



## Agenda of the 2<sup>nd</sup> IAG-EGU Intensive Course of the RCG2019 ON “COASTAL GEOMORPHOLOGY OF CLIMATICALLY AND TECTONICALLY SENSITIVE AREAS”



DATE	VENUE	ACTIVITY	AGENDA
DAY 1 22/09/2019	Harokopio University Department of Geography	• Lecture Session	<ul style="list-style-type: none"><li>WELCOME ADDRESS (<i>Mauro Soldati, Marta Della Seta, Niki Evelpidou, Efthimios Karymbalis, Vasilis Kappsimalis</i>)</li><li>INTRODUCING THE YOUNG GEOMORPHOLOGISTS – up to 5' each participant</li><li>The uplifted marine terraces of Northern Peloponnese: a significant indicator for the geomorphic evolution of the area (<i>Dimitris Papanastassiou</i>)</li><li>Growth of the rift-bounding fault and lithospheric flexural uplift in the modern Corinth Rift (<i>David Fernández-Blanco</i>)</li><li>Metrics and models of coastal landscape evolution, novel tools to measure surface deformation (<i>Julius Jara</i>)</li><li>Methods for assessing erosion rates on rocky coasts (<i>Stefano Furlani</i>)</li></ul>
DAY 2 23/09/2019	Harokopio University Department of Geography	• Laboratory Exercises	<ul style="list-style-type: none"><li>Practical introduction to marine terrace mapping and modeling (<i>Julius Jara</i>)</li><li>A GIS-Based Automatic Landform Analysis (<i>Christos Chalkias, Vagelis Papadias</i>)</li><li>Extraction of high resolution contour lines, DSM and DTM using UAV techniques (<i>Dimitris Vandarakis</i>)</li><li>Coastline displacement rates trend through GPS and remote sensing techniques (<i>Emmanuel Vassilakis</i>)</li></ul>

<b>DAY 3</b> <b>24/09/2019</b>	Fieldtrip to the North Peloponnese (the broader area of Melissi-Kiato-Xylokastro)	<ul style="list-style-type: none"> <li>Fieldtrip to the North Peloponnese</li> </ul>	<ul style="list-style-type: none"> <li>Kakia Skala Fault (<i>Dimitris Papanastassiou, David Fernández-Blanco, Eftimios Karymbalis</i>)</li> <li>Corinth Canal (<i>Dimitris Papanastassiou</i>)</li> <li>Diolkos (<i>Hampik Maroukian, Kalliopi Gaki-Papanastassiou</i>)</li> <li>Overview of the North Peloponnese uplifted marine terraces (<i>Dimitris Papanastassiou, David Fernández-Blanco, Kalliopi Gaki-Papanastassiou, Hampik Maroukian, Eftimios Karymbalis</i>)</li> <li>Perched fan-deltas and reverse drainages along a transect from the coast to Mavro Oros (<i>David Fernández-Blanco</i>)</li> </ul>
<b>DAY 4</b> <b>25/09/2019</b>	Perachora Peninsula	<ul style="list-style-type: none"> <li>Fieldtrip to Ireon - Perachora Peninsula (notched coastal cliff profile), OSL sampling.</li> </ul>	<ul style="list-style-type: none"> <li>OSL sampling methodology (<i>Eleana Karkani</i>)</li> <li>Tidal notches: morphotectonic sea level indicator (<i>Niki Evelpidou, Eleana Karkani</i>)</li> </ul>
	Psatha (Alkyonides Gulf)	<ul style="list-style-type: none"> <li>Fieldtrip to Psatha swamp (vibrocoring drilling) (groups of participants)</li> </ul>	<ul style="list-style-type: none"> <li>Selection of boreholes location for reconstruction of palaeo-depositional environments (<i>Hampik Maroukian, Konstantinos Tsanakas, Dimitris Papanastassiou, Kalliopi Gaki-Papanastassiou, Niki Evelpidou, Eftimios Karymbalis</i>)</li> <li>Borehole drilling using portable drilling tool set (<i>Konstantinos Tsanakas, Eleana Karkani, Giannis Saitis, Vasilis Batzakis, Eftimios Karymbalis, Niki Evelpidou</i>)</li> </ul>
	Psatha (Alkyonides Gulf)	<ul style="list-style-type: none"> <li>Coastline tracing - collection of photogrammetric data using UAV (groups of participants)</li> </ul>	<ul style="list-style-type: none"> <li>Coastline tracing at Psatha with equipment of RTK-GNSS (<i>Emmanuel Vassilakis</i>)</li> <li>Research flight with UAV-Collection of high resolution photogrammetric data (<i>Dimitris Vandarakis</i>)</li> </ul>
	Psatha (Alkyonides Gulf)	<ul style="list-style-type: none"> <li>Coastal bathymetry and high resolution seismic profiles (groups of participants)</li> </ul>	<ul style="list-style-type: none"> <li>Planning and preparation for the seagoing expedition (<i>Vasilis Kapsimalis, Dimitris Sakellariou, Ioannis Panagiotopoulos</i>)</li> <li>Embarkation on board and installation of scientific equipment (<i>Vasilis Kapsimalis, Dimitris Sakellariou, Ioannis Panagiotopoulos</i>)</li> </ul>

