Curriculum Vitae

Wei XIE (颉 炜)

Associate Professor, College of Oceanography, Hohai University, 1# Xikang Street, Gulou District, Nanjing, 210098, P.R. China, Mobile: + 86-188 0200 5068; E-mail: <u>weixie@hhu.edu.cn</u>, Date of Birth: April 10, 1985



RESEARCH INTERESTS:

- Basaltic magmatism in Lau Basin, SW Pacific Ocean. One of my recent studies is Tonga-Kermadec back-arc basaltic magma for studying trace element recycling and mantle flow in subduction zones. I have some valuable samples from Valu Fa Ridge (VFR) and Central Eastern Lau Spreading Center (CELSC), and know Tonga-Lau arc-basin system very well.
- Carboniferous magmatism of ancient "trench-arc-basin" system at the southern margin of the Central Asian Orogenic Belt.
- Genesis of subduction-related magmatic Ni-Cu-(PGE) sulfide deposit at the southern margin of the Central Asian Orogenic Belt.

EDUCATIONAL AND EMPLOYMENT HISTORY:

- 2016.7-Present: Associate professor, College of Oceanography, Hohai University, Nanjing.
- 2016.7-Present: Visiting associate research fellow, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, Guangzhou.
- 2012.7-2016.6: Postdoctoral researcher, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, Guangzhou.
- 2007.9-2012.6: Ph.D candidate; Institute of Geochemistry, Chinese Academy of Sciences, Guiyang.
- 2003.9-2007.6: B.S.; Faculty of Earth Sciences, China University of Geosciences, Wuhan.

AWARDS AND SCHOLARSHIPS:

- 2013 The 54nd Batch Postdoctoral Fund awarded by the China Postdoctoral Science Foundation
- 2012 Chu Yuet Wah Award for Outstanding Ph.D Candidates, Chinese Academy of Sciences

- 2012 Pacemaker to Merit Student Medal, Chinese Academy of Sciences
- 2010 Excellent Student Cadre Medal, Chinese Academy of Sciences
- 2010 Merit Student Medal, Chinese Academy of Sciences
- 2008 Merit Student Medal, Chinese Academy of Sciences
- 2006 First-prize of Renmin Scholarship, China University of Geosciences, Wuhan
- 2004 First-prize of Renmin Scholarship, China University of Geosciences, Wuhan

MAIN ACADEMIC ACTIVITIES:

- 2013.12 The 6th National Metallogenic Theory and Prospecting Method Academic Seminar (China), Guilin, China; **Oral presentation**.
- 2013.4 The 14th Annual Conference of the Chinese Society for Mineralogy, Petrology and Geochemistry, Nanjing, China; **Oral presentation**.
- 2012.6 The 12th International Ni-Cu-(PGE) Symposium, Guiyang, China; **Oral presentation**.
- 2011.12 The 5th National Metallogenic Theory and Prospecting Method Academic Seminar (China), Kunming, China; **Oral presentation**.

RESEARCH PROJECTS:

- 2016-2018 Petrogenesis and tectonic setting of the Permian shoshonitic rocks in the Kyrgyz North Tianshan, funded by the Natural Science Foundation of China. (Director)
- 2013-2016 Mantle source and tectonic setting of the Devonian Dundunshan magnesian andesites in the Beishan Fold Belt, NW China, funded by Chinese Postdoctoral Science Foundation Grant. (**Director**)
- 2011-2015 The Permian Mantle Plume and the related tectonic evolution and surface systems, funded by National Basic Research Program of China. (Investigator)
- 2012-2015 Ore genesis and tectonic setting of the Late Devonian Heishan Ni-Cu-(PGE) deposit in the western of Gansu Province, NW China, funded by the Natural Science Foundation of China. (**Investigator**)
- 2011-2013 Occurrence of PGE from the base metal sulfide and its controlling factors in the Jinchuan large Ni-Cu-(PGE) deposit, funded by the Natural Science Foundation of China. (**Investigator**)
- 2015-2017 Sr-Nd-Pb isotopes of the Cenozoic Baguio adakites in the Luzon Island, Philippines: implications for the subduction process of the South China Sea, funded by the Natural Science Foundation of China. (**Investigator**)

PEER-REVIEWED PUBLICATIONS:

