

---

# CIVIS call for researchers MSCIF 2020

## PANEL: Environmental and Geosciences (ENV)

CIVIS

A European Civic University



Co-funded by the  
Erasmus+ Programme  
of the European Union



SUPERVISOR	RESEARCH LAB/GROUP	AREA OF EXPERTISE	LINES OF INVESTIGATION	KEY FACILITIES	WEBSITE
Grégori Gérald	Mediterranean Institute of Oceanography (MIO UM110) - OSU Pytheas	Marine biology, ecology, biodiversity, microbiology, biogeochemistry, fluxes	<p>Our research group CYBELE (Biogeochemical Cycles and functional Role of planktonic Micro-organisms) is composed of 4 professors, 12 researchers and 5 technicians and engineers, plus post-doctoral research associates and PhD students. The main objective of the CYBELE team is to understand the role of the first autotrophic and heterotrophic levels of the planktonic food web in biogeochemical cycles and their dynamics (biological pump and export) in the context of global change and natural (e.g. pulsed events, sub-mesoscale physics) and anthropogenic (e.g. warming, acidification) forcing. Indeed, these alterations influence the biological pump efficiency, which will modulate carbon sequestration processes in the ocean. We explore many areas around the world including the Mediterranean Sea, the South Pacific, Indian and Austral Oceans. The group also develops new technologies (in situ oxygen autosampler, flow cytometry, cell-specific metabolic rates, high-resolution diversity and activity measurements). The aim of the group is always to better understand the interactions between structural and functional diversity of planktonic groups (both autotrophic and heterotrophic microorganisms) and the biogeochemical cycles of the major biogenic elements C, N, P, Si, O (stoichiometry, metabolic balance, fluxes, budgets, short to large spatiotemporal scale variability) to describe the functioning and the control factors of microbial organisms and their role in biogeochemical cycling in the ocean. These works are in phase with the major international programs IMBER and SOLAS. Members of the CYBELE team participate in international networks such as Euromarine, SOLAS, ASLO, IMBER, IAPSO, OCB and national networks (Silicamix). Members of the team were/are responsible for the following major interdisciplinary projects: ANRs VAHINE (S Bonnet, T Moutin), OUTPACE (T Moutin, S Bonnet), TONGA (S Bonnet), MOBYDICK (B. Queguiner), A-Midex CHROME (M Thyssen), CPER (PRIMA, ALBATROSS, D. Lefevre), and INSU (LEFE, EC2CO). Most of the projects developed by the group offer opportunities for postdoctoral researcher positions and potential candidates are welcome to contact our staff in order to build proposals together. Some team members web sites :</p> <p>Mar Benavides : <a href="http://www.oceanbridges.net">www.oceanbridges.net</a>  Sophie Bonnet : <a href="https://sophiebonnet.wixsite.com/website">https://sophiebonnet.wixsite.com/website</a>  Gérald Grégori : <a href="http://precym.mio.univ-amu.fr/">http://precym.mio.univ-amu.fr/</a>  Dominique Lefevre : <a href="https://people.mio.osupytheas.fr/~lefevre/">https://people.mio.osupytheas.fr/~lefevre/</a>  Thierry Moutin : <a href="https://moutin.mio.osupytheas.fr/">https://moutin.mio.osupytheas.fr/</a></p>	<p>To address its objectives, the CYBELE group combines experimental approaches (in the laboratory or in on-board lab containers), field work (research vessels). The group develops innovative methods applied at the single cell level to identify the microorganisms present and the measure some specific activities related to cell physiology/taxonomy. CYBELE combines the possibilities offered by the MIO platforms such as: incubation of radio-labeled and stable isotopes, cell sorting by flow cytometry. To study at high spatial and temporal resolution the dynamics of the natural planktonic communities and their associated fluxes, CYBELE benefits of some automated instruments (such as autosamplers, online autonomous flow cytometers, IODA autosampler for O<sub>2</sub>, optodes) installed on different possible vectors: mobile platforms such as ships or scientific platforms during oceanographic cruises, moorings, etc. CYBELE benefits of the MIO nine technical platforms that enable a rational organization of the equipment and expertise available at the institute to address a wide variety of research needs. More particularly, the group is used to work with the following platforms:</p> <p>Sea Going Facilities, equipment and staff - Service Atmosphere Sea - PTF SAM  Chemical Analyses - PTF PACEM  Molecular biology and bioinformatics - PTF OMICS  Experimental Culture Facilities - PTF CULTURE  Imagery and Microscopy - PTF MIM  High Performance Computing - PTF HPC  Flow Cytometry - PTF PRECYM  Radioactivity Service - PTF RADIOACTIVITY  PRECYM and CULTURE platforms have been initiated and are managed by CYBELE members. Other members of the group are also involved in the MIM imaging platform. The platform staff provides the training to the members of the group and open access to the resources. CYBELE members are also actively contributing to the MIO's Cross-functional projects to create synergy between scientists (researchers and IT) from the different thematic teams of the institute.</p>	<a href="https://www.mio.osupytheas.fr/en/research-teams/cybele-biogeochemical-cycles-and-functional-role-planktonic-microorganism-assemblages">https://www.mio.osupytheas.fr/en/research-teams/cybele-biogeochemical-cycles-and-functional-role-planktonic-microorganism-assemblages</a>

NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS – Greece					
SUPERVISOR	RESEARCH LAB/GROUP	AREA OF EXPERTISE	LINES OF INVESTIGATION	KEY FACILITIES	WEBSITE
<b>MEGALOFONOOU Persefoni</b>	Lab of Zoology and Marine Biology	Fish Biology and Ecology, Biological Oceanography, Aquaculture	Studies on the biology and ecology of sharks (reproductive strategies, feeding ecology), Age and growth of fish using hard parts, Fish and jellyfish relationships, Impact of fisheries and environmental parameters on marine biological resources, The ocean pollution impact on the top predators (sharks and large pelagic fishes).	Microscopes, Stereoscopes, Image analysis systems. Complete laboratory equipment for the study of the fish hard parts (Isomet, Metaserv, cutting discs, kilns, molding molds etc.) Histology equipment (tissue floatation water bath, slide warmers, paraffin dispensers, block wax trimmer, microtome, tissue embedding, ovens). Aquarium equipment. Multiparameter water quality meters. Underwater recording and monitoring equipment. Fish tagging gun and tags.	
<b>BAKEAS Evangelos</b>	Environmental Analysis Group	Air pollution; Environmental Analysis; Environmental toxicology	Air pollution; Exposure; Public Health; Organic pollutants	A variety of air samplers and sampling media; GC, GC/MS, GC/QTOFMS; LC/QTOFMS	<a href="http://www.chem.uoa.gr">www.chem.uoa.gr</a>
<b>LOUPIS Michael</b>		Nature Based Solutions - Risk Assessment	Environmental Risks - Nature Based Solutions	Open Air Laboratory at Sperchios River Catchment	<a href="https://www.facebook.com/oalgreece">https://www.facebook.com/oalgreece</a>
<b>ARGYRAKI Ariadne</b>	Laboratory of Economic Geology and Geochemistry	Environmental geochemistry, aqueous geochemistry, study of trace elements in soil and water, urban soil and dust pollution, environmental risk assessment, sustainable remediation of contaminated land by using mineral amendments, geochemical mapping, measurement uncertainty estimation due to sampling	Study of geochemical processes that control the behavior of trace elements in the surface Earth environment within the context of environmental geochemistry. Research topics of the group are relevant to contamination by potentially harmful trace elements and water resource management, impact assessment of mining activities, baseline geochemistry of soil and water, urban geochemistry and the use of geo-materials in environmental applications. Research activity also extends to the quantification of measurement uncertainty during sampling and analysis of geochemical media- a horizontal theme that applies in all research topics. The group's research has evolved to look at factors contributing to enhanced environmental mobility of trace elements by combining geochemical data with mineralogical data and spatial analysis techniques. A number of research projects with funding from the EU, Greek Government and industry have been successfully completed and contributed to a number of studies of environmental impact and quality degradation – on both assessment and sustainable remediation.	Fully equipped chemical laboratory for sample preparation, dissolution and leaching. Analytical instruments including XRD, SEM-EDS, AAS, V-UV spectrophotometers, optical microscopes.	<a href="http://users.uoa.gr/~argyaki/">http://users.uoa.gr/~argyaki/</a>
<b>KASSARAS Ioannis</b>	Seismological Laboratory	Seismology	Earthquake Seismology, Structure of the Earth's Interior, Seismic Hazard and Risk	Office room, data, close collaboration with a broad group of experts	<a href="http://scholar.uoa.gr/kassaras">http://scholar.uoa.gr/kassaras</a>
<b>KOSKERIDOU Efterpi</b>	Historical Geology and Paleontology	Paleontology paleoecology paleoenviromet stratigraphy	Past environment (Neogene-Quaternary), Mollusks, Corals, Sea level changes, paleoclimate,	Lab equipment, microscopy, camera, uv-light	<a href="http://users.uoa.gr/~ekosker/KOSKERIDOU-SITE.pdf">http://users.uoa.gr/~ekosker/KOSKERIDOU-SITE.pdf</a>
<b>KOSTOPOULOS Dimitrios</b>		Metamorphic & igneous processes (petrology/geochemistry/geochronology/geodynamics)	Petrology, geochemistry, geochronology & geodynamic environmnet of metamorphic provinces Ophiolite geochemistry, petrogenesis & tectonic setting Ultrahigh-pressure metamorphic terranes — Conditions of diamond formation in deeply subducted crustal rocks Thermodynamics of metamorphic & igneous processes; diffusion modelling and mineral thermobarometry Melting regime of the shallow upper mantle	Optical Microscopy, XRD, XRF, micro-Raman spectroscopy, EDS/WDS-EPMA, LA-ICPMS (in collaboration with the Institut für Geowissenschaften, Johannes Gutenberg-Universität Mainz, Germany_Prof. Dr. E. Moulas)	<a href="https://scholar.google.com/citations?user=PWLTr3gAAAAJ&amp;hl=en">https://scholar.google.com/citations?user=PWLTr3gAAAAJ&amp;hl=en</a>

			Provenance studies of clastic sedimentary sequences (detrital zircon & rutile thermometry and chemical/isotopic composition)		
<b>KOUSKOUNA Vasiliki</b>	Laboratory of Seismology	Seismology, seismic hazard and risk, macroseismology, engineering seismology, historical earthquakes, educational seismology, disaster risk management	Macroseismic intensity based seismic hazard, shake maps, historical earthquakes parameterisation & database, disaster simulations, geoethics, disasters educational models	Http://macroseismology.geol.uoa.gr, seismographic & accelerographic instrumentation, historical earthquakes archives	<a href="https://scholar.google.com/citations?user=SUuTp5oAAAAJ&amp;hl=el">https://scholar.google.com/citations?user=SUuTp5oAAAAJ&amp;hl=el</a>
<b>NOMIKOU Paraskevi</b>	Laboratory of Physical Geography	physical geography, marine geology, geomorphology, morphotectonics	Our research group is active in the use of underwater innovative technologies for exploration and monitoring of submarine volcanoes, landslides and active fault zones, having developed an international research community including collaborators from Europe and USA. We are currently using both AUV and UAVs to investigate onshore and offshore morphotectonic faulting in the active Hellenic arc. We are further involved in the exploration of the most active submarine volcano in East Mediterranean, the Kolumbo volcano, NE of Santorini, using AUVs to map the active hydrothermal vent field in collaboration with other foreign colleagues.	Multibeam bathymetric data and AUV data; ROV data, 2D seismics, Seismic tomography data (OBS), Geophysical data (3,5 kHz, magnetic, gravity) 3D VR models, CTD/geochemical data. 2 Oculus-Rift and dedicated PC and laptop for VR, Software for 3D immersive VR and embedded tools for quantitative measurements, 1 ROV (BLUE ROV2), 1 Go-pro camera and 2 hyperspectral underwater cameras will be available.	<a href="http://www.geol.uoa.gr">www.geol.uoa.gr</a>
<b>VASSILAKIS Emmanuel</b>		Remote sensing, Tectonic geomorphology	Remote sensing, Tectonic geomorphology, active tectonics, photogrammetry, Terrestrial LiDAR, coastal geomorphology, GIS	Laser scanner, UAS, RTK-GNSS, access to Very-High-Resolution satellite images	<a href="http://scholar.uoa.gr/evasilak">scholar.uoa.gr/evasilak</a>
<b>FLOCAS Helena</b>	Section of Environmental Physics-Meteorology, Group of Meteorology and Climatology	weather and climate dynamics	Identification and tracks of Mediterranean cyclones, climatology and impacts of Mediterranean cyclones, development of identification algorithm of cold fronts in the Mediterranean and their climatology, teleconnections patterns affecting Mediterranean climate, the role of upper level dynamics and sea surface fluxes in the Mediterranean cyclogenesis, dynamics of intense mesoscale systems	<ul style="list-style-type: none"> <li>• A powerful workstation with Unix operation system for the implementation of the MS identification and tracking cyclonic Algorithm</li> <li>• Two computational systems with Windows OS with statistical software (e.g. SPSS and Statistica), Interactive Data Language (IDL),</li> <li>• Technical computing software (MatLab), the analysis and display algorithm GrADS, R - Programming Environment for Data Analysis and Graphics</li> <li>• The tracking algorithm MS developed by University of Melbourne, Australia and modified by our group for Mediterranean along with the Vertical Tracking Algorithm that was developed by our group in collaboration with the University of Melbourne</li> <li>• The front identification algorithm MedFTS that was developed by our group in collaboration with the University of Melbourne</li> <li>• Climatic Data bases of station data in the Mediterranean region, reanalysis data (NCEP and ERA), climatic model data</li> </ul> Collaboration with other research group of the same Department that has expertise in regional meteorological models	<a href="http://env.phys.uoa.gr/fileadmin/env.phys.uoa.gr/uploads/Profile_Omadas_Floca.pdf">http://env.phys.uoa.gr/fileadmin/env.phys.uoa.gr/uploads/Profile_Omadas_Floca.pdf</a> AND <a href="http://en.env.phys.uoa.gr/fileadmin/env.phys.uoa.gr/uploads/Floca_CV_EN.pdf">http://en.env.phys.uoa.gr/fileadmin/env.phys.uoa.gr/uploads/Floca_CV_EN.pdf</a>
<b>SOFIANOS Sarantis</b>	Ocean Physics And Modeling Group	Physical Oceanography	The OPAM group has significant expertise on various aspects of the Physical Oceanography of the Mediterranean Sea and its sub-basins. The main research activities are focused on the study of the general circulation and the interaction with the atmosphere. Both data analysis and numerical modelling are used as tools for those studies. The group is involved in operational oceanography with the development of high-	For the operational and other research activities, the group has a significant hardware infrastructure, which includes a large number of Linux Workstations. The group has also the infrastructure and equipment to carry out in situ campaigns with traditional and innovative (e.g. autonomous instruments) in situ instrumentation.	<a href="http://www.oc.phys.uoa.gr">http://www.oc.phys.uoa.gr</a>

