



Date: Sep. 2, 2010

***International Conference on Paleoenvironmental Reconstruction,
Climate Change and Modeling***

Call for abstracts

The surpassing potential of the East African geology is that it offers unique evidence for plume-induced tectonic activities that are not common else where in the continent but under the ocean. As has been well demonstrated by various researchers, over the last 30 million years the biggest part of Ethiopia was affected by the Arabia-Ethiopian swell caused by mantle pluming which has produced a series of uplift, crustal extension, flood volcanism, and structural deformation. This has led to the formation of a series of geological structural-features such as half grabens, sags, depressions and full grabens within the plume generated volcanic terrains. These structures have been sites for the formation of lakes, lacustrine and fluvio-lacustrine sediments that are now exposed in different parts of Ethiopia. These ancient sediments, in geology, are rather called natural achieves because it is within these units that we find evidences of ancient climate, fauna, flora and geologic processes. This geologic record in turn provides evidence of ancient plant and animal lives; frequency, range, and duration of significant global climate changes; and faunal and floral changes which took part in the recorded Earth's history. Over twenty four ancient fluvio-lacustrine sediment localities have been identified in Ethiopia and these sediments have unique potential in that they can provide multiple localities that have different ages and which are rich in fossils of plants, animals and climatic record. When multiple sites that contain fossils of ancient fauna, flora and climate record are discovered ancient environmental and climate model that covers the time span from 30 million to present can be constructed. In effect, these fossil-rich plum-related

lacustrine sediments, which harbor immense geological information, can support in addressing environmental changes that took place over the last 30 million years and can also address the issue of climate change on the globe which is becoming more pressing than ever. Research in geology, paleontology, archaeology, paleoenvironment and related works in Ethiopia has been going on for the last century and was more intensive over the last decades. Harmonizing all these research works and designing overarching research on paleoenvironmental reconstruction for the last 30 million years and using this database for future climate modeling (which is heavily missing in many of the Global Climate change dialogues) and involving graduate students on the various thematic issues is becoming imperative than ever. As a step forward towards this challenging undertaking, bringing a platform where various researchers with various experiences and disciplines could share their research output is important. To materialize this the Mush Basin Research Team and the Institute for Environment, Water and Development of the College of Development Studies, in collaboration with the Department of Earth Sciences and the Paleoenvironment and Paleoanthropology Program of Addis Ababa University; and Mekelle University are organizing an international conference on “Paleoenvironmental reconstruction, climate change and modeling” between **May 20 and 21, 2011** at Addis Ababa University.

The thematic issues of the conference will include:

- Geology and paleoenvironmental reconstruction,
- Paleobotany and paleoenvironmental reconstruction,
- Paleontology and paleoenvironmental reconstruction,
- Archaeology and paleoenvironmental reconstruction,
- Paleoenvironmental reconstruction and climate modeling,
- Climate change and adaptation mechanisms

We call upon all interested individuals and institutions to submit an abstract not later than **Dec. 2, 2010** via e-mail to the coordinators of the conference:

Mulugeta Feseha: mulugetafy@yahoo.com OR Dereje Ayalew: dereayal@yahoo.com

Mulugeta Feseha, PhD
Associate Prof., Institute of Environment, Water and Development/Earth Sciences
College of Development Studies
Addis Ababa University, Addis Ababa, Ethiopia

