

International Obsidian Conference Program

Museo Archeologico Regionale “L. Bernabò Brea”

Via del Castello, Lipari

Wednesday, June 1

- 8:30 *Registration*
- 9:15 *Welcome*
Maria Amalia Mastelloni, Director, Luigi Bernabò Brea Archaeological Regional Museum
- Introduction*
Colin Renfrew
- Robert H. Tykot, Yaroslav V. Kuzmin, Maria Clara Martinelli*

Methods

- 9:45 **Keynote I:** Reflections on the contribution of obsidian characterization studies to archaeological research: The role of analytical methods
Michael D. Glascock
- 10:15 SEM and XRF analyses as a tool to discriminate obsidian provenance from archaeological sites of central and southern Italy
Pasquale Acquafredda, Felice Larocca, Italo Maria Muntoni, Mauro Pallara
- 10:35 Sourcing obsidian artifacts by LA-ICP-MS at the SOLARIS platform
Marie Orange, François-Xavier Le Bourdonnec, Anja Scheffers, Renaud Joannes-Boyau
- 10:55 Magnetic granulometry as a sourcing characteristic of archaeological obsidian in the Mediterranean
Enzo Ferrara, Evdokia Tema, Elena Zanella, Elena Pavesio, Andrea Perino
- 11:15 **Coffee Break**
- 11:45 Microstructure, morphology and magnetism of Monte Arci obsidian
Valentina Mameli, Anna Musinu, Daniel Niznansky, Davide Peddis, Guido Ennas, Andrea Ardu, Carlo Lugliè, Carla Cannas

Mediterranean Region

- 12:05 Lipari obsidian in the Late Neolithic. Artifacts, supply and function
Maria Clara Martinelli, Maria Rosa Iovino, Robert H. Tykot, Andrea Vianello
- 12:25 Lipari obsidian sources and distribution in the prehistoric central Mediterranean
Robert H. Tykot

- 12:45 Archaeological obsidian provenance of several Italian Neolithic sites using a non-destructive XRF method
Anna Maria De Francesco, Marco Bocci, Vincenzo Francaviglia, Gino Mirocle Crisci
- 13:05 **Lunch**
- 15:00 Obsidian out of time: evidence from the Late Copper Age settlement at Poggio dell'Aquila - Adrano (Catania, Sicily)
Massimo Cultraro, Lighea Pappalardo, Giuseppe Pappalardo
- 15:20 Sourcing, circulation and technology of obsidian in Neolithic Apulia (South-East Italy)
Italo Maria Muntoni, Francesca Radina, Sandra Sivilli, Maria Clara Martinelli
- 15:40 A long-term perspective on the exploitation of Lipari obsidian in central Mediterranean prehistory
Kyle P. Freund
- 16:00 Towards the Hyperboreans: tracing out a parabola of Sardinian obsidian exploitation and distribution during the Neolithic
Carlo Lugliè, François-Xavier Le Bourdonnec
- 16:20 Research into Characterization and Geochemical Provenance of Obsidian Artefacts from Pantelleria Island, Sicily (Italy)
Emiliano Tufano, Sebastiano Tusa, Angela D'Amora, Marco Trifuoggi
- 16:40 Consumption of obsidian during the Middle Bronze Age: a use wear analysis of obsidian from Kirrha (Phocis, Greece)
Marie-Philippine Montagne
- 17:00 **Coffee Break**
- 17:30 **Poster Session I** (Methods, Mesoamerica, South America, East Asia)
1. Reassessment of an XRF method based on trace elements peak intensity ratios for obsidian provenance determination
Pasquale Acquafredda, Italo Maria Muntoni, Mauro Pallara
 2. Do I really need to analyze the sources myself? Testing the limits of inter-instrumental XRF obsidian data exchange
Jeffrey Ferguson
 3. A comparative study of non-destructive PGAA and XRF used for provenancing archaeological obsidian
Zsolt Kasztovszky, Boglárka Maróti, Ildikó Harsányi, Dénes Párkányi, Veronika Szilágyi, Katalin T. Biró, András Markó
 4. Link between WD-XRF, ED-XRF and P-XRF for archaeological obsidian analyses
Hidehisa Mashima

