

Report IAS Postgraduate Grant Scheme, 2nd session 2007

RECIPIENT:

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I wish to thank the International Association of Sedimentologists Bureau and their generous sponsors for awarding me 1000 Euros in the second round of the IAS Grant Scheme 2007. This fund will be assisted me in producing isotopic and trace element analyses on the planktonic foraminifera *Globigerinoides ruber alba*, which is the most abundant species in the studied core (NS-14).

The grant will be used to cover partially the analysis costs of my PhD Thesis. Analyses will be performed at the Universitat de Barcelona (Institut de Ciència I Tecnologia Ambiental – ICTA), in Spain using the Inductively Coupled Plasma Mass Spectrometer (ICP-MS).

This project entitled “*Trace element and oxygen isotopic evidence for surface water temperature and salinity changes during sapropel formation in the Aegean Sea (Eastern Mediterranean)*” is a novel approach to determine the environmental factors that play a key role during the deposition of sapropels and will give new insights about the mechanism of the deposition and the geochemical response to the palaeoceanographic changes through the sapropel S1.

With the aim to provide a contribution to the understanding of the palaeoceanographic conditions during the sapropel S1 in the eastern Mediterranean realm, we have carried out a high-resolution geochemical study. We evaluate the Mg/Ca ratio on *G. ruber* in order to establish a cleaning protocol, especially designed to remove the abundant organic matter and all the others contaminated phases present in the foraminifera.

The interpretation of analytical data is central part of my PhD project and the results will permit a wider understanding of the temperature dependence of Mg/Ca in the *G. ruber*, as well as the salinity effect on the ratio Mg/Ca, especially for the Eastern Mediterranean. The first results will be presented as a poster at EGU General Assembly, in Vienna (13 - 18 April 2008), and IAS

will be acknowledged on the above and all further national (local) and international presentations, that I attend during my degree at the University of Athens.

My supervisors and I are very grateful for the support provided by the IAS in helping to make this work possible.

Kind regards,
George Kontakiotis.