

Continental Ichnofabric Types in the Liaohe Oilfield and Their Environmental Interpretation, China

LU Zongsheng¹⁾, HAO Chaokun¹⁾, MA Hongbin²⁾, ZHANG Xinghua²⁾

1) Faculty of Earth Science, China University of Geosciences, Wuhan, 430074

2) Branch Corporation of Liaohe Oilfield, CNPC, Panjin, 124010

Abstract

Ichnofabric research results have come mainly from marine sedimentation since Ekdale (1983) first reported the ichnofabric discovery. China is one of the most developed continental sedimentary regions in the world, and, in particular, a host of cores have been accumulated during energy exploration and development. These cores have fresh surfaces and excellent vertical continuity, which is favorable for the research into the relationship between trace fossils and vertical evolution. The authors of this paper propose for the first time that the ichnofabrics in continental cores can be grouped into 2 major types and 11 subdivisions. Besides, the paper present interpretation for each ichofabiric from the viewpoint of environment based on palaeoecological and sedimentary researches.

Key words: continental ichnofabric; Paleogene; Liaohe Oilfield; China

辽西早白垩世初鸟类——中华神州鸟 (*Shenzhouaptor sinensis*)

季 强

中国地质科学院地质研究所,北京,100037

本文对辽宁义县早白垩世九佛堂组的一件初鸟类 (Avialae)化石——中华神州鸟 (*Shenzhouaptor sinensis*) 进行了详细描述和再研究。新发现的中华神州鸟嘴里无牙而是角质喙,前肢明显长于后肢,尾巴由25~27节尾椎组成,叉骨呈“U”字形,飞行羽毛超过了身体的长度。根据其肩带、腰带、

头颅及四肢等特征,中华神州鸟应真正具有了飞行能力,代表了恐龙向鸟类演化过程中的又一中间环节。该化石的再研究进一步表明,周忠和等人(2002)命名的“原始热河鸟”与季强等人(2002)命名的中华神州鸟为同物异名,根据优先原则,应予废弃。

中国新发现一件保存毛发印痕的中生代对齿兽类哺乳动物化石

Guillermo W. Rougier¹⁾ 季 强²⁾ Michael J. Novacek³⁾

1) Department of Anatomical Sciences and Neurobiology, University of Louisville, Louisville, KY 40292, USA

2) 中国地质科学院地质研究所,北京,100037,中国; 3) Division of Paleontology, American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024-5192, USA

中国东北辽宁西部地区以产中生代热河生物群,尤其发现众多长羽毛恐龙、原始鸟类、哺乳动物和被子植物化石而闻名于世。本文记述了一件保存有精美的毛发和软体印痕的对齿兽类哺乳动物化石,产自辽西北票四合屯地区义县组的底部。笔者将其命名为 *Maotherium sinensis* gen. et sp. nov.,

并与五尖张和兽 (*Zhangheotherium quinquecuspidens* Hu Yaoming et al., 1997) 一道建立了一个新科——张和兽科 (*Zhangheotheridae* fam. nov.)。该化石的发现对于我们了解中生代对齿兽类哺乳动物的形态学、骨骼学、系统演化及生活习性等均具有十分重要的科学意义。

鸚鵡嘴龙科 (恐龙:鸟脚类) 一新属和边头类恐龙的起源及早期进化

尤海鲁¹⁾ 徐 星²⁾ 汪筱林²⁾

1) 中国地质科学院地质研究所,北京,100037; 2) 中国科学院古脊椎动物与古人类研究所,北京,100044

本文记述了发现于辽宁省下白垩统义县组一几近完整的幼年恐龙头骨及下颌。分支系统分析表明它代表边头类

鸚鵡嘴龙科一新属种:侯氏红山龙,并发现异齿龙是边头类的姊妹群。