Preface

This is the thirteenth issue of the journal *Earth Evolution Sciences*, *University of Tsukuba*, which is the annual scientific report of Doctoral Program in Earth Evolution Sciences, a division of Graduate School of Life and Environmental Sciences, University of Tsukuba. The Doctoral program covers research fields belonging to geological sciences, including Historical geology and Paleontology, Stratigraphy, Structural geology, Resources geology, Petrology, Mineralogy, and Earth Historical Analysis (Tsukuba University Graduate School Cooperation University).

Earth Evolution Sciences, University of Tsukuba integrates part of the preceding two journals, Annual Reports and Science Reports, Section B of the Institute of Geosciences, University of Tsukuba, which terminated in the academic year 2004 and 2005, respectively according to the reorganization of the university. Earth Evolution Sciences, University of Tsukuba publishes scientific and official reports of the doctoral program, including original papers, which follow the papers formerly published in Science Reports, Section B, organization and activities and list of publications inheriting Annual Reports.

Due to various circumstances, from the volume 11, the *Earth Evolution Sciences* has been published only by internet, not by book form. All of you can access our journal freely to the URL (https://tsukuba.repo.nii.ac.jp/index.php?action=pages_view_main&active_action=repository_view_main_item_snippet&index_id=751&pn=1&count=20&order=7&lang=japanese&page_id=13&block_id=83).

We will acknowledge continuous interests and responses from the readers and institutes and welcome exchanges of scientific publications.

March 1, 2019 Editorial Committee