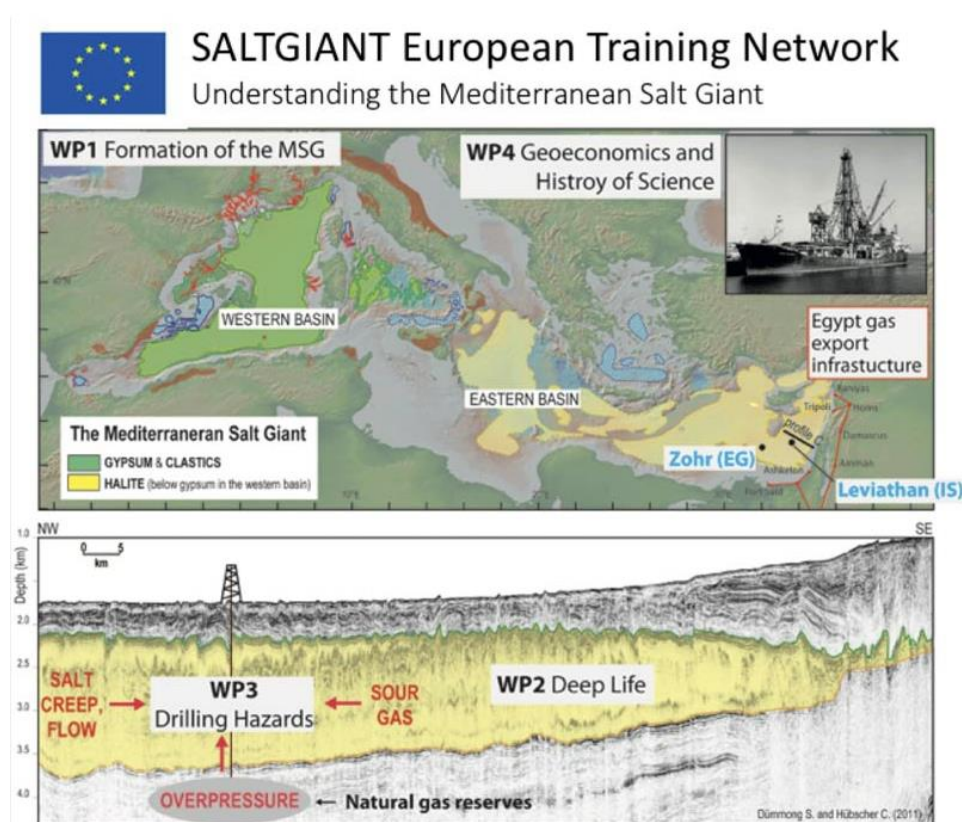


SALTGIANT Newsletter # 3 – February 2020

by Simon Blondel, Fadl Raad and the collaboration of the ESRs

ABOUT SALTGIANT

SALTGIANT is a rare cross-disciplinary network of natural and social scientists dedicated to understand the formation of the Mediterranean Salt Giant, one of the largest salt deposits on Earth, and its implications for sub-seafloor microbial life, risk assessment in the oil industry, geo-economics of the Mediterranean region and the history of oceanography.



SALTGIANT contributes to respond to the growing demand for a new generation of scientists working at the interface between the natural and social sciences.

SALTGIANT brings together 24 academic organizations (13 beneficiaries, 11 partners), 6 private sector Oil&Gas companies, 2 mining sector companies, 1 biotechnology company, 1 geopolitics think tank, 1 museum and 1 specialist in transferable skills training from 11 countries to stimulate interdisciplinary and intersectoral knowledge exchange between geologists, geophysicists, geochemists, microbiologist, geographers and historians in a network with PhD students at its core.

SALTGIANT is developed within the EU MEDSALT COST action: <https://medsalt.eu/the-project/>

NEWSLETTER

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1. Updates

1. Salt Tectonics: Understanding Rocks that Flow, London, United Kingdom (October 29th to 31st 2019)

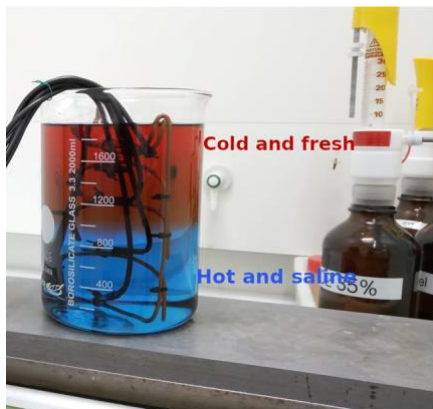
Simon Blondel (ESR 10), Gaia Travan (ESR 13) and Jimmy Moneron (ESR 11) participated to this three-day international conference that brought together leading academic and industry geoscientists. They discovered the new techniques and case studies, capture an up to date assessment of our understanding of salt tectonic processes, and meet other scientists and professionals to expand their network.

