



ACCADEMIA NAZIONALE DEI LINCEI
INTERNATIONAL CONFERENCE

**MINERAL PHASES AND SYNTHETIC ANALOGUES
IN EARTH AND MATERIALS SCIENCE**

JUNE 13-14, 2016

Comitato ordinatore: Maria Franca BRIGATTI, Giovanni FERRARIS (Chair), Massimo INGUSCIO,
Stefano MERLINO, Giancarlo NERI, Adriano ZECCHINA

PROGRAMME

Monday, 13 June

14.30 Opening addresses

Session 1 - Minerals and materials science - Chair Adriano Zecchina

14.45 João ROCHA (Universidade de Aveiro): *Materials science: sailing the wind of mineralogy* ("God sleeps in the minerals and thinks in man")

15.20 Carlo LAMBERTI (Università di Torino): *Studies of inorganic and mineral phases at large facilities*

15.55 Giovanni MANA (INRIM, Torino): *Quartz in science and technology*

16.30 Coffee break

Session 2 - Minerals and geophysics - Chair Giuliano F. Panza

16.50 Artem OGANOV (Stony Brook University): *"Forbidden" compounds stabilized by pressure, and their possible role in planetary interiors*

17.25 Mauro PRENCIPE (Università di Torino): *The contribution from the ab initio modelling to the understanding of structure and dynamics of the Earth's interior*

18.00 Fabio ROMANELLI (Università di Trieste): *Seismological inferences about the interior of the Earth: the structure of the lithosphere*

18.35 Maria Luce FREZZOTTI (Università di Milano-Bicocca): *Carbonate metasomatism and CO₂ lithosphere-asthenosphere degassing beneath Italy: an integrated model arising from petrological and geophysical data*

Tuesday, 14 June

Session 3 - Minerals and frontier crystallography - Chair Stefano Merlino

9.10 Luca BINDI (Università di Firenze): *Natural quasicrystals: A new frontier in mineralogy and its impact on our understanding of matter and the origin of the solar system*

9.45 Fabrizio NESTOLA (Università di Padova): *Super-deep diamonds: a window on the very deep Earth*

10.20 Coffee break

Session 4 - A two-way feedback - Chair Maria F. Brigatti

10.40 Christian CHOPIN (Linceo, ENS Parigi): *Index minerals in metamorphism: beyond applied materials science*

11.15 Daniele Malferrari (Università di Modena): *Reactions at the interface between layered minerals, liquid and gasses: a great start for innovative technological and environmental applications*

11.50 Gabriele GIULI (Università di Camerino): *Tektites and impact glasses: an unexpected way of unraveling silicate glasses structure and physical properties*

12.25 General discussion and Closing remarks - Chair Giovanni Ferraris

ROMA - PALAZZO CORSINI - VIA DELLA LUNGARA, 10

Il convegno è organizzato con il contributo di Università di Messina e Fondazione Guido Donegani

La partecipazione al convegno è libera, fino ad esaurimento dei posti disponibili. Si prega di segnalare la presenza

Segreteria del convegno: piemontese@lincei.it - www.lincei.it

Fino alle ore 10 è possibile l'accesso da Lungotevere della Farnesina, 10