

# THE FIRST IUGS 100 GEOLOGICAL HERITAGE SITES

# PROGRAM

October 25

15:00 -18:00

18:00-19:30

## AITA MARI VENUE

October 26

08:30-08:50

## HISTORY OF GEOSCIENCES

Keynote lecture

### The beautiful history of a beautiful science. The historical value of Geosites

Ezio Vaccari. Chair, IUGS Inter. Commission on the History of Geological Sciences (INHIGEO)

09:00

### 001\_Siccar Point, Hutton's Unconformity. UK

Martina Kölbl-Ebert, University of Munich & INHIGEO

09:15

### 002\_The Quaternary Phlegrean Fields volcanic complex. Italy

Kathleen Histon, INHIGEO

09:30

### 004\_The Holocene Puy-de-Dôme and Petit-Puy-de-Dôme volcanoes. France

Kathleen Histon, INHIGEO. Benjamin van Wyk de Vries, Univ. Clermont Auvergne.

09:45

### 005\_The Paleocene volcanic rocks of the Giant's Causeway and Causeway coast. UK

Mark Cooper, British Geological Survey. Patrick N. Wyse Jackson, Trinity College Dublin

10:00

### 006\_Funafuti Atoll. Tuvalu

Sapolu Tetao, Lands and Survey Department

10:15

### 007\_Capelinhos volcano. Portugal

Salomé Meneses, Azores UGGP

10:30

### 008\_Taburiente volcanic Caldera in La Palma island. Spain

Juana Vegas Salamanca, IGME, CSIC

10:45-11:15

Keynote lecture

### International Geoscience Program (IGCP) and Geoheritage

Ozlem Adiyaman. UNESCO Earth Sciences and Geoparks section.

## OXFORD VENUE

### PARTICIPANTS REGISTRATION

Welcome cultural event

Coffee break

## AITA MARI VENUE

### IGNEOUS AND METAMORPHIC GEOLOGY

- 12:00 **045\_Archean Rocks of the Eastern Beartooth Mountains. USA**  
David W. Mogk, Montana State University
- 12:15 **046\_The Stillwater Complex. USA**  
Alan Boudreau, Duke University
- 12:30 **048\_Richat structure, a cretaceous Alkaline complex. Mauritania**  
Michel Jébrak, Université du Québec à Montréal, Canada
- 12:45 **049\_The Miocene Torres del Paine intrusive complex. Chile**  
Camilo Vergara, Ser. Nacional de Geología y Minería de Chile

### VOLCANOLOGY

- 13:00 **052\_The Quaternary Cameroon Volcano. Cameroon**  
Ghislain Zongmo Tefogoum, University of Maroua
- 13:15 **055\_The Holocene Ulmen Maar. Germany**  
Georg Büchel, Universität of Jena, Institute of Geosciences
- 13:30 **056\_The 1905-1911 Matavanu volcanic eruption. Samoa**  
Iakopo Saumalu, Ministry of Natural Resources and Environment
- 13:45 **057\_The active Yasur-Yenkahe volcanic complex. Vanuatu**  
Gary Lee, The Pacific Community-SPC, Fiji.

Lunch (not included in the registration)

- 15:30 **061\_The Cotacachi-Cuicocha volcanic complex. Ecuador**  
Carlos Merizalde, Imbabura UGGp
- 15:45 **062\_The Quaternary Santorini Caldera. Greece**  
Paraskovi Nomikou, Dept. of Geology and Geoenvironment, NKUA
- 16:00 **063\_The vapor phase ignimbrites of Sillar in the Añashuayco Quarries of Arequipa. Peru**  
Diego Medina Núñez, INGEMMET.
- 16:15 **064\_The Pyroclastic deposits from the Huaynayputina volcano eruption 1600 CE. Peru**  
Rigoberto Aguilar Contreras, INGEMMET.
- 16:30 **066\_El Tatio Geothermal field. Chile**  
Camilo Vergara, Ser. Nacional de Geología y Minería de Chile
- 16:45 **067\_The Yellowstone volcanic and hydrothermal system. USA**  
Jamie Farrell, University of Utah

### IUGS MEDALS

Early career geoscientist medal. Mónica Sánchez  
Emile Argand IUGS medal. Thure Edward Cerling