5. Characterization of the pyroclastic deposit of Cerro Allende (Altotonga, Veracruz), used as aggregate in Teotihuacan plasters
Donatella Barca, Luis Barba, Jorge Blancas, Gino Mirocle Crisci, Linda Rosa Manzanila, Stefano Marabini, Domenico Miriello, Agustin Ortiz, Alejandro Pastrana, Alessandra Pecci
6. Macroscopic and chemical variation in the obsidian of Sierra Las Navajas (Hidalgo, Mexico)
Paola Donato, Rosanna De Rosa, Giancarlo Niceforo, Alejandro Pastrana, Matteo Montesani, Luis A. Barba Pingarron, Gino M. Crisci
7. Lipari (Aeolian Islands, Italy) and Sierra Las Navajas (Hidalgo, Mexico) obsidians: A comparative study
Paola Donato, Rosanna De Rosa, Giancarlo Niceforo, Alejandro Pastrana, Ida Perrotta, Mariano Davoli, Luis A. Barba Pingarron, Gino M. Crisci
8. Provenance of obsidian artifacts from the natural protected area Laguna del Diamante (Mendoza, Argentina) and the upper Maipo valley (Chile) by LA-ICP-MS
Anna Maria De Francesco, Donatella Barca, Victor Durán, Valeria Cortegoso, Ramiro Barberena, Marco Bocci
9. Obsidian sources of northwestern Patagonia (Andean forest region of southern Argentina)
Martin Giesso, Alberto E. Perez, Michael D. Glascock
10. Obsidian in the forest: Chemical characterization of archaeological artifacts from northwest Patagonia, Argentina
Charles R. Stern, Mariana Carballido Calatayud, Cristina Bellelli
11. Obsidian of the Nulgery Paleolithic site in Korea
Jong Chan Kim
12. Obsidian provenance as a tool to study human movements in the Upper Paleolithic, Neolithic, and Paleometal of northeast Asia: an overview of current studies
Yaroslav V. Kuzmin
13. Obsidian sources in the Democratic People's Republic of Korea (North Korea)
Yaroslav V. Kuzmin, Michael D. Glascock, Jong Chan Kim, Clive Oppenheimer, Mi-Young Hong

19:00 **Museum closes**

Thursday, June 2

Europe

- 9:00 Dynamism in the utilization of Carpathian obsidian
Katalin T. Biró
- 9:20 Use of obsidian during the Last Glacial Maximum: case studies from the Ságvárian sites in Hungary
András Markó

Africa

- 9:40 **Keynote II:** Risk and opportunity at Nabro volcano, Eritrea: a deep time perspective
Clive Oppenheimer, Bernard Gratuze, Lamya Khalidi, Bill McIntosh
- 10:10 Obsidian hydration dating of Late Pleistocene deposits at the Mochena Borago rockshelter, Ethiopia
Christopher M. Stevenson, Steven A. Brandt, Alexander Rogers; Stanley H. Ambrose
- 10:30 The effect of latitude on raw material transfers and human social behavior: the case of Palaeolithic obsidian
Theodora Moutsiou
- 10:50 Obsidian sourcing in southwest Arabia and the Horn of Africa: implications for human mobility and interaction in the Neolithic
Lamya Khalidi, Bernard Gratuze, Clive Oppenheimer, Edward Keall, Jessie Cauliez
- 11:10 **Coffee Break**
- 11:40 Obsidian trade across the Red Sea in Neolithic times: the case for Tihamah sites
Vincenzo Francaviglia, Marco Ferretti

Latin America

- 12:00 Geographic vectors of inter-mountain human circulation: the role of Andean obsidian (central Argentina and central Chile)
Martin Giesso, Victor A. Duran, Valeria Cortegoso, Ramiro Barberena, Michael D. Glascock
- 12:20 Obsidian sources and distribution in Patagonia, southernmost South America: a general overview
Charles R. Stern
- 12:40 Spatial and temporal distributions of exotic/local obsidian in the Aisén region, southernmost South America
César Méndez, Charles Stern, Amalia Nuevo Delaunay, Omar Reyes, Felipe Gutiérrez

13:00 **Lunch**

15:00 **Poster Session II** (Mediterranean, Europe, Near East)

14. New data on Antiparos obsidian (Greece) for provenance study by SEM and XRF
Pasquale Acquafredda, Italo Maria Muntoni, Robert H. Tykot
15. A multidisciplinary approach to the study of obsidian fragments: the case of Ustica Island (Palermo, Sicily)
Franco Foresta Martin, Andrea Di Piazza, Claudia D'Oriano, Maria Luisa Carapezza, Antonio Paonita, Silvio Giuseppe Rotolo, Leonardo Sagnotti
16. Semi-quantitative characterization by micro-XRF mapping and SEM/EDS observations of obsidian artifacts from Pantelleria and Levanzo, Sicily (Italy)
Antonella Giarra, Angela D'Amora, Valentina Roviello, Marco Trifuoggi, Emiliano Tufano, Sebastiano Tusa
17. Obsidian from the Bronze Age village of San Vincenzo - Stromboli: provenance, production, use and distribution
Sara T. Levi, Diego Calliari, Valentina Cannavo, Andrea Di Renzoni, Effie Photos-Jones
18. Sicily. The Neolithic site of San Martino: Working and circulation of obsidian from Lipari
Maria Clara Martinelli, Tania Quero
19. Obsidian source selection in the Early Bronze Age Cyclades
Jessica A. Morgan, Robert H. Tykot, Tristan Carter
20. Obsidian industry of Lago di Venere settlement in Pantelleria
Emiliano Tufano, Sebastiano Tusa
21. Obsidian Access along the Adriatic: Sourcing Studies and Maritime Trade in Croatia
Robert H. Tykot, Staso Forenbaher, Damir Kliskic, Zlatko Perhoc, Emil Podrug, Dinko Radic
22. Novel investigations on the mineralogy of Carpathian mahogany obsidian
Károly Lázár, Viktória Kovács Kis, Adél Len, Zsolt Kasztovszky, András Markó, Katalin T. Biró
23. Large-scale provenancing of obsidian artifacts from various sites in the Near East
Stuart Campbell, Elizabeth A. Healey
24. Diffusion of Anatolian and Caucasian obsidian in Iran: elements of explanation in “least cost path” models
Christine Chataigner, Olivier Barge