2. The rugged reefs of Mallorca, Mallorca Island, Spain (September 15th to 21st 2019)



Last September our ESRs Hanneke Heida (ESR 2), Fadl Raad (ESR 3) and Athina Tzevahirtzian (ESR 4) had the opportunity to enjoy an Indian Summer investigating the fascinating Messinian outcrops of the island of Mallorca, in the Balearic archipelago. Thanks to Guillem Mas, from Earth Sciences Research Group of the Universitat de les Illes Balears (UIB), they were able to visit and discuss several outcrops of interest. The work in Mallorca focused on various aspects of Messinian geology, from the stratigraphic correlation with Sicilian outcrops to the continuation of the units offshore and their implications for post-Messinian local and regional deformation and uplift.

3. An ocean in the beaker



Ronjas Ebner (ESR 7) explored the behaviour of an unstable stratification with a group of four 3rd semester students in the laboratory in Utrecht University. With a simple experiment they tried to assess the Mediterranean Sea's dynamic. They investigated the influence of the temperature on mixing rate and behaviour of water strata. While she hopes to improve her models with those results, it also allowed the student on developing an experimental scientific approach.

2. Fall Semester 2019 activities

1. Saltgiant Short course Modelling in Geoscience, Utrecht, Netherlands (7-10 October 2019)

The course was organized by Paul Meijer of Utrecht University on the topic of modelling applied to the MSC. Students were introduced to both numerical and analogue modelling techniques used in many aspects of MSC research, from geodynamics to water budgets and geochemistry. During the first 3 days, the trainers Paul Meijer, Giovanni Aloisi, Jeroen Smit, Hector Marin Morenon, Ronja Ebner and Hanneke Heida gave an insight into the philosophy, methods, and applications of numerical and analogue modelling in Earth Sciences. The participants also visited the University's Earth-Simulation-Lab.



The Short Course ended with the presentations of two former members of the MedGate project. Walter Capella and Dirk Simon, were both based in Utrecht during their PhD. They gave to the ESRs a valuable insight into how they felt during that time and how they can make collaboration work.

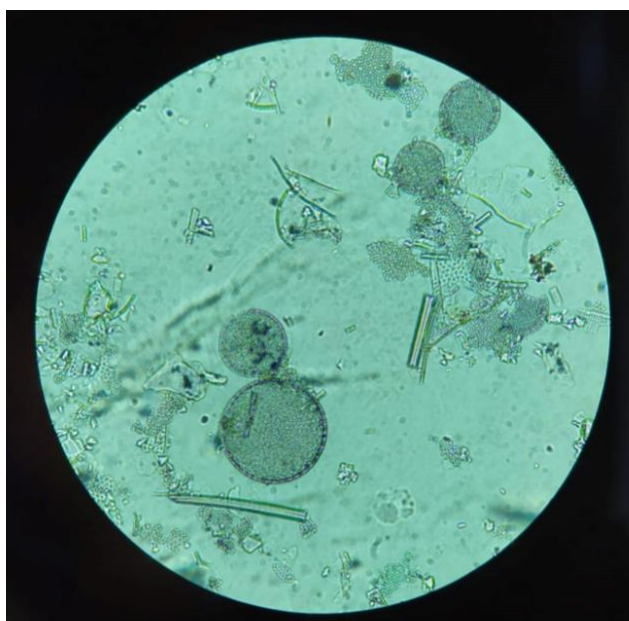


SALTGIANT is an European project funded by the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement n° 765256.

2. SaltGiant Short Course Paleoenvironments, Salamanca, Spain (November, 25th to 29th 2019)

The course was organized by Pr. Francisco Sierro of University of Salamanca to introduce the ESRs to the methods used for the reconstruction of paleoenvironments and paleoceanography. ESRs were presented in detail with the dynamics of evaporite deposition and paleoenvironments (Pr. Francesco Dela Pierre) as well as the analytical methods usually used to investigate the latter (Pr. Jörn Peckmann, Federico Andreetto). Pr. Terry Mcgenity also explained all about microbes and the extreme conditions in which they can live, both in oceans and evaporitic rocks.

