The Dead Sea Borehole
The Longest Archive of the Late Quaternary Levant
Geological and Geophysical Environments

November 25th-28th, 2018

PROGRAM

Sunday, November 25th

8:30-9:00   Registration
9:00-10:30  Opening: The Dead Sea ICDP project
            Chair: Moti Stein
            Achim Brauer: The Dead Sea - target of 25 years of joint Israel - GFZ research
            Gerald Haug: Dead Sea climate in a global context
            Rivka Amit: Geo-hazards along the Dead Sea Transform- The GSI perspectives

10:30-11:00 Coffee Break

11:00-12:30 Sedimentology
            Chair: Yehouda Enzel
            Ina Neugebauer: Lithology and microfacies of the ICDP Dead Sea deep core
            Revital Bookman: The role of dust in aragonite deposition at the Dead Sea and Lake Lisan
            Yigal Erel: Cycles of dust mobilization in the late Quaternary Levant

12:30-13:30 Lunch Break

13:30-15:30 World lakes - I
            Chair: Zvi Ben Avraham
            Andy Cohen: The hominin sites and paleolakes drilling project: Investigating the environmental context of human evolution in East Africa and implications for out-of-Africa dispersal
            Flavio Anselmetti: Sediment proxies of glacial/interglacial and stadial/interstadial changes: Examples from Lake Peten Itza and Lake Van.
Yehouda Enzel: Megalakes in the Sahara. Myths and facts.
Nicolas Waldmann: First insights into millennial-scale environmental and climate reconstruction of the last 250,000 years in equatorial East Africa

15:30-16:00  *Coffee Break*

16:00-18:15  **Present to Future research**
Chair: Yigal Erel
Yoav Bendor: The DSDDP core: From microfacies to hydroclimatologysty
Bar Oryan: The ICDP cores and the Dead Sea heat flow
Ido Sirota: Temperature seasonality control on modern halite layers in the Dead Sea: In situ observation
Elan Levy: Dissolution of the Sedom salt diapir as a source for solutes and driving force for dilution of the deep Lake Lisan
Nurit Weber: The paleohydrology of the hot saline springs at the Dead Sea shore
Moshe (Koko) Armon: Synoptic-scale control over heavy rainfall and flash floods in the drylands of the Levant.
Yael Ebert: Reducing environments and their impacts on magnetic properties of sediments

18:15-21:00  *Poster Session and Reception*

**Monday, November 26th**

9:00-10:30  **Paleobotany**
Chair: Ahuva Almogi-Labin
Thomas Litt: New insights into the paleoenvironment of the southern Levant during MIS5
Dafna Langgut: The fossil pollen archive as a proxy to trace the origin of olive cultivation in the Mediterranean Basin
Andrea Miebach: The Vegetation and Fire History of the Last Glacial Dead Sea Region

10:30-11:00  *Coffee Break*

11:00-13:00  **Salt and Brines**
Chair: Mira Bar-Matthews
Boaz Lazar: Interstitial brine composition and halite thickness in the DSDDP core - tools for reconstructing the history of brine volume and lake level
Nadav Lensky: From evaporation to evaporites: Novel observations and concepts from the Dead Sea, the modern analog for deep evaporitic basins
Ittai Gavrieli: Recycling of halite in the Dead Sea basin
Yossi Yechiel: Hydrogeological response to variations in the Dead Sea levels

13:00-14:00  *Lunch Break*
14:00-15:30  **World Lakes - II**  
Chair: **Boaz Lazar**  
**Jingati Han**: The past 6 ka hydrogen isotope record of n-alkanes of the Sihailong maar sediment in Northeast China and possible climatic implications  
**Jing Wu**: Vegetation and climate change in the Great Khingan Mountain Range, Northeast China during the Holocene  
**Shikma Zaanur**: Synoptic-climate conditions in East China during the past 80,000 years inferred from Sr and Nd isotopic compositions of maar lake Sediments

16:00-21:00  Jerusalem Tour

**Tuesday, November 27th**

9:00-10:30  **Geophysics, paleoseismology and paleomagnetism**  
Chair: **Gideon Baer**  
**Michael Lazar**: Geophysical studies and ICDP boreholes in the Dead Sea - an integrated approach  
**Shmuel Marco**: 220-ka paleoseismic record in the Dead Sea Basin  
**Ron Shaar**: Refining the Dead Sea chronology using magnetism  

10:30-11:00  *Coffee Break*

11:00-12:30  **Biogeochemistry**  
Chair: **Michael Lazar**  
**Daniel Ariztegui**: Integrating microbial community analysis of lacustrine sediments to paleoclimatic studies  
**Camille Thomas**: Microbial life and its consequences in the Dead Sea subsurface  
**Jiaqi Liu**: Study on the Bioclimatology  

12:30-13:30  *Lunch Break*

13:30-15:00  **Chronologies**  
Chair: **Amotz Agnon**  
**Steve Goldstein**: Highlights of the revisited DSDDP core chronology  
**Hiroyuki Kitagawa**: Updated radiocarbon chronology of the Dead Sea cores  
**David Fink**: Meteoric 10Be in paleomagnetism and climate change -tracing and dating global sediments from the Dead Sea to Antarctica  

15:00-15:30  *Coffee Break*

15:30-17:30  **Climate and Hydrology**  
Chair: **Steve Goldstein**
Yael Kiro: Changes in Monsoon intensification and North Hemisphere climate indicated by the DSDDP cores
Yochanan Kushnir: The climate of the last interglacial – what do climate models tell us
Adi Torfstein: Climate cycles in the Dead Sea watershed and their global climate engines
Efrat Morin: Mean, variance and trends of Levant precipitation over the past 4500 years from reconstructed Dead Sea lake levels and stochastic modeling

18:00 Visit to the Israel Museum
19:00 Public talks
Chair: Yigal Erel
Mordechay Stein: The Dead Sea borehole: archive of the climate history of Levant during the past 250,000 years

**Wednesday, November 28th**

7:00-19:00 Field trip to the Dead Sea

End of Conference

**Thursday, November 29th**

Optional - Field trip to the Sea of Galilee