9th CrysAC workshop on
“Bio-Apatite, humans, archaeology and environment”
Department of Geosciences, University of Padova
Via G. Gradenigo 6, 35131 Padova, Italy
Tuesday, 17th September 2024

Chairs: Gilberto Artioli (CrysAC past-Chair), Elisabetta Boaretto (Weizmann Institute of Science)
Organizing Committee: Gregorio Dal Sasso (Consiglio Nazionale delle Ricerche CNR-IGG), Yotam Asscher (University of Haifa), Lior Regev (Weizmann Institute of Science)

9.00 Opening Gilberto Artioli, CrysAC past-Chair
Elisabetta Boaretto, Chair (Weizmann Institute of Science)

9.30 - 10.00 Daniel Harlov (GFZ Helmholtz Centre, Potsdam)
“Apatite: A mineral for all seasons”

10.00 - 10.30 Henrik Birkedal (Aarhus University, Denmark)
“Bone apatite hierarchical structure”

10.30 - 11.00 DISCUSSION + BREAK

11.00 - 11.30 Mailys Richard (CNRS, Bordeaux)
“Investigating tooth diagenesis using cathodoluminescence, infrared spectroscopy: implication for radiometric and trapped-charge dating”

11:30 - 12:00 Gregorio Dal Sasso (CNR-IGG) and Yotam Asscher (Haifa University)
“Bone apatite: microstructure, crystallinity and defects”

12.00 - 12.15 DISCUSSION

12.15 - 13.30 LUNCH

13.30 - 14.00 Steve Weiner (Weizmann Institute of Science)
“Bone Structure and Macromolecule Preservation”

14.00 - 14.30 Ina Reiche (C2RMF, Ministère de la Culture, Paris)
“Apatite in museums. From ivory objects to restoration treatments”

14.30 - 15.00 DISCUSSION + BREAK

15.00 - 15.30 Christophe Drouet (CNRS-University of Toulouse)
“Bone apatite: chemical composition, structure, and synthesis of synthetic analogs”

15.30 - 16.00 José Manuel Delgado-López (Universidad de Granada)
Biomimetic nano-apatite: eco-friendly nanotechnology for more sustainable agricultural practices

16.00 - 16.30 DISCUSSION
“Carbonates, humans, archaeology and environment”  

Department of Geosciences, University of Padova, Italy  
Via G. Gradengo 6, 35131 Padova, Italy  
Wednesday, 18th September 2024

9.00 Opening  
Steve Weiner (Weizmann Institute of Science)

9.10 - 9.40  
Emma Cantisani (CNR-ISPC)  
“Multi-analytic approach for evaluating the origin of calcite in ancient mortars”

9.40 - 10.10  
Michael Toffolo (Centro Nacional de Investigación sobre la Evolución Humana CENIEH)  
“Insights into the crystallinity of calcite based on Raman line widths”

10.10 - 10.50 DISCUSSION + BREAK

10.50 - 11.20  
Mariaelena Fedi (LABEC - Weizmann Institute of Science)  
"Dating calcite from mortars: technical aspects when dealing with very small carbon samples"

11:20 - 11:50  
Elisabetta Boaretto (Weizmann Institute of Science)  
“Carbon isotopes in archaeological carbonate: do they contribute to understanding formation processes and diagenesis”

11.50 - 12.15 DISCUSSION

12.15 - 13.30 LUNCH

Important note: Please complete the registration form (https://forms.gle/nrUKCpthSCBtGL82A) before attending the workshop. There are no registration fees.