Towards the end of the week, the participants visited the Laboratory of Stable Isotopes and Noble gases where Dr. Antonio Valero explained how different stable isotopes were measured and used for paleoenvironmental reconstructions. The participants also took a look into the microscope to observe all the creatures that sea sediments are hiding including: phytoplankton (Alba Gonzalez Lanchas and Dr. Jose Abel Flores), Diatoms (Dr. Andres S. Rigual Hernández and Pr. Maria Ángeles Bárcena Pernía), Zooplankton (Francesca Bulian, Lucía Alonso Azibeiro and Pr. Antonio Caruso) and Ostracodes (Federico Andreetto-UU).



3. Upcoming events : 2020 events

1. MEDSALT Final Symposium, Piran, Slovenia (February 25th to 27th 2020)

In view of the end of COST Action CA15103 Uncovering the Mediterranean Salt Giant (MEDSALT) in March 2020, the Final symposium is organized with the purpose of reviewing the activity performed in the last 4 years, reviewing the scientific achievements and discuss ideas and opportunities for future scientific activity and networking.

2. EGU General Assembly 2020, Vienna, Austria (May 3rd to 8th 2020)

Hanneke Heida (ESR 2), Jimmy Moneron (ESR 11) and Laetitia Guibourdenche (ESR 6) have organized an EGU session with Pr. Christopher Jackson, Pr. Virginie Gaulier; Dr. Jean-Loup Rubino, Dr. Agnès Maillard and Pr. Wout Krijgsman EGU: "Salt Giants: formation, deformation, and resource potential" (SSP1.14).

The objective of this session is to bring together researchers from various disciplines in order to provide new insights into a wide variety of important aspects related to the genesis and evolution of saline basins.

Francesca Bulian (ESR 1), Hanneke Heida (ESR 2), Fadl Raad (ESR 3), Athina Tzevahirtzian (ESR 4), Federico Andreetto (ESR5), Laetitia Guibourdenche (ESR 6), Ronja Ebner (ESR 7), Simon Rouwendaal (ESR 8), Simon Blondel (ESR 10) and Jimmy Moneron (ESR 11) will also present their work.

Two oral sessions of 7 orals each will be held on May, 7th (2pm to 6 pm) and one poster session (20 participants) on May, 8th (from 10:45 to 12:30 am).

Invited speaker :

Dr. Alexandra Turchyn *The Role of Restricted Basins in Global Biogeochemical Cycles*

Confirmed contributions :

Prof. Bilal Haq *Mapping the abyssal Mediterranean's Messinian Evaporite Giant: Salt volumetrics from all deep basins*

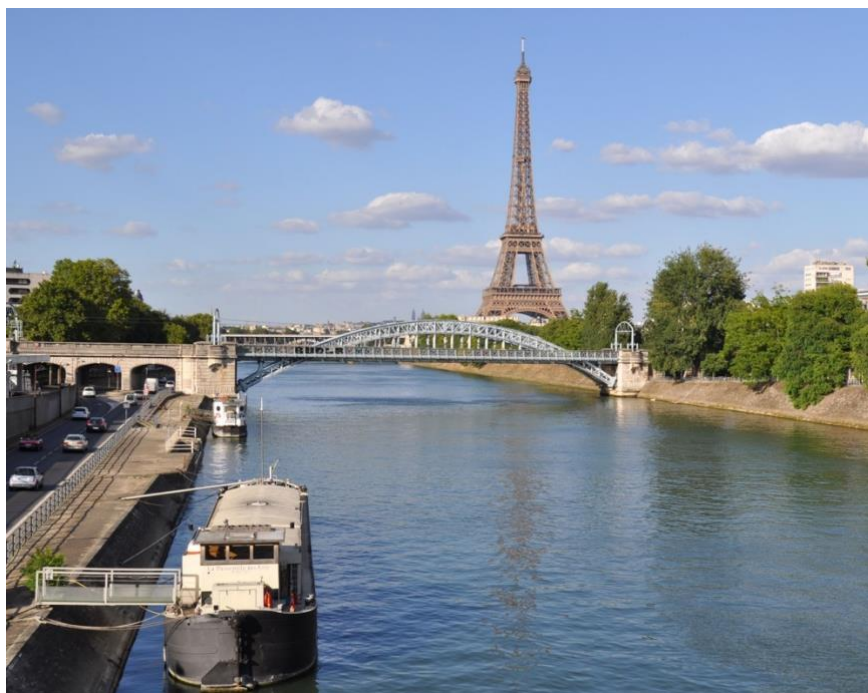
Dr. Giovanni Aloisi. *The geochemical riddle of Mediterranean low-salinity gypsum deposits*