- Xie, W., Song, X.-Y., Chen, L.-M., Deng, Y.-F., Zheng, W.-Q., Wang, Y.-S., Ba, D.-H., Yin, M.-H., Luan, Y., 2014. Geochemistry Insights on the Genesis of the Subduction-related Heishan Magmatic Ni-Cu-(PGE) Deposit in Gansu, NW China, at the Southern Margin of the Central Asian Orogenic Belt. Economic Geology 109: 1563-1583.
- Xie, W., Xu, Y.-G., Chen, Y.-B., Luo, Z.-Y., Hong, L.-B., Ma, L., Ma, Q., Liu, H.-Q., 2016. Petrogenesis and geodynamic implications of the Late Carboniferous felsic volcanics in the Bogda belt, Chinese Northern Tianshan. Gondwana Research 39, 165-179.
- Xie, W., Xu, Y.-G., Chen, Y.-B., Luo, Z.-Y., Hong, L.-B., Ma, L., Ma, Q., Liu, H.-Q., 2016. High-alumina basalts from the Bogda Mountains suggest an arc setting for Chinese Northern Tianshan during the Late Carboniferous. Lithos 256-257, 165-181.
- Xie, W., Luo, Z.-Y., Xu, Y.-G., Chen, Y.-B., Hong, L.-B., Ma, L., Ma, Q., 2016. Petrogenesis and geochemistry of the Late Carboniferous rear-arc (or back-arc) pillow basaltic lava in the Bogda Mountains, Chinese North Tianshan. Lithos 244, 30-42.
- Xie, W., Song, X.-Y., Deng, Y.-F., Wang, Y.-S., Ba, D.-H., Zheng, W.-Q., Li, X.-B., 2012. Geochemistry and petrogenetic implications of a Late Devonian mafic-ultramafic intrusion at the southern margin of the Central Asian Orogenic Belt. Lithos 144-145: 209-230.
- Xie, W., Song, X.Y., Deng, Y.F., Chen, L.M., Zhang, X.Q., Zheng, W.Q., Wei, X., 2013. Geology and olivine geochemistry of the Heishan Ni-Cu-(PGE) sulfide deposit, Gansu, NW China. Acta Petrologica Sinica 29: 3487-3502 (*in Chinese with English abstract*).
- Xie, W., Song, X., Nie, X., Cheng, S., 2011. Features of the mantle source and tectonic setting of the Poshi Ni-Cu sulfide-bearing intrusion, Xinjiang, China. Earth Science Frontiers 18:. 189-200 (*in Chinese with English abstract*).
- Song, X.-Y., Xie, W., Deng, Y.-F., Crawford, A.J., Zheng, W.-Q., Zhou, G.-F., Deng, G., Cheng, S.-L., Li, J., 2011. Slab break-off and the formation of Permian mafic-ultramafic intrusions in southern margin of Central Asian Orogenic Belt, Xinjiang, NW China. Lithos 127: 128-143.
- Song, X.-Y., Chen, L.-M., Deng, Y.-F., Xie, W., 2013. Syn-collisional tholeiitic magmatism induced by slab detachment at the southern margin of the Central Asian Orogenic Belt. Journal of the Geological Society, London 170: 941-950.
- He, H.-L., Yu, S.-Y., Song, X.-Y., Du, Z.-S., Dai, Z.-H., Zhou, T., Xie, W., 2016. Origin of nelsonite and Fe-Ti oxides ore of the Damiao anorthosite complex, NE China: evidence from trace element geochemistry of apatite, plagioclase, magnetite and ilmenite. Ore Geology Reviews 79, 367-381.
- Deng, Y.-F., Song, X.-Y., Chen, L.-M., Zhou, T., Pirajno, F., Yuan, F., Xie, W., Zhang, D., 2013. Geochemistry of the Huangshandong Ni-Cu deposit in northwestern

Chnia: Implications for the formation of magmatic sulfide mineralization in orogenic belts. **Ore Geology Reviews** 56: 181-198.

- Zhang, X.-Q., Song, X.-Y., Chen, L.-M., Yu, S.-Y., Xie, W., Deng, Y.-F., Zhang, J.-F., Gui, S.-G., 2013. Chalcophile element geochemistry of the Baima layered intrusion, Emeishan Large Igneous Province, SW China: implications for sulfur saturation history and genetic relationship with high-Ti basalts. Contributions to Mineralogy and Petrology 166: 193-209.
- Zhang, X.-Q., Song, X.-Y., Chen, L.-M., Xie, W., Yu, S.-Y., Zheng, W.-Q., Deng, Y.-F., Zhang, J.-F., Gui, S.-G., 2012. Fractional crystallization and the formation of thick Fe–Ti–V oxide layers in the Baima layered intrusion, SW China. Ore Geology Reviews 49: 96-108.
- Chen, L.-M., Yi, J.-N., Song, X.-Y., Yu, S.-Y., She, Y.-W., Xie, W., Luan, Y., Xiang, J.-X., 2014. Petrogenesis of the Heigutian Ti-V-magnetite ore-bearing layered intrusion, the inner zone of the Emeishan Large Igneous Province. Acta Petrologica Sinica 30: 1415-1431 (in Chinese with English abstract).
- Hong, L.-B., Zhang, Y.-H., Xu, Y.-G., Ren, Z.-Y., Yan, W, Ma, Q., Ma, L., Xie, W., 2017. Hydrous orthopyroxene-rich pyroxenite source of the Xinkailing high magnesium andesites, Western Liaoning: Implications for the subduction-modified lithospheric mantle and the destruction mechanism of the North China Craton. Lithos 282-283: 10-22.
- Deng, Y.-F., Song, X.-Y., Hollings, P., Chen, L.-M., Zhou, T., Yuan, F., Xie, W., Zhang, D., Zhao, B., 2017. Lithological and geochemical constraints on the magma conduit systems of the Huangshan Ni-Cu sulfide deposit, NW China. Miner Deposita DOI 10.1007/s00126-016-0703-7.

REFEREES:

Dr. Yi-Gang Xu

State Key Laboratory of Isotope Geochemistry, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, 511 Kehua Street, Wushan, Guangzhou, P. R. China; <u>yigangxu@gig.ac.cn</u>

Dr. Anthony J. Naldrett

Economic Geology Research Unit, School of Geosciences, The University of the Witwatersrand, P.O. Box 150, Wits, Johannesburg, South Africa; ajnaldrett@yahoo.com

Dr. Chusi Li

Department of Geological Sciences, Indiana University, Bloomington, IN 47405, USA; <u>cli@indiana.edu</u>