### Keynote lecture

**Isotopes, improbable questions, an unexpected journey**  
Thure Edward Cerling, University of Utah

## OXFORD VENUE

### STRATIGRAPHY

Keynote lecture

**GSSP. Establishment of global standards for the history of the Earth**

**David Harper**, Chair. IUGS International Commission on Stratigraphy

### 013\_Paleoproterozoic Banded Iron Formation of the Quadrilátero Ferrífero. Brazil

Joana Sánchez, Universidade Federal de Goiás

### 014\_Glacial record of the Marinoan snowball Earth. Namibia

Helke Mocke, Geological survey of Namibia

### 015\_The Cambrian Explosion in Sirius Passet. Greenland

David Harper, IUGS- ICS

### 016\_The Great Unconformity at Grand Canyon. USA

Laura J. Crossey, University of New Mexico

### 017\_The Ordovician rocks of the Mount Everest. China and Nepal

David Harper, IUGS- ICS

### 018\_Permyan-Triassic great extinction and GSSPs of Meishan. China

David Harper, IUGS- ICS

### 019\_Carboniferous – Triassic Unconformity in Telheiro. Portugal

João Xavier Matos, LNEG

### 021\_Cretaceous-Paleogene transition at Seymour (Marambio) Island. Antarctica

Jerónimo López-Martínez, Universidad Autónoma de Madrid, Scientific Committee on Antarctic Research (SCAR)

### 022\_Cretaceous – Paleogene stratigraphic section of Zumaia. Spain

Loic Alegret, Univ. of Zaragoza & ICS-IPS

### 023\_GSSP of the Meghalayan Stage in the Mawmluh Cave. India

Satish C. Tripathi, The Society of Earth Scientists

18:00-19:00 Boat trip to Zumaia section

ITA MARI VENUE		OXFORD VENUE
<b>PALEONTOLOGY</b>		<b>GEOMORPHOLOGY</b>
08:30-09:00 Keynote lecture <b>Palaeontological heritage: A journey through the history of life on Earth</b> Isabelle Rouget, International Paleontological Association, IPA		Keynote lecture <b>Geomorphological landscapes: valuable hosts of remarkable Geoheritage</b> Mauro Soldati, Inter. Association of Geomorphologists, IAG
09:00 <b>027_Burgess Shale Cambrian Palaeontological Record. Canada</b> Todd Keith, Parks Canada		<b>079_The Sugar Loaf monolith of Rio de Janeiro. Brazil</b> Joana Sánchez, Universidade Federal de Goiás
09:15 <b>028_Ordovician Fezouata Shale fossil site at Jbel Tizagzaouine. Morocco</b> Khadija El Hariri, Université Cadi Ayyad		<b>084_The Grand Canyon. USA</b> Karl E. Karlstrom, University of New Mexico
09:30 <b>029_Middle Ordovician giant trilobites of Canelas Quarry, Portugal</b> Artur Abreu Sá, Arouca UGGp		<b>087_Dry Falls and The Channeled Scabland. USA</b> Stanley Finney, California State University
09:45 <b>032_Late Permian Tete Fossil Forest. Mozambique</b> Nelson Ernesto Nhamutole, National Museum of Geology		<b>088_Jutulhogget Canyon. Norway</b> Tom Heldal, Geological Survey of Norway
10:00 <b>033_The Ammonite Slab of Digne-les- Bains. France</b> Nicolas Charles, French Geological Survey (BRGM)		<b>089_Perito Moreno Glacier. Argentina</b> Piotr Migoń, Inter. Association of Geomorphologists, IAG
10:15 <b>034_Jurassic Solnhofen-Eichstätt Archaeopteryx serial site. Germany</b> Roland Eichhorn, Geological Survey of Bavaria (Germany)		
10:30-11:00		Coffee break
11:15-11:45 Keynote lecture <b>Past, present and global challenges for Geoconservation</b> Lars Erikstad, President, International Association for the Conservation of Geological Heritage, ProGeo		
11:45 <b>037_Late Cretaceous Rudist Bivalves of the Caribbean province. Jamaica</b> Sherene James-Williamson, University of the West Indies		<b>090_Rockglaciers of the Engadine. Switzerland</b> Isabelle Gärtner-Roer, University of Zurich
12:00 <b>038_Eocene paleontological record of Messel Pit Fossil Site. Germany</b> Marie-Luise Frey, Welterbe Grube Messel gGmbH		<b>092_Yardang (Kalut) in the Lut Desert. Iran</b> Alireza Amirikazemi, Member of the Scientific Committee of Lut Desert World Heritage Base
12:15 <b>039_Miocene Primates Paleontological site of Napak. Uganda</b> Jackline Nyiracyiza Besigye, Ministry of Tourism, Wildlife and Antiquities		<b>093_Namib Sand Sea. Namibia</b> Piotr Migoń, Inter. Association of Geomorphologists, IAG
12:30 <b>040_Lesvos Early Miocene Petrified Forest. Greece</b> Nikolaos Zouros, Lesvos Petrified Forest UGGp		<b>095_Vajont landslide. Italy</b> Paola Coratza, University of Modena and Reggio Emilia
12:45 <b>041_Palaeoanthropological Sites of Human Evolution of Laetoli–Olduvai Gorge. Tanzania</b> Ramadhani Khatib, Ngorongoro Conservation Area		<b>096_Pamukkale Travertines. Turkey</b> Mehmet Özkul, Pamukkale University
13:00 <b>042_Late Quaternary asphalt seeps and paleontological site of La Brea Tar Pits. USA</b> Lori Bettison-Varga, Natural History Museum of Los Angeles County		<b>098_Škocjan Caves in the Classical Karst. Slovenia</b> Matevž Novak, Geological Survey of Slovenia
13:15		<b>099_Sac Actun Underwater Cave System. Mexico</b> Rafael López Martínez, Univ. Nacional Autónoma de México
Lunch (not included in the registration)		