			<p>resolution operational numerical models (<a href="http://www.oc.phys.uoa.gr/oceanf.html">http://www.oc.phys.uoa.gr/oceanf.html</a>) and a wave forecast system (<a href="http://www.oc.phys.uoa.gr/dok1.htm">http://www.oc.phys.uoa.gr/dok1.htm</a>), which goes from global to regional down to coastal scales and represents the University of Athens at the Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS). During the 20 last years, the group participated in several national and international projects funded by different organizations (EU, ONR-USA, GSRT-Greece), covering several aspects of the regional and large-scale ocean dynamics and operational activities (e.g. FP5 ADIOS project, FP6 ECOOP project, DIAVLOS project, FP7 MARINA Platform project, FP7 MyOcean project, TOSCA Med project, MEDESS4MS Med project).</p>		
<b>TOMBROU Maria</b>	Numerical Applications in the Atmosphere	Atmospheric Boundary Layer/Physical and Chemical Processes/Cloud–Aerosol interactions	<p>Numerical simulations have been performed with the WRF_Chem and WRF/CAMx mesoscale models to:</p> <ul style="list-style-type: none"> <li>• Investigate the marine boundary-layer spatial structure over the Aegean Sea, during periods of the Etesian flow (Tombrou et al., 2015; Dandou et al., 2017).</li> <li>• The study the composition of the atmosphere under the influence of biomass burning activity as well as the influence of biogenic emissions and the realistic representation of the stratosphere-troposphere exchange processes (Bossioli et al., 2016).</li> <li>• To understand and quantify the cloud–aerosol interactions and the corresponding radiative forcing in various marine boundary layer structures (Methymaki et al., 2020)</li> </ul>	The group members are expert scientists on Atmospheric Physics, Chemistry and Dynamics having extensive experience in using the LES, WRF, and the on-line WRF_Chem models. Apart from NKUA computer facilities, we also have access to GRNET ( <a href="https://grnet.gr/en/">https://grnet.gr/en/</a> ) advanced cluster of multi-node parallel processing platforms and its advanced storage device.	<a href="http://env.phys.uoa.gr/fileadmin/env.phys.uoa.gr/uploads/Tombrou_cv_gr.pdf">http://env.phys.uoa.gr/fileadmin/env.phys.uoa.gr/uploads/Tombrou_cv_gr.pdf</a>

UNIVERSITY OF BUCHAREST - Romania

contact person : Filuta Ionita [filuta.ionita@cdi.unibuc.ro](mailto:filuta.ionita@cdi.unibuc.ro)

SUPERVISOR	RESEARCH LAB/GROUP	AREA OF EXPERTISE	LINES OF INVESTIGATION	KEY FACILITIES	WEBSITE
<b>Mihai Emilian Popa</b>	Laboratory of Palaeontology	Palaeontology, Geology	Palaeobotany, palynology, palaeoalgology, terrestrial palaeoecology, coal geology, continental sedimentology, stratigraphy, geoconservation	Laboratory for palaeobotany and palynology: HF fume hood, centrifuge, optical microscopes, dissecting microscopes, digital cameras, workstations, printers, scientific library, scientific fossil and rock collections. Field laboratory in Bigăr, South Carpathians.	<a href="https://unibuc.ro/user/mihaiemilian.popa/">https://unibuc.ro/user/mihaiemilian.popa/</a> <a href="https://mepopa.com/paleoresearch.htm">https://mepopa.com/paleoresearch.htm</a> <a href="https://mepopa.com/library.htm">https://mepopa.com/library.htm</a> <a href="https://mepopa.com/collection.htm">https://mepopa.com/collection.htm</a> <a href="https://mepopa.com/dilpo.htm">https://mepopa.com/dilpo.htm</a> <a href="https://mepopa.com/paleoresearch.htm">https://mepopa.com/paleoresearch.htm</a>
<b>Iulian POPA</b>	Fac. of Geology and Geophysics – Geological Engineering Dept.	Hydrogeology	Groundwater resources and reserves assessment (quantity and quality), Natural mineral water investigation Pumping tests interpretation Flow, mass transport and stability around salt domes, Salt mining by dissolution	Field car Field Equipment for piezometric and physico-chemical measurements	<a href="https://unibuc.ro/user/iulian.popa/?lang=en">https://unibuc.ro/user/iulian.popa/?lang=en</a> <a href="https://gg.unibuc.ro/organizare/departamentului-ingenierie-geologica/">https://gg.unibuc.ro/organizare/departamentului-ingenierie-geologica/</a>
<b>Ileana Stupariu</b>	Research Centre for Landscape, Territory and Information Systems CeLTIS	Research interests are related to: Landscape Ecology and Geographic approaches (nature and society).	landscape fragmentation, landscape dynamics, ecosystem/ landscape (di)services, landscape planning, land use / land cover change, cultural landscape, ecological modelling using 3D data and deep learning/AI/ML	CeLTIS is part of the Research Institute of the University of Bucharest ICUB <a href="https://icub.unibuc.ro/research/research-groups/">https://icub.unibuc.ro/research/research-groups/</a> Facilities such as office, conference room, seminars rooms are available at ICUB. The center CeLTIS has its own equipment (1 graphic station DELL; 1 Laptop Acer; 1 desktop; 1 Canon printer BP5970; 1 Canon copy machine, 2 GPS Garmin) and software licenses (Microsoft Office 2003/2007/2010; Microsoft 7; ArcGIS 10.1; Corel Draw). The centre also owns geodatabases (maps in digital format, high resolution remote sensing LiDAR data, historical maps collection, topographical maps at different scales, etc.). A set of two data loggers for field measurements and other specific equipment are already available	<a href="http://landscape.cc.unibuc.ro/">http://landscape.cc.unibuc.ro/</a> <a href="https://icub.unibuc.ro/research/research-groups/">https://icub.unibuc.ro/research/research-groups/</a>
<b>Vespremeanu-Stroe Alfred</b>	Sfântu Gheorghe Marine and Fluvial Research Station /  GEODAR Research Group for Geomorphology, Geoarchaeology and Paleo-environments	Coastal geomorphology;  Paleogeography  Geoarchaeology	Beach-Dune interactions Nearshore bars dynamics Coastal evolution River deltas Human-landscape interactions Neolithic colonization of SE Romania	Our research station is equipped with the following infrastructure: marine research vessel Merry Fisher 530 (with Evinrude 90 HP engine), fluvial research vessel Rebel 400 (with Selva 25 HP engine), Nortek Vector 3D current meter, Level Troll 700 pressure sensor, RTX 1930 water level pressure sensor, Echo-sounding equipment (Valeport MIDAS Surveyor, Garmin GPSMAP 166 and Garmin GPSMAP 298C Sounder), DGPS Leica VIVA Coring equipment (Vibro-coring engine, Auger, Split-Spoon, Push Core, Piston Core, Gage) Eijkelkamp percussion corer with Cobra TT engine (up to 20 m cores) Lamote Sampling Dredge 5110 bottom sediment sampler HI9828/20 Multiparameter water quality meter (13 parameters measured) Water test 3150 (pH, ORP, conductivity and temperature) HI98713-2 Turbidimeter Marvel 6035 portable turbidimeter	<a href="http://www.coastalresearch.ro">www.coastalresearch.ro</a>

