葛智渊 博士

中国石油大学(北京)特聘副教授

研究领域: 沉积构造耦合、盐构造、深水沉积过程

Email: gezhiyuan@cup.edu.cn 个人网站: geogezhiyuan.com/zh



我的研究主要是以盆地分析为核心,应用多种研究手段(地震数据分析、数值模拟和物理模拟)开展构造与沉积相互作用的基础理论研究。特别侧重于含盐构造和深水沉积的耦合过程。我具备较为丰富的与国际工业界合作经验,已作为核心研究者承担多个国际石油公司委托项目,包括法国道达尔公司、挪威国家石油公司等。当前的研究重点集中在被动陆缘含盐盆地的重力变形驱动机制和过程。截至目前,已在国际一流的地学期刊如《Geology》、

《Basin Research》、《Sedimentology》上发表文章 10 余篇。

1. 个人基本情况

1A. 教育背景

2011.10-2015.10 挪威卑尔根大学地球科学系石油地质博士

2009.09-2010.09 英国伦敦大学皇家霍洛威学院地球科学系地质硕士

2005.09 - 2009.06 浙江大学地球科学理学学士

1B. 工作经历

2020.06 至今特聘副教授中国石油大学(北京)地球科学院地质系2016.07 - 2019.12博士后研究员,博士生导师挪威卑尔根大学地球科学系2013.09 - 2014.06助教挪威卑尔根大学地球科学系2010.10 - 2011.10研究助理英国伦敦大学皇家霍洛威学院地球科学系

1C. 访问研究

2. 教学经验

 2013-2014
 石油地质
 助教
 卑尔根大学

 2013-2014
 地球物理数据解释
 助教
 卑尔根大学

3. 行业协会

美国石油地质学家协会(AAPG)会员 国际沉积学家协会(IAS)会员

4. 科研项目

3A. 主持项目 (PI)

- 1. 中国石油大学(北京)优秀青年学者科研启动基金,"含盐盆地的构造沉积耦合",2020-2022
- 2. EON 能源公司与 EPOS (European Plate Observing System)联合资助项目, "Minibasin evolution in passive margin salt basins", 2018;
- 3. 卑尔根大学 SPIRE 国际研究战略项目的子课题负责人, 2017-2018;

3B. 核心参与项目

- 1. 挪威国家石油公司项目, "Turbidites, Topography and Tectonics (T3): understanding the response of turbidity currents to structurally controlled seafloor topography", 核心研究人员, 2016 至今;
- 2. 道达尔公司项目,"Late Jurassic tectono-stratigraphic development of the Norwegian Central Graben and the influence of normal faulting on turbidite sedimentation",核心研究人员,2011–2015;
- 3. 巴西国家石油项目,"Kinematics and Mechanics of Salt-related Fold & Fault Structures in South-Atlantic Passive Margin Sedimentary Basins",核心研究人员,2009–2011;

