謝奈特

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得獎著作：

- Shellnutt, J.G.*, Bhat, G.M., Wang, K.-L., Brookfield, M.E., Dostal, J., Jahn, B.-M., 2014, "Petrogenesis of the flood basalts from the Early Permian Panjal Traps, Kashmir, India: geochemical evidence for shallow melting of the mantle", *Lithos*, 204, 159- 171.

- Shellnutt, J.G.*, Bhat, G.M., Wang, K.-L., Yeh, M.-W., Brookfield, M.E., Jahn, B.-M, 2015, "Multiple mantle sources of the Early Permian Panjal Traps, Kashmir, India", *American Journal of Science*, 315, 589-619.

- Yeh, M.-W., Shellnutt, J.G.*, 2016, "The initial break-up of Pangaea elicited by Late Palaeozoic deglaciation", *Scientific Reports*, 6, 1-9.

得獎簡評：

謝奈特教授的三篇代表作主要探討早期 Permian 時期之 Panjal Traps 的形成時間、成因、演化，以及對於全球構造運動的演化和對於氣候環境的衝擊等，是一項研究全球性的地質問題，讓大家對地球演化有更進一步的了解，是相當有創見的研究。

目前地質最重要的學說 plate tectonics 對於 mantle 的演化與岩漿形成機制仍有很多待解的問題。謝教授的研究成果也提供更進一步的了解 mantle 的

dynamics，以及 mantle & crust 之相互作用。謝教授在過去十年內共發表 45 篇以上的 SCI 文章，被引用次數超過 1000 次以上，研究表現相當優異。綜觀謝奈特教授的成就，在岩石學及地球化學的基礎知識面有重大的發現及貢獻，為在臺灣年輕一輩研究學者之翹楚。

得獎人簡歷：

Greg graduated from Saint Mary's University (Canada) with a Bachelor of Science in Geology (honours) in 1998 and completed his M.Sc. degree at The University of Western Ontario (Canada) in 2000. After a successful internship at the Instituto de Geología, Universidad Nacional Autónoma de México in 2003 he pursued his Ph.D. studies at The University of Hong Kong and completed his program in 2007. He moved to the Institute of Earth Sciences, Academia Sinica where he received a distinguished post-doctoral fellowship. After three years at Academia Sinica he was hired by National Taiwan Normal University (NTNU) as an assistant professor at in the Department of Earth Sciences. During his five and half years at NTNU he has published over 60 SCI research papers, established a new WD-XRF laboratory, was awarded the Mineralogical Association of Canada Young Scientist Award and the Geological Society of Taiwan Ma Ting Ying Award, received the Ministry of Science and Technology Outstanding Research Award, and is an editorial board member of Lithos, Geology, Journal of Asian Earth Sciences and Frontiers in Earth Sciences. Greg's early research focuses on the formation magmatic Fe-Ti oxide deposits and their association with A-type granites but he has published extensively on large igneous provinces (Emeishan and Panjal), mafic dyke swarms of the Canadian Shield, granites on Venus, silicate-liquid immiscibility, the India-Eurasia collision, Late Devonian granitic intrusions of the Northern Appalachians, and post-collisional granites of the Central African Orogenic Belt of southern Chad.

得獎著作簡介：

Understanding the geology of the Indian margin prior to collision is important for unravelling the conditions and processes that occurred during one of the most important orogenic events of the Cenozoic. The break-up of Pangæa was principally facilitated by tensional plate stress acting on pre-existing suture zones. The rifting of Pangæa began during the Early Permian along the southern Tethys margin and produced the lenticular-shaped continent known as Cimmeria. Flood basalt volcanism was contemporaneous with rifting and a mantle-plume model is ascribed to explain both the tensional stress and the

volcanism. However NW-SE oriented Cimmerian rifts do not correlate well with pre-existing suture zones or 'structural heterogeneities' but appear to have a pertinent spatial and temporal association with Late Palæozoic glacial-interglacial cycles. Mantle potential temperature estimates of Cimmerian rift-related basalts (1410 °C ± 50 °C) are similar to ambient mantle conditions rather than an active mantle-plume rift as previously suggested. Moreover, the distribution of glacial deposits shows significant temporal and spatial concurrence between the glacial retreat margins and rifting sites. It is suggested that the location and timing of Cimmerian rifting resulted from the exploitation of structural heterogeneities within the crust that formed due to repeated glacial-interglacial cycles during the Late Palæozoic. Such effects of continental deglaciation helped create the lenticular shape of Cimmeria and Neotethys Ocean suggesting that, in some instances, climate change may directly influence the location of rifting.

得獎感言：

I am truly honored to receive the Academia Sinica Young Investigator Award. The Young Investigator Award recognizes an individual however it also acknowledges the patience and dedication of teachers and supervisors. Initially, it is a teacher that sees the potential of a student and chooses to engage and embark on an endeavor that will allow the student to realize their potential. I am grateful to Prof. Jahn Bor-Ming who convinced me to move to Taiwan for a post-doctoral fellowship at Academia Sinica. His dedication to research, professionalism and his pleasant demeanor are amongst the many qualities that made a profound impact on me. My supervisors, Zhou Mei-Fu, Neil MacRae and Jaroslav Dostal, provided the right balance of independence and guidance during my studies that allowed me to express my own scientific views. I am also very thankful to my wife, Su Yilan, for her unwavering support and Wang Kuo-Lung, Chung Sun-Lin, Georg Zellmer, Lo Ching-Hua, Lee Tung-Yi, Pang Kwan-Nang and Yeh Meng-Wan for their assistance during the past ten years. Finally, I am indebted to the Ministry of Science and Technology and National Taiwan Normal University for fully supporting my research and providing an environment to pursue my research endeavors wherever they may take me and whatever they may be.