



INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON INORGANIC AND MINERAL STRUCTURES

The <u>National Italian Academy of Lincei</u> and the <u>Commission on Inorganic and Mineral Structures</u> (CIMS) of the <u>International Union of Crystallography</u> sponsor and organize the meeting

MICRO- AND MESOPOROUS MINERAL PHASES

Mineralogical, Crystallographic and Technological aspects

6-7 December 2004

Accademia Nazionale dei Lincei - Via della Lungara 10 - Rome (Italy)

Aim

Even exclusive of zeolites, the number of known mineral phases whose structure is characterized by the presence of micro (3 - 20 Å) and meso (> 20 Å) pores is rapidly increasing. This type of compounds has attracted the attention of materials scientists because of their potential applications in nanotechnologies. The same types of porous structures are active in nature and can favour solid-state transformations of primary minerals into secondary ones. The meeting aims to present an overview of the status of knowledge in the field of micro- and mesoporous mineral phases, with main focus on their structural and crystal chemical aspects, but including also their natural occurrence, possible synthesis, chemical-physical characterization, structure-properties relationships, and uses.

Scientific programme

The meeting includes invited and volunteer oral contributions, and a poster session where most of the contributions shall be presented.

Invited contributions

- 1. IUPAC nomenclature for ordered microporous and mesoporous materials and its application to non-zeolite mineral phases. Lynne B. McCusker Zurich (Switzerland).
- 2. Topology of microporous structures. Sergey V. Krivovichev St. Petersburg (Russia).
- 3. Polysomatic aspects of microporous minerals Heterophyllosilicates, palysepioles and rhodesite-related structures. Giovanni Ferraris and Angela Gula Torino (Italy).
- 4. Microporous mixed octahedral-pentahedral-tetrahedral framework silicates. João Rocha Aveiro (Portugal).
- 5. Heterosilicates with tetrahedral-octahedral frameworks Mineralogical and crystal-chemical aspects. *Nikita V. Chukanov* and *Igor V. Pekov* Moscow (Russia).
- 6. Modular microporous minerals: cancrinite-davyne group and CSH phases. **Elena Bonaccorsi** and **Stefano Merlino** Pisa (Italy).
- 7. The sodalite family A simple architecture, but versatile framework structure. **Wulf Depmeier** Kiel (Germany).
- 8. Microporous framework silicate minerals with rare and transition elements Minerogenetic aspects. **Igor V. Pekov** and **Nikita V. Chukanov** Moscow (Russia).
- 9. Tunnel oxides. Marco Pasero Pisa (Italy).
- 10. Apatite An adaptive framework structure. Tim J. White, Cristiano Ferraris, Jean Kim and Madhavi Srinivasan Singapore.
- 11. Microporous and mesoporous sulfides. Emil Makovicky Copenhagen (Denmark).
- 12. Mesoporous mineral phases. Marcello Mellini Siena (Italy).

Organizing Committee

Fausto Calderazzo <u>facal@dcci.unipi.it</u> Stefano Merlino <u>merlino@dst.unipi.it</u>

Giovanni Ferraris <u>giovanni.ferraris@unito.it</u> Annibale Mottana <u>mottana@uniroma3.it</u>

Programme Committee

The invited lectures act as Programme Committee.

Abstract submission

An extended abstract up to five A4 pages, including figures, is welcome (single space between lines and Times 12 character). It must be submitted as electronic file to giovanni.ferraris@unito.it not later than 30 September 2004.

Registration fee

A registration fee of 100.00 euros, inclusive of some social events, is required to be paid at the registration desk of the meeting.

Financial support

A registration fee is not required to students and post-doc participants under 35 years in age. A limited number of financial supports are available. Applicants must be first author of an accepted abstract. A short CV of the applicant and a letter of presentation of his/her supervisor are required and can be sent by e-mail to giovanni.ferraris@unito.it together with the abstract and the application.

The venue

Rome does not need a presentation!

The Accademia Nazionale dei Lincei, the national Italian academy, is conveniently located in the historical centre (Trastevere), Via Della Lungara 10 (Palazzo Corsini), close to Vatican City (see web site). Public transportation is available in the nearby; however, the street net is complicated in the historical centre of Rome and the use of a taxi for the first contact is suggested. From the Rome/Fiumicino (FCO) airport, it can be convenient to use the train to Ostiense or Termini stations; then, a taxi to the Lincei.

Wednesday 8 December 2004 is holyday in Italy and some other European countries; that can be an occasion for spending some days as a tourist in the Eternal City.

Accommodation

Accademia dei Lincei will take care of accommodating the invited lecturers and their company, if requested. Moreover, a number of cheap (for Rome!) lodgings and hotels have an agreement with the Lincei and may be set up for other participant needs.

Sponsors

Besides the organizing Institutions (Lincei and IUCr-CIMS), the following Institutions sponsor the meeting.



The Italian Ministry for Education, University and Research (MIUR) through the FIRB project "Properties and technological applications of minerals and their synthetic analogues" and the PRIN project "Microstructural and modular aspects in minerals: analyses and applications".



The European Crystallographic Association (ECA).



The European Mineralogical Association (EMU).



The International Mineralogical Association (IMA).



The Italian Crystallographic Association (AIC).

The Organizing Committee shall observe the basic policy of non-discrimination and affirms the right and freedom of scientists to associate in international scientific activity without regard to such factors as citizenship, religion, creed, political stance, ethnic origin, race, colour, language, age or sex, in accordance with the Statutes of the International Council for Science. At this meeting no barriers will exist which would prevent the participation of bona fide scientists.

Stazione Termini (Central Station) is within the square



