

# SUMMER MEETING:

Different perspectives and approaches  
to study a volcanic lake



**The Società Geochimica Italiana (SOGEI) and the  
Commission of Volcanic Lakes (CVL-IAVCEI) welcome  
you to meet our scientific community  
at Monticchio lakes (southern Italy)**

on **25-29 June 2018**

# SCOPE OF THE MEETING

The aim of this proposal is to experience a common scientific activity at the shoreline of two volcanic lakes, the Monticchio lakes in southern Italy, an almost isolated and peaceful place. The participants, students as well as young and senior researchers, will be encouraged to promote discussions on the main themes concerning the methodological approaches that can be used to investigate volcanic lakes under a multidisciplinary umbrella.

In situ measurements of physical-chemical parameters and collection of samples for lab analysis will be carried out at both the lakes.

**The meeting is addressed to:**

**Geochemists, Limnologists, Biologists, Volcanologists,...**

Scientific Committee:

**Franco Tassi, University of Florence, Italy**

**Fatima Viveiros, University of the Azores, Portugal**

**Martin Zimmer, GFZ, Germany**

**Gladys Melian Rodriguez, ITER, Spain**

**Bertram Boherer, UFZ, Germany**

**Cristiana Callieri, CNR-ISE, Italy**

**Jacopo Cabassi, University of Florence, Italy**

**Dmitri Rouwet, INGV Bologna, Italy**

**Antonio Caracausi, INGV Palermo, Italy**

**Guendalina Pecoraino, INGV, Palermo, Italy**

**Michele Paternoster, University of Basilicata, Italy**

Organizing Committee:

**Franco Tassi, Michele Paternoster, Sergio Calabrese, Orlando Vaselli**

**Francesco Capecchiacci, Stefania Venturi, Francesco Magi**

# Monticchio Lakes



## General informations of the meeting site:

The two Monticchio maars formed 140 ky ago during the last eruptive activity of Mt. Vulture. The area is characterized by intense CO<sub>2</sub> degassing. Bubbling gases are present along the lake shore. Lake rollover, fish-kill events were witnessed on June and August 1810 and in 1820, with the formation of water fountains up to 6 m high. Lake Piccolo is the tributary of Lake Grande through an artificial channel. It has a maximum depth of 38 m, a surface area of  $1.6 \times 10^5$  m<sup>2</sup>, and a volume of  $3.98 \times 10^6$  m<sup>3</sup>. The lake morphology is characterized by steep walls, a funnel shape, and a depth-ratio value of 0.64. Lake Grande has a maximum depth of 35 m, a surface area of  $4.1 \times 10^5$  m<sup>2</sup>, and a volume of  $3.25 \times 10^6$  m<sup>3</sup>. A large portion of this lake has a flat bottom not exceeding 12 m depth. As a consequence, its depth ratio is relatively low (0.25). A channel built by monks of the nearby San Ippolito Monastery, to prevent water level increases, connects Lake Grande to the Ofanto river.