				HI98203 salintest Optical instruments for biological and ecological studies Satellite imagery facilities	
<b>Armas Iuliana</b>	Center for Risk Studies CRMD		Fluvial geomorphology; landslide susceptibility and hazards; index-based spatial methodologies for disaster vulnerability and risk assessments; RS in disasters and InSAR displacement maps; risk perception and risk-related behavioural research.	IT infrastructure, dedicated software; data base Orthophotomaps; LiDAR DEM etc.	<a href="http://www.geodinamic.ro">www.geodinamic.ro</a>

SUPERVISOR	RESEARCH LAB/GROUP	AREA OF EXPERTISE	LINES OF INVESTIGATION	KEY FACILITIES	WEBSITE
Jean-François Flot	Research group "Ecological and Evolutionary Genomics" within the Evolutionary Biology & Ecology research unit	genome assembly, marine biology, coral biology, cave biology, species delimitation, molecular systematics, experimental evolution, bioinformatics	<p>The overall research goal of our group is to find out how the ecology of organisms influence the evolution of their genomes. To do so, we mainly focus on two types of ecosystems: coral reefs and terrestrial caves. We are working actively on organisms as diverse as marine and freshwater amphipods, scleractinian corals, chemoautotrophic bacteria and bdelloid rotifers. We develop new software for species delimitation as well as for genome assembly, and we perform experimental evolution on yeast and bacteria.</p> <p>Our research group (composed presently of 1 PI, 7 PhD students, 4 MSc students and 4 interns) is very international and its everyday language is English.</p>	Access to state-of-the-art computing clusters, molecular biology lab with sterile PCR cabinets, PCR machines, a separate post-PCR room for gel electrophoresis, several nanopore sequencers, access to the ULB/VUB sequencing facility (BrightCORE) as well as to state-of-the-art computing clusters ( <a href="http://www.ceci-hpc.be">http://www.ceci-hpc.be</a> ).	<a href="https://ebe.ulb.ac.be/ebe/Flot.html">https://ebe.ulb.ac.be/ebe/Flot.html</a>



**SAPIENZA UNIVERSITY OF ROME - Italy**

contact person: [rosa.distefano@uniroma1.it](mailto:rosa.distefano@uniroma1.it)

SUPERVISOR	RESEARCH LAB/GROUP	AREA OF EXPERTISE	LINES OF INVESTIGATION	KEY FACILITIES	WEBSITE
<b>Paolo Aldo Audisio</b>	Evolutionary & Conservation Biology of Insects	Evolutionary Biology; Insect Conservation Biology; Insects taxonomy and phylogeny	Evolutionary Biology; Insect Conservation Biology; insects taxonomy and phylogeny	Molecular Biology Laboratory; SEM and optical tools; hardware and software for analyses in the field of biostatistics	<a href="https://www.researchgate.net/profile/Paolo_Audisio">https://www.researchgate.net/profile/Paolo_Audisio</a>
<b>Maurizio Barbieri</b>	Environmental Geochemistry and Hydrogeochemistry	Water quality, Environmental Geochemistry, Isotope Geochemistry	Water quality, Environmental Geochemistry, Isotope Geochemistry	Geochemical tracers in hydrological studies; interactions between water and the geological and chemical environment; quantitative understanding of chemically based processes in hydrogeochemical environments and complementary physical and biological processes and conditions; kinetics and equilibria of geochemical reactions; the movement of isotopes and soil chemistry; freshwater-seawater interactions in coastal aquifers; basic and applied research on speciation and transformation of trace metals and metalloids during biogeochemical processes in both natural and anthropogenic environments; radiogenic and stable isotope geochemistry. Other fields of expertise are application of the geochemistry methodologies for the characterization of environmental problems. In particular the role of toxic trace elements (e.g. As, B and Hg), deriving from hydrogeochemical anomalies of natural origin, on water quality. Ion chromatography, ICP-MS, water, soil and geological mapping, univariate and multivariate analysis of geochemical datasets, Isotope analyses of Sr, H, O and B.	<a href="http://www.dst.uniroma1.it/Barbieri">http://www.dst.uniroma1.it/Barbieri</a>
<b>Carlo Cellamare</b>	LABSU - Laboratorio di Studi Urbani "Territori dell'Abitare" / Urban Studies Lab "Dwelling Territories"	Cities, planning, suburbs, participation, dwelling	His research items are the study, even with an interdisciplinary approach, of the relationship between town planning and urban practices, of the relationship between everyday life dimension and the global processes of urban structure developing and growing, of the regeneration of the peripheries, with special attention to Rome. He has developed his researches even through research-action experiences and innovative participatory design and planning processes.	Desk, library, nodes of national and international networks	<a href="https://sites.google.com/a/uniroma1.it/laboratorio-studi-urbani-dicea/">https://sites.google.com/a/uniroma1.it/laboratorio-studi-urbani-dicea/</a>
<b>Alfredo Coppa</b>	HUMAN PALAEOBIOLOGY LABORATORY	Skeletal Biology and Dental Anthropology, Genomic DNA, Virtual Palaeoistology (Micro Ct Scan And Synchrotron)	PROJECT ADAMHO: Analysis Dental Anthropology for the study of Modern Humans Origin; GENOMIC analysis of Italian population; late Homo erectus in Africa	Laboratory: a database in dental morphology of populations from all over the world and from all periods, IT tools for geometric morphometry, laboratory for the preparation of samples for ancient DNA. Research group: extraction and sequencing of ancient DNA.	
<b>Maria Vittoria Corazza</b>	DICEA Area Trasporti	Sustainable Mobility and Transport; Transport Policies; Non-motorized Modes; Urban environment and Mobility; Public Transport and Paratransit; Road Safety for Vulnerable Users	EC-funded research projects on sustainable mobility (recent ones within H2020: ELIPTIC - Electrification of Public Transport in Cities; EBSF_2 - European Bus System of the Future)	No specific facilities required; DICEA laboratories available	<a href="https://phd.uniroma1.it/web/-MARIA-VITTORIA-CORAZZA_nC1241_IT.a_sdx">https://phd.uniroma1.it/web/-MARIA-VITTORIA-CORAZZA_nC1241_IT.a_sdx</a>
<b>Daniela De Leo</b>	Planning in the unequal cities	urban planning, planning theory and practice, sustainable urban development	National and international research activities focuses on important challenges for the Urban Planning theories and practices such as conflicts, stressful and marginal places, strong asymmetry of powers, inequalities.	Desk, library, nodes of national and international networks	<a href="https://uniroma.academia.edu/DanielaDeLeo">https://uniroma.academia.edu/DanielaDeLeo</a>