			<ul style="list-style-type: none"> <li>• Departure of the vessel and arrival to the survey area (<i>Vasilis Kapsimalis, Dimitris Sakellariou, Ioannis Panagiotopoulos</i>)</li> <li>• Measurement of physical parameters of seawater column using a CTD (<i>Vasilis Kapsimalis, Dimitris Sakellariou, Ioannis Panagiotopoulos</i>)</li> <li>• Collection of surface sediments using a grab sampler (<i>Vasilis Kapsimalis, Dimitris Sakellariou, Ioannis Panagiotopoulos</i>)</li> <li>• Bathymetric survey using a single-beam echo sounder (<i>Vasilis Kapsimalis, Dimitris Sakellariou, Ioannis Panagiotopoulos</i>)</li> <li>• Detection of seafloor bedforms using a side scan sonar (<i>Vasilis Kapsimalis, Dimitris Sakellariou, Ioannis Panagiotopoulos</i>)</li> <li>• High resolution marine seismic reflection profiling using a chirpsub-bottom profiler (<i>Vasilis Kapsimalis, Dimitris Sakellariou, Ioannis Panagiotopoulos</i>)</li> </ul>
DAY 5 26/09/2019	Harokopio University Department of Geography Physical Geography Laboratory	<ul style="list-style-type: none"> <li>• Laboratory activities</li> </ul>	<ul style="list-style-type: none"> <li>• Borehole logging - qualitative description of the sedimentary stratigraphy by visual inspection (<i>Konstantinos Tsanakas, Eleana Karkani</i>)</li> <li>• Granulometric analysis of selected sediment samples (<i>Eleana Karkani, Konstantinos Tsanakas, Vasilis Batzakis</i>)</li> <li>• Micropalaeontological analysis of selected samples (<i>Hara Drinia, Assimina Antonarakou, Markella Assimina Louvari, Eleana Karkani</i>)</li> <li>• Reconstruction of palaeo-depositional environments – Discussion (<i>Hara Drinia, Assimina Antonarakou, Markella Assimina Louvari, Eftimios Karymbalis, Niki Evelpidou, Konstantinos Tsanakas, Eleana Karkani</i>)</li> </ul>
DAY 6 27/09/2019	Hellenic Center for Marine Research (HCMR)	<ul style="list-style-type: none"> <li>• Laboratory activities</li> </ul>	<ul style="list-style-type: none"> <li>• Creation of bathymetric maps based on single beam and/or swath bathymetry data (<i>Vasilis Kapsimalis, Dimitris Sakellariou, Ioannis Panagiotopoulos</i>)</li> </ul>

			<ul style="list-style-type: none"> <li>• Analysis and Interpretation of high-resolution seismic reflection profiles (<i>Vasilis Kapsimalis, Dimitris Sakellariou, Ioannis Panagiotopoulos</i>)</li> <li>• <b>SUMMARY OF RESULTS</b></li> </ul>
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## Tutors

**Prof. Stefano Furlani**

**Dr. David Fernández-Blanco**

**Dr. Julius Jara-Muñoz**

**Dr. Dimitris Papanastassiou**

**Prof. Hampik Maroukian**

**Prof. Kalliopi Gaki-Papanastassiou**

**Prof. Christos Chalkias**

**Prof. Assimina Antonarakou**

**Prof. Hara Drinia**

**Prof. Niki Evelpidou**

**Prof. Efthimios Karymbalis**

**Dr. Vasilis Kapsimalis**

**Dr. Dimitris Sakellariou**

**Prof. Emmanuel Vassilakis**

**Dr. Eleana Karkani**

**Dr. Konstantinos Tsanakas**

**Dr. Dimitris Vandarakis**

Department of Mathematics and Geosciences, University of Trieste

Institut de Physique du Globe de Paris

Institute of Geosciences, University of Potsdam

Institute of Geodynamics, National Observatory of Athens

Department of Geography and Climatology, Faculty of Geology and Geoenvironment, National and Kapodistrian University of Athens

Department of Geography and Climatology, Faculty of Geology and Geoenvironment, National and Kapodistrian University of Athens

Department of Geography, Harokopio University of Athens

Department of Historical Geology and Palaeontology, Faculty of Geology and Geoenvironment, National and Kapodistrian University of Athens

Department of Historical Geology and Palaeontology, Faculty of Geology and Geoenvironment, National and Kapodistrian University of Athens

Department of Geography and Climatology, Faculty of Geology and Geoenvironment, National and Kapodistrian University of Athens

Department of Geography, Harokopio University of Athens

Institute of Oceanography, Hellenic Centre for Marine Research

Institute of Oceanography, Hellenic Centre for Marine Research

Department of Geography and Climatology, Faculty of Geology and Geoenvironment, National and Kapodistrian University of Athens

Department of Geography and Climatology, Faculty of Geology and Geoenvironment, National and Kapodistrian University of Athens

Department of Geography, Harokopio University of Athens

Institute of Oceanography, Hellenic Centre for Marine Research

***Dr. Ioannis Panagiotopoulos***

***Vasilis Batzakis (PhD candidate)***

***Markella Assimina Louvari (PhD candidate)***

***Vagelis Papadias (PhD candidate)***

***Giannis Saitis (PhD candidate)***

Institute of Oceanography, Hellenic Centre for Marine Research

Department of Geography, Harokopio University of Athens

Department of Historical Geology and Palaeontology, Faculty of Geology and Geoenvironment, National and Kapodistrian University of Athens

Department of Geography, Harokopio University of Athens

Department of Geography and Climatology, Faculty of Geology and Geoenvironment, National and Kapodistrian University of Athens