

Scientific symposium on Fluids at Active Transform Margins: Migration, transformations and monitoring

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Monday October 16, 2017

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Monday October 16, 2017

Welcome/introductory session

- 09h00-09h30 Coffee - Welcome of participants
09h30-09h40 Livio Ruffine (Ifremer): Welcome address
09h40-09h55 Jean-Marc Daniel (Ifremer): *Presentation of Ifremer with focus on the Department of Physical Resources and Deep Sea Ecosystems*

Session 1. Overview lectures: Seismicity, geohazards, fluids: learnings from MarsiteCruise Session convener: Louis Géli

- 10h00-10h30 Ziyadin Çakir (ITU): *Onset and mechanism of surface creep on strike-slip faults*
10h30-10h55 Stéphanie Dupré (Ifremer): *Fluid emissions in the Sea of Marmara: distribution, controls and impacts*
10h55-11h20 Pierre Henry (CEREGE): *Creep and seep: the North Anatolian Fault in the Sea of Marmara*

11h20-11h35 Coffee Break

- 11h35-12h00 Louis Géli (Ifremer): *New insights on seismicity from near-fault sea-bottom monitoring*
12h00-12h25 Livio Ruffine (Ifremer): *Gas emissions along the Marmara fault network: Implication of several gas reservoirs with asymmetric degrees of mixing*

12h30-14h00 Lunch Break (Buffet)

Session 2. Tectonics, seismotectonics, stratigraphy

Session convener: Namik Çağatay

- 14h00-14h30 Luca Gasperini (CNR ISMAR- Italia): *Recent advances in submarine paleoseismology*
14h30-15h00 Namik Çağatay (ITU- Turkey): *Paleoseismicity in the SoM: new insights from sediment core and carbonate crust studies*
15h00-15h15 Celine Grall (LDEO/Columbia Univ.- USA): *A tangible stratigraphic model across the Sea of Marmara since MIS-5 transition*

15h15-15h30 Coffee break

- 15h30-15h45 Celine Grall (LDEO/Columbia Univ.- USA): *Active faulting and tectonic activity during the late quaternary on the Southern Shelf of the Sea of Marmara*
15h45-16h00 Kadir Eriş et al. (ITU- Turkey): *Paleo-environmental evolution of the Sea of Marmara over the last few glacial cycles: new evidence from MarsiteCruise cores*
16h00-16h15 Gülsen Uçarkuş et al. (ITU- Turkey): *Sedimentary records of active faulting in Kumburgaz basin, Sea of Marmara*
16h15-17h00 General discussion

Programme, October 16-19, 2017

Tuesday, October 17, 2017

08h30-09h00 Welcome/Coffee

Session 3. Biogeochemical processes and Fauna

Session convener: Livio Ruffine

09h00-09h25 Barbara Teichert (Münster University- Germany): *Geochemical transformations of calcium within pore waters within the Main Marmara Fault zone*

09h25-09h50 Hailin Yang (China University of Geosciences- China): *Geochemical Characteristics of Fe in Sediments from the Sea of Marmara*

09h50-10h15 Hailong Lu (Peking University- China): *Geochemical dynamics of Gas Hydrates within the SoM*

10h15-10h30 Coffee break

10h30-10h55 Nicolas Chevalier (UPMC-LOCEAN- Paris): *Analysis of biomarkers related to the oxidation of methane in marine sediments*

10h55-11h20 H el ene Ondr eas (Ifremer- Brest): *Diversity of seeps in the Marmara sea: Input from MarsiteCruise in situ exploration*

11h20-11h45 Karine Olu (Ifremer- Brest): *Spatial heterogeneity and dynamics of cold-seep biodiversity*

12h00-13h30 Lunch Break (Buffet)

Session 4: *In situ* and onboard methane measurements: New developments and challenges

Session convener: Roberto Grilli

13h30-13h55 Roberto Grilli (IGE- Grenoble): *New sensor for the molecular and isotopic analysis of methane*

13h55-14h20 Carsten Frank (Kongsberg Maritime- Germany): *Integrated observatory systems for long term monitoring of gas emissions in underwater environments*

14h20-14h45 Davide Embriaco (INGV- Italia): *SN4, multi-parameter observations from the SoM*

14h45-15h00 : Coffee Break

15h00-15h25 Nolwenn Le Cuff (Ifremer- Brest): *Innovative system for the onboard determination of isotopic and molecular compositions of methane and carbon dioxide*

15h25-15h50 Dominique Birot (Ifremer- Brest): *New system for methane sensor calibration at high pressure*

15h50-16h15 Emmanuel Rinnert (Ifremer- Brest): *In situ molecular analysis of hydrocarbon gases by Raman spectroscopy: an efficient tool for decision-making during exploration*

Conference dinner

Programme, October 16-19, 2017

Wednesday, October 18th, 2017

09h00-09h15 Welcome/Coffee

09h15-11h00 Free time and specific meetings for involved people

11h00-12h30 Poster Session A

12h30-14h00 buffet

Session 5: Geophysical monitoring, observatories and new perspectives

Session convener: Ziyadin Çakir

14h00-14h30 Nurcan Meral Özel (KOERI-Turkey): *Presentation of Marsite project* (visioconf. from Vienna)

14h30-15h00 Jean-François Rolin (Ifremer): EMSO Perspectives and R&D in seafloor monitoring at Ifremer

15h00-15h25 Carla Scalabrin (Ifremer): Monitoring natural gas sources: BOB (Bubble Observation module) for in situ continuous data acquisition

15h25-15h40 Coffee Break

15h40-16h10 Kerim Tuncer Sarikavak (MTA- Turkey): Presentation of MTA seismic vessel "ORUC REIS"

16h10-16h35 Florian Petersen (GEOMAR- Germany): Seafloor geodesy - lessons from the Chilean margin

16h35-17h00 Walter Roest (Ifremer- Brest): Studying strike-slip faulting off Haiti: the « North Carribean_Limits » project

17h00-18h00 Poster Session B and ice break



Programme, October 16-19, 2017

Thursday, October 19th, 2017

08h30-10h30 Visit of Ifremer Labs (Geochemistry, R&D)

Session 6. General perspectives for future research

10h30-12h30 **Discussion on future projects, Symposium restitution and Actions to be taken**

12h30-14h00 **Lunch Break and End of symposium**

Friday, October 20th, 2017

09h00 Welcome/Coffee

09h30-16h00 Welcome of Pupils for science discovery