<b>Moreno Di Marco</b>		Biodiversity Conservation; Climate Change; Nature's Contribution to People; Pandemic Risk; Sustainable Development;	I am a conservation biologist with a passion for addressing the challenges that global change poses to biodiversity. I am a former MSCA Fellow, and current Rita Levi Montalcini Fellow. My research group is especially interested in developing quantitative techniques for addressing large-scale conservation problems, and evaluate how the solutions to these problems interact with the achievement of other societal goals (such as food production, climate change mitigation, improved human well-being).	The BBCC Department at Sapienza operates excellent laboratories and research facilities, libraries with a wealth of modern and historical books, reading rooms and museums. In particular, the following benefits will be made available to each fellow in the Zoology building (part of the BBCC department): a personal laboratory space with a desk and phone; electronic facilities such as internet access, e-mail address, on-line library, journal subscription and personal webpage; and a personal computer. Access to the departmental computational centre will also be granted, as well as access to the world-class Italian High Performance Computing infrastructure CINECA.	<a href="https://morenodimarco.wixsite.com/research/">https://morenodimarco.wixsite.com/research/</a>
<b>Giovanni Laneve</b>	EOSIAL	Satellite image processing	precision agriculture, land cover mapping, disaster management, environmental monitoring	Workstation, drone, satellite images acquisition system, field campaign instruments	<a href="http://eosial.psm.uniroma1.it/">http://eosial.psm.uniroma1.it/</a>
<b>Luigi Maiorano</b>	Macroecology and Conservation Lab	Biogeography, Macroecology, Species Distribution Models, Global Change Biology	Response of animal biodiversity to climate change	Pc and workstation in a modelling lab	<a href="http://www.maioranolab.com">http://www.maioranolab.com</a>
<b>Frank Silvio Marzano</b>	RadMetEO - RadioMeteorology and Earth Observation	Earth observation, Remote sensing, Satellite communications, Radiopropagation, Microwave radiometry, Radar meteorology, Radar volcanology	Current research concerns passive and active remote sensing of the atmosphere from ground-based, airborne, and space-borne platforms, with a particular focus on clouds and precipitation using microwave and infrared data, development of inversion methods, radiative transfer modelling of absorbing and scattering media, radar meteorology for rain, wind and ash retrieval and synthetic aperture radar data processing for land-use applications and snow cover. The activity is also deeply oriented to electromagnetic propagation studies, including e.m. field scintillation and rain fading modelling and data analysis along satellite microwave and millimeter-wave links. Recently research has been dealing with radar-based retrieval of volcanic ash clouds and free-space optics from a modeling and experimental point of view.	<ul style="list-style-type: none"> <li>- Lab. of Radio Meteorology, Laboratory of measurements connected to the Laboratory of Antennas and Earth Observation (Via Eudossiana 18, Roma, IT) with radioinstrumentation for atmospheric remote sensing.</li> <li>- JointLabAP (Antennas and Propagation), Joint Lab. DIET-ISCOM-FUB on Antennas and Propagation (Viale America 204, Roma, IT) with computers, servers and software for Earth observation and remote sensing.</li> <li>- JointLabRM (Radar Meteorology), Joint Lab. DIET-DPC-CETEMPS on Radar Meteorology (Via Eudossiana 18, Roma, IT) with meteorological radars and surface stations.</li> <li>- CETEMPS, Center of Excellence on Telesensing of the Environment and Model-based Prediction Systems (Joint center with University of L'Aquila, Via Vetoio – 67010 L'Aquila, IT) with remote sensing instruments and multi-core computers, servers and software for environmental modeling.</li> </ul>	<a href="https://cispio.diet.uniroma1.it/marzano/index_eng.html">https://cispio.diet.uniroma1.it/marzano/index_eng.html</a>
<b>Silvano Mignardi</b>		Ore geology, environmental sciences, mineralogical and geochemical characterization of archaeological artefacts	Immobilization of heavy metals (Pb, Zn, Cu, Cd, Co, Ni, etc.) in contaminated water and soil by phosphate treatment. Carbon dioxide sequestration through the synthesis of carbonate minerals. Study of archaeological artefacts (mainly stones and potteries) by means of mineralogical-petrographic and geochemical characterization to define the provenance of the raw materials.	ICP-AES (Varian Vista RL CCD Simultaneous ICP-AES); SEM-EDS FEI-Quanta 400 instrument; XRPD parallel-beam Bruker AXS D8 Advance, operating in transmission in $\theta$ - $\theta$ geometry equipped with a prototype of capillary heating chamber; Cameca SX50 electron microprobe equipped with five wavelength-dispersive spectrometers Laboratory equipped for sample preparation.	
<b>Marco Petitta</b>	Hydrogeology Lab /Laboratorio di Idrogeologia	water resources, groundwater, environmental protection	polluted site remediation, fractured aquifers monitoring, earthquake/groundwater interaction, isotope fingerprinting, Groundwater Dependent Ecosystems, KINDRA H2020 project, KARMA PRIMA project	Monitoring of groundwater level, physico-chemical parameters, spring/river discharge, gas (CO2 and Rn)	<a href="http://www.dst.uniroma1.it/en/Petitta">http://www.dst.uniroma1.it/en/Petitta</a>
<b>Marco Petrangeli Papini</b>	Laboratorio di Processi e Impianti	(Bio)Technological Processes for the Remediation of Contaminated Sites	Study and modeling of chemical/physical and biological technologies for the remediation of polluted soil and groundwater from toxic organic and inorganic compounds (especially Biological Reductive Dechlorination, Permeable Reactive barriers, Aquifer Hydraulic Manipulation coupled with biotech processes)	Laboratory equipped with bioreactors, columns for continuous investigation, instrumental analytical facilities for quantification of organic and inorganic contaminants. Involved in several national operative projects on the development of innovative sustainable technologies for the remediation of real contaminated sites	<a href="https://www.chem.uniroma1.it/dipartimento/persona/marco-petrangeli-papini">https://www.chem.uniroma1.it/dipartimento/persona/marco-petrangeli-papini</a>

