the key points. Gave in-class demonstrations and lead the students through their own experiments. Graded lab reports and final lab examination.	University of Minnesota <i>Fall, 2011</i>
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## Awards & Honors

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Doctoral Dissertation Fellowship (50% stipend)	2013-2014
Harold Mooney Fellowship (25% stipend)	2012-2013
V. Rama Murthy / Janice Noruk Fellowship (25% stipend)	2012-2013
Richard C. Dennis Graduate Fellowship (25% stipend)	2011-2012
Forrest Fellowship (25% stipend)	2010-2011

## Invited Talks

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“Consequences of melt-preferred orientations in sheared partially molten rocks: viscous anisotropy and fabric”

China University of Geosciences (Wuhan), October, 2015

Nanjing University, October, 2015

“Base-state melt segregation in partially molten rocks deformed under torsion: discovery and investigation”

Peking University, November, 2014

University of Chinese Academy of Sciences, November, 2014

Institute of Geology and Geophysics, Chinese Academy of Sciences, November, 2014

“Viscous anisotropy in partially molten rocks deformed under torsion”

University of Minnesota, October, 2013

“An experimental study of pressure shadows in partially molten rocks”

University of Oxford, May, 2012

## Peer-reviewed Articles

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**Qi, C.**, Goldsby, D. L. & Prior, D. J. (under review) The down-stress transition from cluster to cone fabrics in experimentally deformed ice. *Earth and Planetary Science Letters*.

Hansen, L. N., **Qi, C.**, & Warren, J. M. (2016) Olivine anisotropy suggests Gutenberg discontinuity is not the base of the lithosphere. *Proceedings of the National Academy of Sciences*, doi:10.1073/pnas.1608269113.

**Qi, C.**, Kohlstedt, D. L., Katz, R. F., & Takei, Y. (2015). Experimental test of the viscous anisotropy hypothesis for partially molten rocks. *Proceedings of the National Academy of Sciences*, 112(41), 12616-12620.

Pommier, A., Leinenweber, K., Kohlstedt, D. L., **Qi, C.**, Garnero, E. J., Mackwell, S. J., & Tyburczy, J. A. (2015). Experimental constraints on the electrical anisotropy of the lithosphere-asthenosphere system. *Nature*, 522(7555), 202-206.

**Qi, C.**, Zhao, Y. H., & Kohlstedt, D. L. (2013). An experimental study of pressure shadows in partially molten rocks. *Earth and Planetary Science Letters*, 382, 77-84.

## Articles in Preparation

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- Qi, C.**, Hansen, L. N., Wallis, D., Holtzman B. K., & Kohlstedt, D. L. Crystallographic-preferred orientation of olivine in sheared partially molten rocks: the source of the “a-c switch”. *in preparation for submission to Journal of Geophysical Research*.
- Qi, C.**, Kohlstedt, D. L., Katz, R. F., & Takei, Y. Influence of compaction length on base-state melt segregation in torsionally deformed partially molten rocks. *in preparation for submission to Geochem., Geophys., Geosys*.
- Qi, C.** & Goldsby, D. L. Dislocation creep of ice at glaciological pressure and temperature. *in preparation for submission to Journal of Glaciology*.

## Conference Abstracts

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- Qi, C.**, & Goldsby D. L. (2015). Dislocation Creep of Ice At Glaciological Pressures and Temperatures. *AGU Fall Meeting MR31A-04*.
- Qi, C.**, Hansen, L. N., Holtzman, B. K., & Kohlstedt, D. L. (2014). Fabric Development in Sheared Mantle Rocks: The Source of the “a-c” Switch. *AGU Fall Meeting MR23B-4353*.
- Kohlstedt, D. L., **Qi, C.**, Takei, Y., & Katz, R. F. (2014). Deformation-Driven Melt Segregation: Theoretical Predictions and Laboratory Observations. *AGU Fall Meeting S53F-02*.
- Hansen, L. N., **Qi, C.**, Kumamoto, K., Warren, J. M., Katz, R. F., & Kohlstedt, D. L. (2014). Constraints on the Nature of the Lithosphere-Asthenosphere Boundary: Comparison of Observed Textural Evolution to Measured Seismic Anisotropy. *AGU Fall Meeting DI43B-07*.
- Katz, R. F., Taylor-West, J., Allwright, J., Takei, Y., **Qi, C.**, & Kohlstedt, D. L. (2014). Consequences of Melt-Preferred Orientation for Magmatic Segregation in Deforming Mantle Rock. *AGU Fall Meeting MR23B-4352*.
- Qi, C.**, Kohlstedt, D. L., Katz, R. F., & Takei, Y. (2013). Base-state stress-driven melt segregation in torsion and extrusion experiments on partially molten rocks. *AGU Fall Meeting T51E-2523*.
- Katz, R. F., **Qi, C.**, Takei, Y., & Kohlstedt, D. L. (2013). Viscous anisotropy of the partially molten mantle: theory and evidence from laboratory experiments. *AGU Fall Meeting T42D-06*.
- Qi, C.**, & Kohlstedt, D. L. (2012). A study of pressure shadows formed in torsion experiments of olivine-basalt systems. *AGU Fall Meeting T13G-2712*.
- Kohlstedt, D. L., **Qi, C.**, & Zimmerman, M. E. (2012). Melt Segregation in Extrusion and Torsion Experiments on Partially Molten Rocks. *AGU Fall Meeting T12D-01*.
- Qi, C.**, & Kohlstedt, D. L. (2012). An experimental study of the formation of pressure shadows in partially molten rocks. *Gordon Research Conference on Rock Deformation*.
- Qi, C.**, & Kohlstedt, D. L. (2011). An experimental study of the formation of pressure shadows in partially molten rocks. *AGU Fall Meeting T43C-2325*.