You can find more information about SaltGiant fellow participation to EGU on : <https://meetingorganizer.copernicus.org/EGU2020/session/36472>

3. SaltGiant Short Course Social Sciences and Workshop 3, Paris, France (May 26th – June, 3rd 2020)

The Short course organized by Sorbonne Université and Sciences Po will focus on economic, social, historical, and philosophical aspects of salt giants science. This short course is open to external participations, the deadline to apply is March, 22nd. For more information, read our article on the SaltGiant website: <https://www.saltgiant-etn.com/the-saltgiant-short-course-in-paris-next-may/>

Just after the short course from Monday, 1st to Wednesday, 3rd June, IPGP will host the 3rd SaltGiant workshop. It will be a 3 days event of scientific talks with sessions dedicated to introduce the ESRs results halfway to the end of the project. The consortium will also meet on the 3rd day for the annual supervisory board meeting.



4. SaltGiant Field Course Drilling Training School (November 2020)

The SaltGiant Field Course Drilling Training School will be organized next november in Spain by the CNRS Montpellier, the Salamanca University and thanks to the University of Granada equipments.

The purpose of this field course will be to convey basic knowledge on borehole drilling/coring and downhole logging methods to the ESRs and provide hands-on experience on core data description and logging data acquisition, processing and interpretation.

More information to come, stay tuned on our website page: <https://www.saltgiant-etn.com>

Keep up with the project through social media!

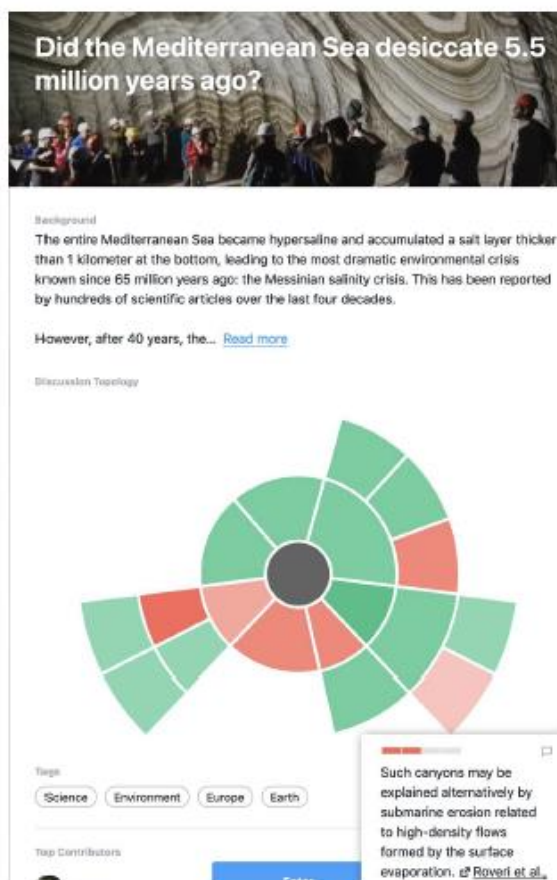
Website : <https://www.saltgiant-etn.com>

Blog : <https://thesaltgiantfellowship.wordpress.com>

Twitter : <https://thesaltgiantfellowship.wordpress.com>

LinkedIn : <https://www.linkedin.com/company/etn-saltgiant/>

Kialo discussion : <https://www.kialo.com/>



Join now the SaltGiant discussion on Kialo contributing the existing (published) scientific arguments you have found in the literature. We currently have around 20 claims and counterclaims already, each with the corresponding reference.

You can also review which arguments you find more sound than others.

Full address:

<https://www.kialo.com/did-the-mediterranean-sea-desiccate-55-million-years-ago-9531>



Università degli Studi di Pavia



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THE HEBREW UNIVERSITY OF JERUSALEM



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