<p><b>Laura Sadori</b></p>	<p>Laboratory of palaeopalynology and archaeobotany</p>	<p>Palaeoenvironmental and palaeoclimatic reconstruction of the Mediterranean area</p>	<ul style="list-style-type: none"> <li>• Palynology of long lacustrine records</li> <li>• Archaeobotany of Mediterranean sites</li> <li>• Holocene climatic change vs. human impact</li> <li>• Plant macrofossil study through isotope analyses</li> </ul>	<p>There are two full-equipped laboratories for fossil pollen and macro-remain analyses (seeds and woods), and modern plant reference collection</p>	<p><a href="https://web.uniroma1.it/dip_dba302/utenti_profili_det/456?iris=laura.sadori%40uniroma1.it&amp;offset=0&amp;limit=5&amp;cname=SADORI%20LAURA">https://web.uniroma1.it/dip_dba302/utenti_profili_det/456?iris=laura.sadori%40uniroma1.it&amp;offset=0&amp;limit=5&amp;cname=SADORI%20LAURA</a></p>
<p><b>Vincenzo Stagno</b></p>	<p>Experimental Petrology at high pressure and temperature</p>	<p>Experimental Petrology and Mineralogy of the deep Earth and other terrestrial planets, magma rheology at high P-T, the Deep Carbon Cycle, planetary geology, physics and chemistry of Fe-bearing mantle minerals, origin of diamonds and CO<sub>2</sub>-bearing magmas, oxy-thermobarometry of peridotites and eclogites.</p>	<p>Over the last decade, I have been working on the interplay between the oxidation state of Fe in Earth's mantle minerals and the speciation of volatiles with implications for the origin of a diverse suite of CO<sub>2</sub>-bearing magmas (carbonatites to kimberlites), diamonds, the atmospheric composition and habitability of terrestrial planets. I am an experienced Experimental Petrologist able to reproduce P-T-fo<sub>2</sub> conditions of the Earth's Lower and Upper mantle and the crust. I am intense user of synchrotron radiation facilities (APS Argonne, SPRING8, Elettra, ESRF) where I perform HP-T experiments to determine the physical and optical properties of minerals and melts.</p>	<p>In the frame of the Department of Excellence funded project, I have build up a high pressure lab consisting of diamond anvil cell (DAC) and multi anvil lab capable to reproduce pressures between 2.5 and 150 GPa and temperatures up to 2200K. In addition, I collaborate with mineralogists of my Department owing X-ray diffractometers and Mossbauer 57Fe spectroscopy. My Department offers also the opportunity to perform textural and chemical analyses by scanning electron microscopy (SEM) and electron microprobe (EPMA). Finally, as affiliated to the Istituto Nazionale di Geofisica e Vulcanologia, I have access to further instruments other than the opportunity to interact with colleagues with different expertises (volcanology, geophysics, seismology...).</p>	<p><a href="http://vinstagno.wixsite.com/vincenzostagno-petro">http://vinstagno.wixsite.com/vincenzostagno-petro</a></p>
<p><b>Antonio Zuorro</b></p>	<p>Ingegneria Biochimica e Tecnologie Ambientali</p>	<ul style="list-style-type: none"> <li>• Chemical and Biochemical Engineering;</li> <li>• Green processes;</li> <li>• Biorefinery and Resource Recovery;</li> <li>• Agro-industrial residues valorization;</li> <li>• Extraction of bioactive ingredients from natural matrices and microalgae;</li> <li>• Optimization of enzymatic preparations;</li> <li>• Enzyme-assisted extraction;</li> <li>• Microwave-assisted extraction;</li> <li>• Ultrasonic assisted techniques;</li> <li>• NaDES – Natural Deep Eutectic Solvents;</li> <li>• Innovative solvents;</li> <li>• Green production of bio nanoparticles for environmental and biomedical use;</li> <li>• Degradation of recalcitrant compounds;</li> <li>• Advanced Oxidation Processes;</li> <li>• Materials multiscale modeling;</li> <li>• Microplastics and emergent pollutant treatment;</li> </ul>	<p>The research activities have been developed in several areas of chemical and biochemical engineering, including heterogeneous catalysis, chemical thermodynamics, enzyme kinetics, nanomaterials and microencapsulated systems. At present, the main research topics are the development of innovative and environmentally friendly technologies for the recovery of value-added products from agroindustrial wastes and microalgae, the degradation of recalcitrant organic compounds by advanced oxidation processes and the green synthesis of metal nanoparticles.</p> <p>Regarding the recovery of value-added compounds from plant materials and microalgae, new chemical and enzyme-assisted extraction procedures are investigated. The use of industrial wastewaters and other waste residues for the growth of microalgae is another field of active research. Special attention is given to the optimization of process conditions using advanced statistical methods for the design of experiments and the development of mathematical models.</p> <p>Researches are also being conducted for the development of new functional products for the cosmetic, nutraceutical and food sectors with enhanced antioxidant and antibacterial properties. In this latter area of research, the production of natural honey-based products with anti-quorum sensing properties and broad-spectrum antimicrobial activity is investigated.</p> <p>Most of the above research activities are carried out through international collaborations. The most important research partners are the Université de La Lorraine (Nancy office), the ILAB (Italian - LatinAmerican Biochemical Group) research group, of which Prof. Zuorro is the Coordinator, and in which</p>	<ul style="list-style-type: none"> <li>• Dual-beam UV-Vis spectrophotometer with measuring cell temperature programmer</li> <li>• Microencapsulator</li> <li>• Nanosizer Litesizer 500 analyzer for the measurement of the dimensions and size distribution of nanoparticles and the determination of the zeta potential</li> <li>• Bench-top freeze dryer</li> <li>• Focused microwave system for conducting chemical reactions and the synthesis of materials</li> <li>Potentiostat and Galvanostat Multichannel Biologic sas</li> <li>• AMEL Mod. DX 51 Galvanostat Potentiostat</li> <li>• TOC-5000A TOC analyzer</li> <li>• ISCO thermoreactors for COD determination in water</li> <li>• Mineraliser</li> <li>• Distiller for nitrogen measurement</li> <li>• Ionic chromatograph</li> <li>• UV-VIS Spectrophotometer</li> <li>• Laser particle size analyzer</li> <li>• Atomic Absorption Spectrophotometer graphite furnace</li> <li>• HPLC</li> <li>• Microtox</li> <li>• BOD5 meter</li> <li>• OUR Test meter</li> <li>• Autoclave</li> <li>• Jar-Test device</li> <li>• Millesimal meters for mortar and concrete expansion tests</li> <li>• Heidolph Unimax 1010 orbital shaker</li> <li>• Bench-top centrifuge MPW with fixed angle rotor</li> <li>• Rotary evaporators</li> <li>• Naviglio extractor 500 cc with 0.75 kW coaxial compressor</li> <li>• Thermocryostat</li> <li>• Temperature programmer for thermocryostat</li> <li>• Incubator / chiller 90 liters</li> </ul>	<p><a href="https://sites.google.com/uniroma1.it/greensp/irit/">https://sites.google.com/uniroma1.it/greensp/irit/</a></p>

		<ul style="list-style-type: none"> <li>• Nanocellulose to reinforce biopolymers"</li> </ul>	<p>researchers from the Universidad Industrial de Santander (Bucaramanga, Colombia), the Universidad Francisco de Paula Santander (Cúcuta, Colombia), the Universidad de Santiago de Chile (Chile), the Universidad de Cartagena, the Universidad de Pamplona and the Universidad Central "Marta Abreu" de Las Villas (Cuba) participate.</p>	<ul style="list-style-type: none"> <li>• Well freezer 98 L</li> <li>• Refrigerator 88 L</li> <li>• Microwave oven multimodale</li> <li>• Bench-top dryer with forced air convection</li> <li>• Analytical balances</li> <li>• UV-Vis spectrophotometer with double beam and double monochromator</li> <li>• Bench photometer for the analysis of polyphenols content</li> <li>• Electronic humidity meter</li> <li>• pH meters</li> <li>• Turbidimeter</li> <li>• Dual channel digital thermometer with Pt probes</li> <li>• Homogenizer / Dispenser Ultra Turrax</li> <li>• Luxmeter with radiometric probes</li> <li>• UV-A / UV- lamps</li> <li>• Device for conducting germination / growth tests</li> <li>• Franz's cell for permeability measurements</li> <li>• Glass vacuum filtering system</li> <li>• Diaphragm vacuum pump</li> <li>• Mechanical stirrer rod with speed indicator and set of impellers</li> <li>• Vibrating shaker</li> <li>• Multistirrer magnetic stirrers</li> <li>• Jacketed glass containers of various sizes</li> <li>• Scaling-up tools up to 100 kg</li> </ul>	
--	--	---	---	---	--