25. New data on source characterization and exploitation of obsidian from the Chikiani area (Georgia)
Bernard Gratuze, Paolo Biagi
26. Emplacement of obsidian outcrops in Meydan and obsidian characteristics
Anne-Kyria Robin, Damase Mouralis, Ebru Akköprü, Katherine Kuzucuoglu, Bernard Gratuze

16:00 **Lipari Island Tour**

20:00 **Conference dinner**

Friday, June 3

Anatolia and the Near East

- 9:00 Identification and characterization of a new obsidian source in the Nemrut volcano (Eastern Anatolia, Turkey): the Sicaksu obsidian
Anne-Kyria Robin, Damase Mouralis, Ebru Akköprü, Katherine Kuzucuoglu, Bernard Gratuze
- 9:20 Arslantepe (Eastern Anatolia): Procurement of obsidian from Anatolian geological sources during the Chalcolithic and Middle Bronze Age
Damase Mouralis, Massimo Massussi, Ebru Akköprü, Francesca Balosi, M. Korhan Erturaç, Delphine Grancher, Bernard Gratuze, Fatima Mokadem, Katherine Kuzucuoglu, Giulio Palumbi, Anne-Kyria Robin
- 9:40 Obsidian at Mesolithic Sites in Georgia
Ana Tetrushvili
- 10:00 Networks of obsidian use and exchange in the Neolithic eastern Fertile Crescent
Amy L. Richardson
- 10:20 The spread of obsidian on the Iranian Plateau during the Neolithic and the Bronze Age. The possible role of mobile pastoralists
Bernard Gratuze, Marjan Mashkour, Mohamad Hossein Azizi Kharananghi, Ali Zalaghi, Sepideh Maziar, Damase Mouralis, Anne-Kyria Robin
- 10:40 Obsidian in the southern Caucasus between cooking and knapping. The case of the obsidian-tempered ceramics from Aratashen (Armenia) and Mentesh Tepe (Azerbaijan)
Giulio Palumbi, Denis Guilbeau, Laurence Astruc, Bernard Gratuze, Bertille Lyonnet, Christine Chataigner, Armine Harutyunyan

11:00 **Coffee Break**

East Asia

- 11:30 **Keynote III:** The Impact of obsidian source studies on archaeology: A view from the Japanese islands
Akira Ono
- 12:00 New obsidian sources and Late Pleistocene/Early Holocene maritime interaction in southeastern Indonesia - East Timor
Christian Reepmeyer, Sue O'Connor, Mahirta, Tim Maloney
- 12:20 Obsidian provenance for prehistoric sites on Chukotka (northeastern Siberia, Russia): First results and interpretations
Yaroslav V. Kuzmin, Andrei V. Grebennikov, Michael D. Glascock

- 12:40 Internal structures of a Quaternary obsidian lava at Sanuka-yama, Kouzu Island, Japan
Yoshihiko Goto, Keiji Wada
- 13:00 **Lunch**
- 15:00 Transporting Kozushima Island obsidian across the Pacific Ocean at the beginning of the early Upper Paleolithic, Japan
Nobuyuki Ikeya
- 15:20 Changes in obsidian use and human responses to the LGM climate conditions in central Japan
Kazutaka Shimada
- 15:40 Genesis of internal structure of Shirataki obsidian, northern Hokkaido, Japan
Keiji Wada, Kyohei Sano
- 16:00 Provenance study of obsidian artifacts from Hiroppara site in Kirigamine, central Japan
Yoshimitsu Suda
- 16:20 Two contrasting provenances of prehistoric obsidian artifacts in South Korea: mineralogical and geochemical evidence
Yong-Joo Jwa, Seonbok Yi
- 16:40 Obsidian sourcing and characterization in the Celebes region: An initial interpretation on the “Celebes Seafaring People”
Lee Anthony M. Neri
- 17:00 **Coffee Break**
- 17:30 **Discussion**
- 18:00 **Place for next conference; end of meeting; visit museum**
- 19:00 **Museum closes**