



UNIVERSITÉ
DE GENÈVE

FACULTY OF SCIENCES
Department of Earth Sciences



MeMoVolc workshop on

"Dynamics of volcanic explosive eruptions"

University of Geneva, Switzerland, January 29-31, 2014

Organized by:

*Costanza Bonadonna, University of Geneva, Switzerland; Raffello Cioni, University of Firenze, Italy;
Antonio Costa, INGV, Sezione di Bologna, Italy; Tim Druitt, Université Blaise Pascal, France*

PRELIMINARY WORKSHOP PROGRAM

Wednesday, 29 January 2014 (Room M1140, UNIMAIL)

- 08:30-09:00 Tim Druitt (Université Blaise Pascal, France) Introduction to the workshop
09:00-09:30 Kathy Cashman (University of Bristol, UK) Volatile controls on eruptive style
09:30-10:00 Ulli Kueppers (Ludwig-Maximilians-Universität, Germany) Fragmentation processes

10:00 – 10:30 Coffee Break

- 10:30-11:00 Michael Manga (University of California, USA) Microphysical processes in volcanic eruptions
11:00-11:30 Augusto Neri (INGV Pisa, Italy) Dynamics of eruptive columns and their controls
11:30-12:00 Jeremy Phillips (University of Bristol, UK) Particle transport and sedimentation

12:00-13:30 Lunch (UNIMAIL cafeteria)

13:30-15:00 Break-out sessions (rooms M1140, MR150)

Themes:

- 1) New advances in our mechanistic understanding of a broad range of eruptive styles
- 2) Crucial parameters that drive and characterize explosive volcanism of different types, and the variations in eruptive regime

15:00-15:30 Coffee Break

15:30-17:00 Presentation of results from breakout sessions

19:00-21:00 Poster session and ice breaker at UNIMAIL



Thursday, 30 January 2014 (Room M1140, UNIMAIL)

- 08:15-08:30 Costanza Bonadonna (University of Geneva, Switzerland) Introduction to eruption classification
- 08:30-09:00 Bruce Houghton (University of Hawaii, USA) Strombolian and Hawaiian eruptions and their variations
- 09:00-09:30 Laura Pioli (University of Geneva, Switzerland) Transient and pulsatory explosive activity
- 09:30-10:00 Raffaello Cioni (University of Florence, Italy) Plinian and subplinian eruptions

10:00 – 10:30 Coffee Break

- 10:30-11:00 Armann Hoskuldsson (University of Iceland, Iceland) Subglacial and phreatomagmatic eruptions
- 11:00-11:30 Gregg Valentine (University at Buffalo, USA) Eruptive activity driven by discrete subsurface explosions
- 11:30-12:00 Guido Giordano (University of Roma3, Italy) Caldera-forming eruptions

12:00-13:30 Lunch (UNIMAIL cafeteria)

- 13:30-14:00 Maurizio Ripepe (University of Firenze, Italy) Geophysical constraints of volcanic processes – Part 1
- 14:00-14:30 Matthias Hort (Universität Hamburg, Germany) Geophysical constraints of volcanic processes – Part 2
- 14:30-15:30 Break-out sessions (rooms M1140, MR150)

Themes:

- 1) Main processes that control the temporal evolution of the eruptions, and the frequently observed changes in eruptive style
- 2) Shortcomings of the way explosive eruptions are typically described and characterized

15:30-16:00 Coffee Break

- 16:00-17:30 Break-out sessions (rooms M1140, MR150)

Themes:

- 1) Modern applications and use of eruption classification (advantages and disadvantages)
- 2) Suggestions for an alternative multidisciplinary classification scheme

20:00 Dinner à la Bergerie (Rue François-Bonivard 6, 1201 Genève)



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Friday, 31 January 2014 (Room M1140, UNIMAIL)

08:30-10:00 Presentation of results from breakout sessions

10:00-10:30 Antonio Costa (INGV Bologna, Italy) Wrap up and synthesis

10:30 – 11:00 Coffee Break

11:00-12:00 Plenary discussion (presentation of main points for the compilation of consensual document and suggestions for an alternative multidisciplinary classification scheme)

12:00-12:15 Closing of workshop

12:15-13:30 Lunch (UNIMAIL cafeteria)