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## 沉积盆地、结晶基底和油、气成因理念与第二深度空间勘探和开发

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Theoretical concept for sedimentary basin, crystalline basement and the origin of oil and gas and its exploration and exploitation in the second deep space

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摘要

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摘要 在石油、天然气的勘探和开发研究中, 涉及到深部空间的介质、结构和属性, 在沉积建造上涉及到陆相沉积、海相沉积和火山岩相, 在油、气成因理论上涉及到有机成因和无机成因, 在机制上涉及到深部流体的分异、调整、运移和动力作用. 这些本质性问题的研究和探讨是人们十分关注的科学领域. 基于油、气生、储和形成的理论、应用和成效的研究提出, 有几个基础性的理念问题必须重新认识, 特别是沉积建造与古老变质岩结晶基底; 双相(海相和陆相)沉积建造与盆地的内涵和双基(有机和无机)混合油、气成因理念. 清晰地厘定这些认识不仅有益于对油、气形成、聚集和勘探及开发给出一个更为科学的深部空间, 即第二深度空间(5000~10000 m)的油、气勘探, 而更为重要的是基于对这些理念的重新认识和深化研究可构建新的思路或理论, 且在新的理念导向下, 强化油、气深部勘探, 以期能在理论研究和实践中取得新的成效, 发现大型与超大型油、气田.

关键词 石油与天然气, 第二深度空间, 古老变质岩基底, 双相沉积(陆相和海相), 油、气双基(有机和无机)混合成因

Abstract: In the research into oil and gas exploration and exploitation, it is inescapable to involve the media, structure and properties in the deep space. As for the sedimentary formation, it touches upon continental sediment, marine sedimentation and lava phase; for the theory of the oil and gas formation, it involves the organic and inorganic origin; for the mechanism, it refers to the divergence, adjustment, migration and dynamic effort. The research and probe on these essential problems draw much attention. Based on the promotion of the research into the generation, reservation, and formation of oil and gas, we propose that several basic theoretical issues be reconsidered, especially the sedimentary formation, the ancient metamorphic rocks crystalline basement; the connotation of dual-phase(continental phase and marine phase) sedimentary and the notion of mixing origin (organic and inorganic) basin. Knowledge of these notions benefits us in providing more scientific deep space for the formation, accumulation, exploration and exploitation of oil and gas, i.e. oil and gas exploration in the second deep space (5000~10000 m). What's more important, reconsideration and research of these knowledge will bring us new ideas or theories. Under the guidance of the new ideas, we may have new breakthroughs in the theoretical research and practical into the formation and deep exploration of oil and gas, obtain the new effect and discover large or super-large oil or gas fields.

Keywords Soil and gas, Second deep space, Ancient metamorphic basement, Dual-phase sedimentary (continental phase and marine phase), Mixing origin of oil and gas (organic and inorganic origins)

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