15:00-15:30	<b>GEOCOLLECTIONS</b> A new IUGS recognition for the greatest geological collections at international level <b>Rachel Wallcot, Angela Ehling &amp; Marcela Gómez,</b> IUGS-ICG. Subcommission on Geocollections
15:30-16:30	<b>THE FIRST 100</b> Evaluation and selection process Definition and main standards. What is next? <b>Asier Hilario, Benjamin Van Wyk de Vries, Juana Vegas, Zhang Jianping,</b> IUGS - ICG. Subcommission on Sites.
16:30-17:45	<b>IUGS STONE HERITAGE DESIGNATIONS</b> <b>Kaur Gurmeet, Angela Ehling &amp; Victor Cárdenas,</b> IUGS-ICG. Subcommission on Stone Heritage

18:00-19:00 Boat trip to Zumaia section

08:30	<b>TECTONICS</b> <b>069_Namakdan Salt Cave. Iran</b> Alireza Amirkazemi, Qeshm island UGGP
08:45	<b>071_Upper Jurassic ophiolitic sequence in La Désirade Island. France</b> Nicolas Charles, French Geological Survey (BRGM)
09:00	<b>073_Northern Snake Range metamorphic core complex. USA</b> David W. Mogk, Montana State University
	<b>MINERALOGY</b>
09:15	<b>075_Tsumeb ore deposit. Namibia</b> Helke Mocke, Geological Survey of Namibia
09:30	<b>076_The giant mercury deposit of the Almadén syncline. Spain</b> José Luis Gallardo Millán, Univ. of Castilla-La Mancha
09:45	<b>077_Deposits of Amethyst of Los Catalanes Gemological District. Uruguay</b> César Goso Aguilar, Univ. de la República. Mauricio Faroane, Servicio Geológico de Uruguay
	<b>IMPACT STRUCTURES</b>
10:00	<b>100_Domo de Araguainha Impact Structure. Brazil</b> Joana Sánchez, Universidade Federal de Goiás
10:15-10:45	
11:00-11:30	<b>GEOLOGICAL SURVEYS SUPPORTING IUGS GEOLOGICAL HERITAGE SITES</b> <b>Juana Vegas,</b> IGME-CSIC / IUGS - ICG.
11:30-12:00	<b>Keynote lecture</b> <b>Global Geopark: Memory of the Earth sustaining local communities</b> <b>Nickolas Zouros.</b> President. Global Geoparks Network. GGN
12:45-14:15	<b>IUGS 60th ANNIVERSARY CELEBRATION FINAL EVENT</b> <i>Official announcement of the First 100 IUGS Geological Heritage Sites</i> <i>IUGS Zumaia declaration and Cultural performance</i>
14:30	Final Lunch (included in the registration)

**EUSKADI**  
BASQUE COUNTRY