

4 April 2022

Mgr. Valerie Havrdová
Faculty of Science
Charles University
Student Affairs Division
Albertov 6
128 00 Praha 2
Czech Republic


Dear Mgr. Havrdová:

I have read the dissertation thesis of **Leta Alemayehu Megerssa** in its entirety. In my opinion, Mr. Megerssa's research, contained in his dissertation manuscript and in several papers already published, is sufficient to earn a Ph.D. I make this declaration with no bias nor conflict of interest.

Mr. Megerssa investigated post-collisional geodynamics of two continent-continent collision events, the Neoproterozoic-Cambrian East African orogeny (EAO) and the Carboniferous Variscan orogeny (VO). This was accomplished by integrating Anisotropy of Magnetic Susceptibility measurements, macro- and microscopic structural analysis, U/Pb geochronology, and thermobarometry with field mapping. The combination of these datasets allowed Mr. Megerssa and colleagues to evaluate the tectonic and magmatic histories of the post-collisional stage of these orogenies. By studying both orogenic belts, he was able to obtain a snapshot of orogenic processes at upper crustal (EAO) and mid-/low-crustal (VO) levels. Ancillary portions of the dissertation addressed the establishment of a Geopark and Geoheritage sites and an assessment of geological hazards in Ethiopia.

Overall, I think Mr. Megerssa's research and dissertation (including already published papers) provide valuable contributions to our fundamental understanding of continental orogenesis in two important geological settings. These ancient examples, by extension, can provide a thorough understanding of the geodynamic evolution in modern orogenic belts (e.g., the Tibetan Himalaya). I will send questions regarding the text in a separate email to Mr. Megerssa's supervisor, Dr. Kryštof Verner.

Sincerely,


Kenneth Johnson, Ph.D.