

## **Foraminifera assemblages of East Kalimantan through time and space**

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Larger benthic foraminifera (LBF) are useful tool for biostratigraphy, paleoenvironmental reconstruction and biozonation. They are excellent environmental indicators and with use of microfacies analysis, geochemical and statistical methods we can obtain diverse data, e.g. water depth, temperature, living surface. Main objective of this project is building a stratigraphic framework based on biostratigraphy of LBF which should result in chronostratigraphic information for sediments of East Kalimantan. Thin sections and isolated specimens of foraminifers are analyzed and recognized to species level (where possible) allowing age determinations of sampled sediments. Second and more specific objective is to determine how the environmental change affected LBF assemblages. By use of microfacies analysis and additional criteria, e.g. macro fossils, facies, depositional fabrics and textures, and focus on LBF assemblage, reconstruction of changes that occurred in reef ecology during Oligocene and Miocene will be made. Significant number of collected samples contain macro fossils which will provide valuable additional information for paleoenvironmental reconstruction. Third objective is focused on Indo-Pacific LBF evolution through time trying to establish a correlation with widely used Mediterranean shallow benthic zonation (SBZ) for the Oligo-Miocene. Absolute dating and correlation with SBZ will mainly be done by use of strontium isotope analysis. In the end the results from this research will hopefully contribute to finally placing Indonesia on a deserved place in the geological map of the World.