**Look at Vulture  
experience!**



<https://www.youtube.com/watch?v=yPIbuF-sT-g>

<https://www.youtube.com/watch?v=AdaWeHs9daw>

<https://www.youtube.com/watch?v=92jVQ6V1Kio>

# Monticchio Lakes



Monticchio monastery

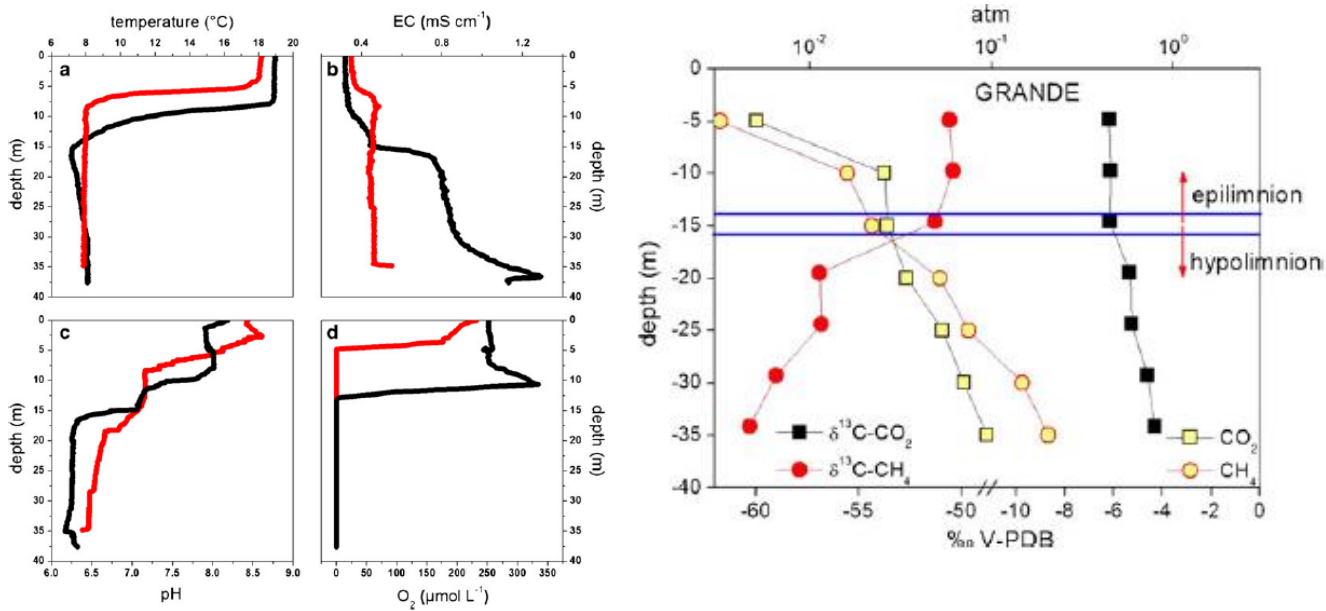


Small boats are available for fieldwork

CO<sub>2</sub> bubbling

CH<sub>4</sub> bubbling

The dissolved gas reservoir shows CO<sub>2</sub> and CH<sub>4</sub> at comparable concentrations (bioactivity-type).



# TIME SCHEDULE



## 25 June

- h. 11.00 am: Departure from Rome (“Roma Termini” train station:) by bus.
- h. 17.00 pm: Arrival at Monticchio lakes. Hotel accommodation.
- h. 20.00 pm: Ice Breaking.

## 26 June

- h. 8.00: Breakfast
- h. 9.30: Workshop presentation
- h. 10.00-13.00: Oral presentations
- h. 13.00-14.30: Lunch
- h. 14.30-19.00: Oral presentations
- h. 20.00: Dinner.

## 27 June

- h. 8.00: Breakfast
- h. 9.00: Fieldwork at Lake Monticchio Piccolo
- h. 13.00: Lunch.
- h. 14.00-19.00: Fieldwork at Lake Monticchio Piccolo
- h. 20.00: Dinner.

## 28 June

- h. 8.00: Breakfast
- h. 9.00: Fieldwork at Lake Monticchio Grande.
- h. 13.00: Lunch (box) at the lake’s shoreline.
- h. 14.00: Fieldwork at Lake Monticchio Grande.
- h. 20.00: Dinner.

## 29 June

- h. 8.00: Breakfast
- h. 9.00: Round Table. An open discussion about present future research of volcanic lakes
- h. 11.00: excursion to Matera (UNESCO site).
- 21.00: Dinner.

## 30 June

- h. 7.30: Breakfast
- h. 9.00: Departure to Roma Termini Train Station by bus.



**BORGO**  
VILLA MARIA




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Treatment (mineral included - soft drinks and wine not included) with buffet breakfast (sweet and savory), lunch box and dinner with three course menu and overnight stay.

All rooms have private bath, TV, minibar, telephone, hair dryer and wi-fi.

Free use of the swimming pools (open every day from 10.00 to 19.00).



See you at the Monticchio  
CVL summer meeting!!!!



« ZI'BILLVS SILVANVS  
RIGVTINAENSIS »