

## First Laureate Fundamental Research

- **Research Work Title:** Precambrian geology and supercontinent
- **Researcher:** Prof. Guochun Zhao
- **Country:** China (Hong Kong)
- **Field:** Earth Sciences
- **Scientific Affiliation:** The University of Hong Kong



### Abstract:

This research work led to discoveries of two 1.85-1.95 billion years old Himalaya-type continent-continent collisional belts (named Trans-North China Orogen and Khondalite Belt) in North China. On the basis of these discoveries, Prof. Guochun Zhao recognized that similar-aged continental collisional belts exist in nearly all other old continents in the world. This led him to have proposed that these collisional belts recorded global-scale collisional events that led to the assembly of an old supercontinent. In 2002 and 2004, Prof. Zhao and his colleagues presented comprehensive overviews on the assembly, outgrowth and breakup of this supercontinent in two classic papers published in *Earth-Science Reviews* (volume 59, pages 162-125; volume 67, pages 127-91). Later, this supercontinent was named “Columbia” or “Nuna”, whose existence has been supported by more and more geological and paleomagnetic data. So far, this supercontinent has been widely accepted by earth scientists and become a hotspot in earth sciences.

### Biography:

Prof. Guochun Zhao earned BSc and MSc degrees from Changchun University of Earth Sciences in 1985 and 1988, respectively, and a PhD degree from Curtin University in 2000. Since 2000, he has been working as postdoctoral fellow/associate professor/full-time professor at the University of Hong Kong. His major scientific findings include discoveries of two 1.85-1.95 Ga (Ga = billion years) Himalaya-type collisional belts in North China and first recognition of global-scale 1.8-2.0 Ga collisional events leading to the assembly of ~1.8 Ga supercontinent. He has published ~200 papers that have been cited for ~20000 times. He is the Editor-in-Chief of *Precambrian Research*, and the principal investigator of project "Paleoproterozoic amalgamation of North China and the assembly of the Columbia supercontinent" that won The State Natural Science Award in 2014. Also in 2014, he was elected to be the Fellow of GSA and the President of the International Association of Gondwana Research.

A supercontinent formed about 1.8 billion years ago