5. 文章发表

- 1. Howlett, D.*, Gawthorpe, R., Ge, Z., Rotevatn, A., & Jackson, C. A-L, (2020), Turbidites, Topography and Tectonics: Evolution of submarine channel-lobe systems in the salt-influenced Kwanza Basin, offshore Angola. *Basin Research* (under review).
- Ge, Z.*, Gawthorpe, R., Zijerveld, L., & Oluboyo, A. P., (2020), Controls on variations of geometry and stratigraphy in salt minibasins: Lower Congo Basin, Angola Margin. *Basin Research*. doi: https://doi.org/10.1111/bre.12486
- 3. **Ge, Z.***, Warsitzka, M., Rosenau, M., & Gawthorpe, R., (2019), Progressive margin tilting controls thin-skinned deformation in salt-bearing basins. *Geology*. doi: https://doi.org/10.1130/G46485.1
- 4. **Ge, Z.***, Gawthorpe, R., Rotevatn, A., Zijerveld, L., Jackson, C. A.-L., & Oluboyo, A. P., (2019), Minibasin depocentre migration during diachronous salt welding, offshore Angola. *Basin Research*. doi: https://doi.org/10.1111/bre.12404
- 5. **Ge, Z.***, Rosenau, M., Warsitzka, M., & Gawthorpe, R., (2019), Overprinting translational domains in passive margin salt basins: Insights from analogue modelling. *Solid Earth*. doi: https://doi.org/10.5194/se-10-1283-2019
- 6. Howlett, D. M.*, **Ge, Z.,** Nemec, W., Gawthorpe, R., Rotevatn, A., & Jackson, C. A.-L., (2019) Response of unconfined turbidity current to deep-water thrust fold-belt topography: orthogonal incidence on solitary and segmented folds. *Sedimentology*. doi: https://doi.org/10.1111/sed.12602
- 7. **Ge, Z.***, Nemec, W., Gawthorpe, R., Rotevatn, A., & Ernst, H., (2018) Response of unconfined turbidity current to relay-ramp topography: insights from process-based numerical modelling. *Basin Research*, doi: https://doi.org/10.1111/bre.12255
- 8. **Ge, Z.***, Gawthorpe, R., Rotevatn, A., & Thomas, M., (2017) Impact of normal faulting and pre-rift salt tectonics on the structural style of salt-influenced rifts: the Late Jurassic Norwegian Central Graben, North Sea. *Basin Research*, doi: https://doi.org/10.1111/bre.12219
- 9. **Ge, Z.*,** Nemec, W., Gawthorpe, R., & Ernst, H., (2017) Response of unconfined turbidity current to normal-fault topography. *Sedimentology*, 64: 932–959. doi: https://doi.org/10.1111/sed.12333
- 10. Adam, J.*, **Ge, Z.,** & Sanchez, M. (2012). Salt-structural styles and kinematic evolution of the Jequitinhonha deepwater fold belt, central Brazil passive margin. *Marine and Petroleum Geology*, 37(1), 101-120. doi: https://doi.org/10.1016/j.marpetgeo.2012.04.010
- 11. Adam, J.*, **Ge, Z.,** & Sanchez, M. (2012). Post-rift salt tectonic evolution and key control factors of the Jequitinhonha deepwater fold belt, central Brazil passive margin: Insights from scaled physical

- experiments. *Marine and Petroleum Geology*, 37(1), 70-100. doi: https://doi.org/10.1016/j.marpetgeo.2012.06.008
- 12. **葛智渊**, 李东平. 基于 GIS 的浙江省地震快速评估模型构建研究[J]. 华北地震科学, 2009, 27(3): 12-16.

6. 会议发表

- 1. **Ge, Z.**, Rosenau, M., & Warsitzka, M., Variations of sediment progradation control gravity-driven deformation in salt-bearing passive margins. AAPG GTW Evaporite processes and systems: Integrating perspectives, 2020. (延期至 2021)
- 2. **Ge, Z**., Gawthorpe, R., Rotevatn, A., Zijerveld, L., Jackson, C. A-L, & Oluboyo, A. P., Diachronous Minibasin Welding Controls Hydrocarbon Migration and Trapping. AAPG ACE, 2020. (延期)
- 3. **Ge, Z.**, Warsitzka, M., Rosenau, M. & Gawthorpe, R.L. The Impact of Instant Versus Progressive Margin Tilting Upon Passive Margin Salt Basins. AAPG GTW EuroAsian Mature Salt Basins,克拉科夫, 2019 年 4 月 16–17 日
- 4. **Ge, Z.,** Warsitzka, M., Rotevatn, A., Gawthorpe, R.L., Zijerveld, L. & T. Wrona. Extension initiation and localization on minibasin formation in passive margin salt basins. TSG,卑尔根, 2019 年 1 月 14–16 日.
- 5. **Ge, Z.**, Rosenau, M., Warsitzka, M. & Gawthorpe, R.L. Kinematic domain partitioning in passive margin salt basins: the myth of translational domain. GeoMod2018, 巴塞罗那, 2018 年 10 月 1–4 日.
- 6. **Ge, Z.**, Nemec, W., Gawthorpe, R.L., Rotevatn, A., Basani, R. & Hansen, E.W.M. The impact of fault topography on turbidity currents descending from the slope to the floor of an early-stage deep-water rift basin: insights from CFD numerical simulations. IAS 2013. 第 30 届国际沉积学会大会,曼切斯特, 2013 年 9 月 2–9 日.
- 7. **Ge, Z**., Gawthorpe, R., Rotevatn, A., & Wonham, J. Variations in Depocentre Style under Mid-Late Jurassic Salt-Influenced Rifting: Norwegian Central Graben, North Sea. 美国石油地质学会年会(AAPG 2013 ACE), 匹兹堡, 2013 年 5 月 19–22 日.