

Dr. Zhibin Lei | 雷志斌 博士

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Education

2022	Ph.D. • Earth Science (Geodynamics)	Cardiff University, UK
2017	M.S. • Geology	China University of Petroleum, Beijing, China
2014	B.Eng. • Geological Engineering	China University of Petroleum, Beijing, China

Research output

Lei, Z., Davies, J.H., 2023. Progressive weakening within the overriding plate during dual inward dipping subduction. *Tectonophysics* 230004. <https://doi.org/10.1016/j.tecto.2023.230004>

Wang, J., Gleeson, M., Smith, W. D., Ma, L., Lei, Z., Shi, G., & Chen, L. 2022. The factors controlling along-arc and across-arc variations of primitive arc magma compositions: A global perspective. *Frontiers in Earth Science*, 10, 1055255. <https://doi.org/10.3389/feart.2022.1055255>

Lei, Z. 2022. Numerical investigation of the influence of subduction on deformation within the overriding plate. PhD Thesis, Cardiff University. <https://orca.cardiff.ac.uk/id/eprint/152759>

Bai, D., Yang, M., Lei, Z., & Zhang, Y. 2020. Effect of tectonic evolution on hydrocarbon charging time: A case study from Lower Shihezi Formation (Guadalupian), the Hangjinqi area, northern Ordos. *Journal of Petroleum Science and Engineering*, 184, 106465. <https://doi.org/10.1016/j.petrol.2019.106465>

罗晓华, 杨明慧, 贾春阳, 李占元, 雷志斌, 张少华. 2019. 晋北地区口泉断裂带晚中生代分段构造特征. *现代地质*, 33(3), 551-560. <https://10.19657/j.geoscience.1000-8527.2019.03.08>

杨明慧, 张厚和, 廖宗宝, 罗晓华, 雷志斌, 张少华, 张雨田, 李毅玮. 2017. 南海南沙海域沉积盆地构造演化与油气成藏规律. *大地构造与成矿学*, 41(4), 710-720. <https://doi:10.16539/j.ddgzycx.2017.04.007>

邓爱居, 张少华, 李凤群, 雷志斌, 黄志佳, 李其瑞, 李运娥. 2017. 饶阳凹陷肃宁地区新生代断裂活动及其对油气成藏的控制作用. *油气地质与采收率*, 24(3), 18-24. <https://10.13673/j.cnki.cn37-1359/te.2017.03.003>

雷志斌, 杨明慧, 张厚和, 廖宗宝, 张少华, 罗晓华. 2016. 南沙海域南部第三纪三角洲演化与油气聚集. *海相油气地质*, 21(4), 21-33. <https://doi:10.3969/j.issn.1672-9854.2016.04.003>

Awards

2021 • EGU • The Virtual Outstanding Student and PhD candidate Presentation (vOSPP) Award [[link](#)] [[poster](#)]

Skills

Coding: Experienced in a) designing and running numerical simulations on high-performance computing (HPC); b) post-processing and visualizing large dataset. **Fluidity, Paraview, Python, Jupyter, vtk, GMT, PyGMT etc.** are some code or software I have rich experience with, and I am always happy to explore new research tools.

Talks & Presentations

2022 • Ada Lovelace Workshop on Numerical Modelling of Mantle and Lithosphere Dynamics • *Progressive weakening within the overriding plate during dual inward dipping subduction* [[slides](#)] [[recording](#)]

Outreach & Services

2023 • EGU Geodynamics blog editor, edited blogs can be found at <https://blogs.egu.eu/divisions/gd/author/lei/>.