

International Mineralogical Association

Working Group

# “Biominerals And Environment”

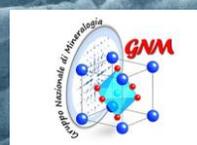
## SUMMER SCHOOL

### Cagliari, Italy, 05-08 September 2023

- ✓ *Biomineralogy*
- ✓ *Minerals and the environment*
- ✓ *Advanced techniques for (bio)minerals characterisation*

**Registration deadline: May, 24<sup>th</sup> 2023**

Further information at the following link: <https://sites.unica.it/biominerals-and-environment>

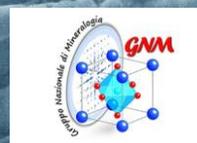


## Organising committee:

G. De Giudici, K. Rosso, K. Hudson-Edwards, J. Maizlan,  
F. Di Benedetto, F. Bellatreccia, P. Di Leo,  
V. Funari e L. Pastero, P. Onnis., D. Medas

## Planned field trips:

- ✓ *Porto Flavia* an industrial archeological dock linked to the mining sites
- ✓ *Santa Barbara Cave* a natural cave hosting barite, calcite and aragonite mineralisation
- ✓ *Ingurtosu - Naracauli mines* a mining site where one of the largest Pb-Zn-Ag district in Italy was exploited



# Programme:

	Biomineralogy and environmental processes		Environmental Mineralogy		field trip and field activity		Investigating BM by High sensitivivity techniques
09:00	Opening and Introduction to the school						
09:30 - 11:00	Molecular processes and iron minerals - K. Rosso	09:00 - 10:30	Sulphide weathering - J. Maizlan	8:30 - 17:30	Field trip, Santa Barbara Cave and Masua Bay, sampling biofilms	09:00 - 10:30	IR microscopy and environment - G. Birarda
11:30 - 13:00	Biomineral generalities - G. De Giudici	11:00-12:00	Fungi weathering and microbiological tools - M. Zotti			11:00-12:30	XAS and synchrotron techniques to investigate biomineral Processes - C. Meneghini
		12:00 - 13:00	Sulphur reducing bacteria and environment - P. Paganin				
14:00 - 15:30	Biomineral, microbiology tools - C. Alisi	14:00 - 15:30	Mine sustainability - K. Hudson-Edwards			14:00 - 15:00	Biominerals and Lichens - P. DI Leo
16:00 - 16:45	Mn oxide and caves microbiological tools - M. Pellegrini	16:00 - 16:45	Application of Phosphates, carbonates and oxalates to environmental remediation - L. Pastero			15:00 - 16:45	Short presentations (students)
16:45 - 17:30	Biomneralization processes in microbial communities: role of bacteria, extracellular polymeric substance and viruses - E. Perri	16:45 - 17:30	Mineral and the environment: risk analysis - A. Vecchio			17:00 - 17:30	final remarks

