Tectonics and metallogeny of the orogenic collages in Central and East Asia: Preface

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Editorial

Tectonics and metallogeny of the orogenic collages in Central and East Asia: Preface

As one of the largest continental metallogenic domains in the world, the Paleo-Asian Tectono-metallogenic Domain containing many world-class mineral deposits was formed as a result of the complex geodynamic evolution of orogenic collages in Central and East Asia (Şengör et al., 1993; Pirajno et al., 1997; Yakubchuk, 2004; Jahn et al., 2004; Seltmann and Porter 2005; Xiao and Santosh, 2014; Xiao et al., 2015; Han et al., 2015; Safonova et al., 2016).

The orogenic collages in Central and East Asia include the Central Asian Orogenic Belt (CAOB) and their interactions with several orogenic events in the Tethyan and Pacific domains (Şengör et al., 1993; Yakubchuk, 2004; Xiao et al., 2015). The geodynamic processes in these collages are different from those in other orogenic belts such as those in the Tibetan Plateau where orogenic architectures are conducted by collision between continental blocks and/or continents. The dominant CAOB was produced by long-lived accretionary processes without considerable involvement of collision of continents. During the long-lived accretionary processes, many orogenic collages have formed huge metallogenic provinces in Central and East Asia.

However the link between the geodynamic processes and formation of the mineral deposits is not well understood. In this special issue of *Gondwana Research* we assemble 13 contributions that contribute to a better understanding of the link between the geodynamic processes and formation of the mineral deposits.

Zheng et al. (2017-in this issue) carried out mica $^{40}Ar/^{39}Ar$ dating of the representative samples syngenetic with orogenic-type mineralization to record a poorly studied Permian to Triassic metallogenic episode in the Chinese Altay Orogen. Two muscovite and five biotite