**STOCKHOLM UNIVERSITY - Sweden**

contact person: henrik.aspeborg@su.se

SUPERVISOR	RESEARCH LAB/GROUP	AREA OF EXPERTISE	LINES OF INVESTIGATION	KEY FACILITIES	WEBSITE
<b>Agatha De Boer</b>	Department of Geological Sciences	Physical oceanography and paleoclimate	My research is focused around the dynamics of the large-scale ocean circulation and its interaction with climate, now and in the past. Current research interests include the dynamics of the Arctic circulation, now and in the past; the control of deep water formation in various polar regions in a range of climate states; and the interaction between fronts, wind, topography and sea-ice in the Southern Ocean. I address these problems using theory and models of various complexity and through collaboration with observationalists and paleoceanographers.	Climate model simulations can be carried out using resources of the Swedish National Infrastructure for Computer (SNIC) which are annually applied for by the Bolin Centre for Climate Research through a Large Allocation grant. The postdoc will have access to researchers and seminars across the wide spectrum of climate science fields covered in the Bolin Centre as well as to a mentoring program.	<a href="https://www.su.se/english/profiles/adebo-1.189368">https://www.su.se/english/profiles/adebo-1.189368</a>
<b>Annica Ekman</b>	Department of Meteorology	Aerosols, clouds and climate	Mainly numerical modelling of aerosols and their impact on clouds and climate on scales ranging from large-eddy simulation to global climate. Evaluation of the models against observational data. Detection of aerosol effects on clouds and climate in satellite data.	We have access to high-performance computing facilities and mainly use the models NorESM (climate model) and MIMICA (large-eddy simulation).	<a href="https://www.su.se/english/profiles/aekma">https://www.su.se/english/profiles/aekma</a>
<b>Edouard Pesquet</b>	Cell differentiation and coordination in tissues, Department of Ecology, Environment and Plant Sciences	Renewable energy, plant derived products	Understanding of the formation of plant cell walls in the ecosystem as biomass for feed, energy, materials, fine-chemistry and food.	Ranging from biotechnology (tissue culture, inducible pluripotent cell lines), advanced imaging (confocal, 2-photon, microspectroscopy), molecular biology and biochemistry (LC-MS/MS,..)	<a href="https://www.su.se/english/profiles/epesq-1.251402">https://www.su.se/english/profiles/epesq-1.251402</a>
<b>Emily Baird</b>	Insect Sensory Ecology and Cognition Lab, Department of Zoology	Biology/bioinspired engineering	We seek to understand how the small brains and limited sensory systems of insects achieve complex tasks such as object recognition in natural environments.	Insect behavioural lab, X-ray microCT machine for reconstructing high-resolution models of insect eyes for simulations, 4 high powered computers running 3D image analysis software	<a href="https://www.insectlab.u.com/">https://www.insectlab.u.com/</a>
<b>Håkan Berg</b>	Department of Physical Geography	Wetland management, aquatic ecology, ecosystem services, biodiversity	This project would focus on developing strategies for improved management of the Gialova Lagoon in southwestern Greece. A specific focus would be on assessment of wetland ecosystem services/functions, fish and water management. The work would link to the EU horizon 2020 project COASTAL ( <a href="https://h2020-coastal.eu/">https://h2020-coastal.eu/</a> )	Large part of the work would be conducted at Stockholm universities field station Navarino Environmental Research Station in Greece ( <a href="https://www.navarinoneo.se/">https://www.navarinoneo.se/</a> ), but also involve work at Stocholms University main campus ( <a href="https://www.natgeo.su.se/english/">https://www.natgeo.su.se/english/</a> )	<a href="https://www.navarinoneo.se/">https://www.navarinoneo.se/</a>  <a href="https://www.natgeo.su.se/english/">https://www.natgeo.su.se/english/</a>  <a href="https://h2020-coastal.eu/">https://h2020-coastal.eu/</a>
<b>Johan Nilsson</b>	Department of Meteorology	Large-scale ocean circulation, Arctic Ocean, and ice-ocean interactions	Investigations of the Atlantic Ocean circulation and how the flow of Atlantic Water into the Arctic Ocean affects climate, sea ice, and Greenland's marine glaciers. The research involves modeling and observations.	The department offers a strong and vibrant scientific environment in physical oceanography and climate. The group has also unique data from an icebreaker expedition to North Greenland in 2019, which can be used to study how the ocean's impact on the future evolution of the ice sheet on North Greenland and its contribution to sea level rise.	<a href="https://www.su.se/english/profiles/jnils-1.182479">https://www.su.se/english/profiles/jnils-1.182479</a>
<b>Jonas Nycander</b>	Department of Meteorology	Physical oceanography, global carbon cycle	1) Analysis of the global ocean overturning circulation. We use various theoretical and modelling tools that go beyond standard model diagnostics. Examples are particle trajectories, and stream functions with coordinates that explicitly display water mass transformation or the thermodynamic character of the circulation.	The department conducts research in both oceanography, dynamic meteorology, atmospheric chemistry and atmospheric physics, using theory, numerical models and observations. It belongs to the Bolin Centre for Climate Research, which covers most important aspects of the climate system.	<a href="https://www.su.se/english/profiles/nycan-1.182533">https://www.su.se/english/profiles/nycan-1.182533</a>

