

# 19 Prof. Zhenmin Jin



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## Education

1960-1965, Graduated from Beijing Geological College, Beijing, Major in Geology, China

## Work Experience

1965-1974, Worked at the First Geological Team in Hubei Province (Engineer of Geology)

1974-1976, Worked at Geological College of Wuhan, Hubei Province, China (Teacher of Geology)

1976-1982, Worked at Wuhan Geological College, Wuhan City, Hubei Province (Assistant Professor of Geology)

1982-1987, Worked at Wuhan Geological College, Wuhan City, Hubei Province (Assistant Professor of Geology)

1987-Present, Worked at China University of Geosciences, Wuhan City, Hubei Province (Professor of Geology)

## Research Interests

(1) mainland lithosphere rheology and deep structure; (2) the mantle dynamics and ultrahigh pressure rocks phase change; (3) high temperature and high pressure experiment and its application

## Major Publications

Jin, Z. M., Green II, H.W., Zhou, Y. Melt topology in partially molten mantle peridotite during ductile deformation. *Nature*, 1994, 372, 164-167.

Zhang, J. F., Green, H. W., Bozhilov, Jin Z.M. Faulting induced by precipitation of water at grain boundaries in hot subducted oceanic crust. *Nature*, 2004, 428:633-636.

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Jin, Z. M., Green II, H. W., Borch, R. S. Microstructures of olivine and stress in the upper mantle beneath Eastern China. *Tectonophysics*, 1989, 169, 23-50.

Jin, Z. M., Bai, Quan D.L. Kohlstedt. High-temperature creep of olivine crystals from four localities. *Physics of the Earth and Planetary Interiors*, 1994, 82: 55-64.

Jin, Z. M., Zhang, J. F., Green, H.W. Jin, S. Y. Rheological properties of deep subducted oceanic lithosphere and their geodynamic implications. *Science in China (Series D)*, 2002, 45 (11) : 769-977.

Jin, Z. M., Ji, S. C., Jin, S. Y. Lattice preferred orientation of olivine and seismic anisotropy in the upper mantle beneath the south-eastern China. *Chinese J. Geophysics*, 1994, 37 (3): 413-424.

Liu, X. W., Jin, Z. M., Green II, H. W. Clinopyroxene exsolution in diopsidic augite of Dabieshan: Garnet peridotite from depth of 300 km. *American Mineralogist*, 2007, 92: 546 -552.

- Kern, H., Jin, Z. M., Gao, S., et al. Physical properties of ultrahigh-pressure metamorphic rocks from the Sulu terrain, Eastern China: implication for the seismic structure at the Donghai (CCSD) drilling site. *Tectonophysics*, 2002, 354, 315-330.
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- Zhao, S., Jin, J. Zhang, H. Xu, G. Xia and H. W. Green II, Does subducting lithosphere weaken as it enters the lower mantle? *Geophys. Res. Lett.*, 2012, 39, DOI: 10.1029/2012GL051666.
- Xu, H. J., Jin, Z. M., Roger, M., OU, X. G., Magnetic susceptibility of ultrahigh pressure eclogite: The role of retrogression, *Tectonophysics*, 2009, 475 (2) 279-290.
- Wu, Y., Fei, Y., Jin, Z., Liu, X. The Fate of subducted upper continental crust: An experimental study, *Earth and Planetary Science Letters*, 2009, 282: 275-284.
- Yongfeng Wang, Junfeng Zhang, Zhenmin Jin, David L. Kohlstedt, Low oxygen fugacity dependency for the deformation of partially molten lherzolite, *Tectonophysics*, 2012, 580, 114-123.
- Xu, L. L., Mei, S. H., Dixon, N., Jin, Z. M., Ayako M. Suzuki, David L. Kohlstedt, Effect of water on rheological properties of garnet at high temperatures and pressures, *Earth and Planetary Science Letters*, 2013, 379, 158-165.
- Zhang, Y. F., Wu, Y., Wang, C., Jinand, Z. M., Schertl, H. Experimental constraints on the genesis of Jadeite quartzite from Shuanghe, Dabie Mountain ultra-high pressure metamorphic terrane, *Sci. China Earth Sci.*, 56, 1-13, 2013, doi: 10.1007/s11430-013-4763-6.