

大陆漂移, 板块构造, 地质力学

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中文摘要:本文简要地介绍了魏格纳大陆漂移说的主要内容及其提出的依据;论述了在大陆漂移说的基础上,由于海洋地质地球物理调查发现了大洋中脊、洋底扩张,解释了大陆张裂的机制,并建立了全球板块构造理论,形成现代地学思想的革命;李四光在大陆漂移说提出的同时已在积极地探讨和论述大陆地壳水平运动问题,并结合中国大陆实际,发展了陆内碰撞变形理论,即包括全球大陆构造体系在内的地质力学理论和方法。他强调地质力学是一支脚站在地质上,另一支脚站在力学上来研究地壳运动和变形现象。后来更扩大了其在资源、环境方面的应用。文章对魏格纳大陆漂移说、全球板块构造理论及地质力学三者的关系做了深入探讨,论述了李四光地质力学理论方法的现代意义、超前意义,提出要重视和发扬李四光留给中国人民的宝贵遗产,建议深入学习李四光的著述,结合地质调查新成果去丰富它和发展它。

中文关键词:[大陆漂移](#) [板块构造](#) [地质力学](#) [李四光](#)

Continental Drift, Plate Tectonics and Geomechanics

Abstract:This paper briefly describes the major content and basis of Wegener's continental drift hypothesis and deals with the fact that, due to the discovery of the mid-ocean ridge and the ocean floor expansion during the geological and geophysical survey on the basis of the continental drift hypothesis, researchers have explained the mechanism of continental tensional faulting and established the global plate tectonic theory, thus resulting in the revolution of modern geoscience thinking. Simultaneously with the emergence of the continental drift hypothesis, Li Siguang actively approached and dealt with the problem of continental crust horizontal movement and, in combination with the reality of China's mainland, developed the theory of intracontinental collision deformation, i.e., the geomechanic theory and method that included the global continental tectonic system. Li Siguang emphasized that geomechanics studies the phenomena of crustal movement and deformation on the basis of geology on one side and mechanics on the other side. Later, he extended the application of geomechanics to the aspects of resources and environment. This paper makes a thorough discussion on the relationships between Wegener's continental drift hypothesis, global plate tectonic theory and geomechanics, expounds the practical significance and fore-sight significance of Li Siguang's geomechanic theory and method and puts forward the suggestion that we should attach great importance to and carry forward the valuable heritages that Li Siguang left to us, deeply study Li Siguang's works and, in combination with new achievements of geological survey, enrich and develop his theory.


keywords:[continental drift](#) [plate tectonics](#) [geomechanics](#) [Li Siguang](#)

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