			<p>2) Tidally forced internal waves, which are responsible for the mixing that drives the overturning circulation. Theory and first-principle computations are compared to observations and used for parameterizing mixing in general circulation models.</p> <p>3) Ocean biogeochemistry and the global carbon cycle. For example, earth system models of intermediate complexity are used to investigate why the atmospheric concentration of carbon dioxide was so low during ice ages.</p>		
<b>Jonathan Martin</b>	Exposomics, Department of Environmental Sciences	Environmental analytical chemistry and toxicology	My research program focuses on the exposome and on development of methods to measure it, which we call exposomics. We combine elements of environmental analytical chemistry and informatics to understand the wide range of environmental contaminants in the environment and in our bodies. Through toxicology and epidemiological studies we further aim to understand the adverse impacts these exposures have on health. In particular I'm concerned with early-life exposures to persistent and bioaccumulative organic contaminants that may alter the normal developmental of humans and wildlife.	I run the Ultratrace Non-Target Laboratory (UNTARGET Lab) at Science for Life Laboratory (SciLifeLab) which houses ultrahigh resolution mass spectrometers for discovery of important new chemical contaminants in air, water, tissues and biofluids. The surrounding research environment at SciLifeLab specializes in genomics, epigenomics, proteomics, functional biology, bioimaging, and biostatistics, creating great possibilities to investigate our questions using best-available biomolecular technologies and methods.	<a href="https://www.aces.su.se/staff/jonathan-martin/">https://www.aces.su.se/staff/jonathan-martin/</a>
<b>Maricela De la Torre-Castro</b>	Department of Physical Geography	Marine and coastal management/governance	All related to marine/coastal spaces: management, governance, institutions, geography, human settlements (livelihood studies), food security, SDGs, gender, seascape, seagrass ecology	All needed for social-ecological studies with focus to marine/coastal areas	<a href="https://www.su.se/english/profiles/maricela-1.192594">https://www.su.se/english/profiles/maricela-1.192594</a>
<b>Matt O'Regan</b>	Marine Geology and Geophysics, Department of Geological Sciences	Arctic Marine Geology and Paleoceanography	We are a world-leading research group on Arctic Ocean paleoceanography and glacial history. We have expertise in marine geophysics, micropaleontology, sedimentology, biogeochemistry and paleoclimate modelling. We work across orbital to millennial-scale timescales, and are interested in advancing research into the past extent of sea-ice and circum-Arctic ice sheets, and more generally on reconstructing environmental conditions in the Arctic across Quaternary glacial cycles.	We have an extensive collection of marine sediment cores from across the Arctic Ocean, and routinely participate in new expeditions on Sweden's icebreaker Oden. We have state-of-the-art facilities for all aspects of core processing and sample analyses.	<a href="http://www.su.se/english/profiles/more">www.su.se/english/profiles/more</a>
<b>Rachel Foster</b>	Planktonic Symbioses Group, Department Ecology, Environment and Plant Sciences	Microbial Oceanography	The primary focus is on the distribution, activity and diversity of marine phytoplankton and their role in biogeochemical cycles and ecosystem function. A strong emphasis is on planktonic symbioses and the development of single cell methods to study the in situ activity and interactions between marine microorganisms.	Standard and advance microscopy platforms (epifluorescence, confocal, TEM), access and expertise in SIMS and nanoSIMS, instrumentation for standard molecular biology methods, temperature controlled growth chambers for experimentation, field equipment for experimentation and sampling in the open sea.	<a href="https://www.su.se/english/profiles/rfost-1.194443">https://www.su.se/english/profiles/rfost-1.194443</a>
<b>Rienk Smittenberg</b>	Department of Geological Sciences	Paleoclimate research, organic geochemistry, stable isotopes, carbon cycle	Measurement and analysis of 'molecular fossils' (organic molecules), and their isotopes, from sediment records and soils as proxies for past environmental and climate change. Reconstruction of past hydroclimate, vegetation, temperature, from lake, ocean and peat records	Facilities to obtain, process and extract sediment core material. Basic geo/chemical analysis like grain size and TOC content, as well as analysis of 'molecular fossils' by GC-MS, HPLC-MS, and compound-specific isotope analysis.	<a href="https://www.su.se/english/profiles/rsmit-1.188830">https://www.su.se/english/profiles/rsmit-1.188830</a>
<b>Sarahi Garcia</b>	Department Ecology, Environment and Plant Sciences	Microbial Ecology and Environmental Microbiology	We investigate the role of microorganisms in the carbon cycle in aquatic environments	Lab is located in SciLifeLab, which is the national research infrastructure for life sciences	<a href="https://www.su.se/english/profiles/saga4727-1.452977">https://www.su.se/english/profiles/saga4727-1.452977</a>
<b>Valentina Di Santo</b>	Department of Zoology	Ocean acidification, Climate change, Biomechanics, Fish physiology	In the Di Santo Lab we explore how abiotic factors alter the performance, behavior, and morphology of fishes. Most of our work focuses on the effect of climate change stressors, such as ocean warming, acidification and hypoxia on physiology and biomechanics of fish locomotion, including swimming, walking and schooling behavior. We also collaborate with engineers to develop bio-inspired underwater robots.	Swim and walking respirometers, fish housing facility, high speed videography, CTscanner, MRI, Natural history collection	<a href="http://www.valentinadisanto.com">www.valentinadisanto.com</a>

SUPERVISOR	RESEARCH LAB/GROUP	AREA OF EXPERTISE	LINES OF INVESTIGATION	KEY FACILITIES	WEBSITE
<b>E. Marie Muehe</b>	Center for Applied Geoscience	Root-Microbe-Mineral Interaction, Metal contamination, Rhizosphere, climate impacts on metal fate in soil-root systems	I am Helmholtz Young Investigator Group Leader (equivalent to an assistant professorship) associated with the University of Tübingen, Department of Geoscience, and the Leipzig Center for Environmental Research. I will start my own lab in May. My research focuses on biogeochemical processes in the rhizospheres of crops and phytoremediating plants when stressed with metallic soil contaminants and a shifting climate. We further elucidate how climate changed coupled with soil contaminants affect microbially produced greenhouse gases in agricultural soils. We investigate biogeochemical changes that occur at the micrometer scale in the rhizosphere to explain macroscopic outcomes of plant productivity and quality. My goal is to contribute to advancing sustainable agriculture, which is key to the global challenge of food security.	At Tübingen, I work in close collaboration with the Kappler lab. We have a fully equipped geochemical laboratory (centrifuges, incubators, gas stations, microsensors and optodes, analytical measurement facilities, anaerobic chambers), microbial cultivation laboratories and a molecular ecology lab (PCR and qPCR cycler, flow cytometry, gel electrophoresis, incubators, clean benches...). At Leipzig, I will be associated with the Environmental Microbiology Department hosting various cultivation and molecular tools.	<a href="http://www.mariemuehe.com/home">http://www.mariemuehe.com/home</a>
<b>Jens Bange</b>	environmental physics @ applied geo-science	atmospheric turbulence, atmospheric boundary layer, wind energy, atmospheric measurement technology, unmanned research aircraft UAS, ground-station networks	wind-energy in complex terrain and off-shore-wind-energy in complex terrain and off-shore - wakes behind wind turbines and wind-energy parks - validation of remote-sensing systems like lidar, sodar, radar - measuring gases in the lower atmosphere - building networks of low-cost ground stations - design of new atmosphere measurement technology - design and operation of unmanned research aircraft - polar research - turbulence, gas and aerosol in situ measurement	High-performance unmanned research aircraft UAS high-performance unmanned research aircraft UAS - eddy-covariance micro-meteorological stations - network of ground stations - wind tunnel - labs for sensor development - wind-energy test site in complex terrain - various data bases of manned and unmanned airborne turbulence measurements	<a href="http://www.umphy.de">www.umphy.de</a>
<b>Christiane Zarfl</b>	Geoscience	Environmental Systems Analysis	understanding and quantification of processes related to anthropogenic pressures on river systems, e.g. fate and effects of organic pollutants, impacts of dam construction on catchment scales	EDV and software for mathematical modelling (Matlab, ArcGIS) laboratory for chemical analysis	<a href="https://uni-tuebingen.de/en/fakultaet/fakultaet/fakultaet/fachbereiche/geowissenschaften/arbeit-gruppen/angewandte-geowissenschaften/umwelt-systemanalyse/">https://uni-tuebingen.de/en/fakultaet/fakultaet/fakultaet/fachbereiche/geowissenschaften/arbeit-gruppen/angewandte-geowissenschaften/umwelt-systemanalyse/</a>
<b>Christian Zwiener</b>	Geoscience	Environmental Analytical Chemistry - analysis, occurrence and fate of micropollutants in the aquatic environment	Development of analytical methods for trace organic compounds (TrOC) Occurrence of TrOCs in environment and in water treatment. Lab-scale experiments to produce and characterize transformation products (TPs) by high-resolution mass spectrometry (HRMS). Occurrence of TPs in environment and in water treatment. In cooperation: effects of TrOCs and TPs and risk assessment.	Chromatography coupled to mass spectrometry (LC), triple quadrupole MS, quadrupole- time-of-flight-MS laboratory infrastructure for sample preparation, water chemical parameters and organic trace analysis lab experiments to mimic environmental processes and water treatment	<a href="https://uni-tuebingen.de/fakultaet/en/mathematisch-naturwissenschaftliche-fakultaet/fachbereiche/geowissenschaften/arbeit-gruppen/angewandte-geowissenschaften/umweltanalytik/">https://uni-tuebingen.de/fakultaet/en/mathematisch-naturwissenschaftliche-fakultaet/fachbereiche/geowissenschaften/arbeit-gruppen/angewandte-geowissenschaften/umweltanalytik/</a>