

**Geochemistry of the earth surface and  
processes of mineral formation**

- I. International Symposium on Geochemistry of the Earth Surface.
- II. International Symposium on Crystal Growth Processes in Sedimentary Environments.

**JOINT MEETING ORGANIZED BY:** International Association of Geochemistry and Cosmochemistry. Working Group of Geochemistry of Weathering, Diagenesis and Sedimentary Processes; and International Mineralogical Association. Commission on Crystal Growth of Minerals. Granada (Spain) 16–22 March 1986.

It is the aim of this meeting to provide a forum to report and discuss recent achievements of the studies of geochemical processes and physical backgrounds of mineral formation on and near the earth's surface, and eventually to find common languages among geochemists, mineralogists, sedimentary petrologists and crystal growth scientists who are interested in such problems. The demand for such a forum have been increased among scientists of many disciplines in recent years.

The Second International Symposium on Crystal Growth Processes in Sedimentary Environments and the First International Symposium on Geochemistry of the Surface, will take place concurrently in the same Conference site, and plenary sessions will be provided for the topics of mutual interest. Namely two Symposia will take place in parallel in the same Campus of the University of Granada. The major part of communications will be presented in the form of posters, but the plenary conferences will be conjoint and referring to topics of mutual interest. Efforts will be made to facilitate as much as possible the "open forum" nature of the meeting for specialists coming from different fields.

Those who are interested in these Symposia may obtain further information from: Dr. R. Rodriguez Clemente. National Museum of Natural Sciences c/José Gutiérrez Abascal, 2, 28006 Madrid. Spain.

**Penrose Conference Announcement**

A Geological Society of America Penrose Conference, "Migmatites and Crustal Melting," will be held June 8–13, 1986, probably at the University of Massachusetts Conference Center, Amherst, Massachusetts. Convenors are Robert J. Tracy (Dept. of Geology and Geophysics, Yale University, New Haven, CT 06511), 203-436-3539; Fred Barker (Branch of Alaskan Geology, USGS, 4200 University Drive, Fairbanks, AK 99508), 907-786-7435; and Elaine Padovani (Office of Earthquakes, Volcanoes and Engineering, USGS, Reston, VA 22092); 703-860-7875.

*Conference Goals:*

Many earth scientists from a wide variety of disciplines are now working on diverse aspects of melting in the earth's crust, and the time is opportune for getting these investigators together to discuss their data and models. The objective of this Penrose Conference is to discuss crustal melting and migmatite formation with respect to: (1) the nature of the melts formed; (2) subsequent deformation of the molten terrane; and (3) the tectonic environments in which melting may occur.

*Major Topics and Questions:*

Discussions topics will include tectonics (both convergent regimes involving crustal thickening and divergent ones involving crustal thinning), physical and chemical conditions of melting, phase equilibrium in melting systems, major and minor element geochemistry of melt-solid systems, structural mechanisms operating in partially molten materials, and thermal modelling and thermal energy considerations. Major questions to be addressed include: (1) how is melting initiated in the crust; (2) what are the sequences of melting reactions in different protoliths; (3) how are elemental and isotopic characters of the melts related to melting reactions and protoliths; (4) how should the field geologist deal with migmatites—what features are most significant and how should collecting and description be systemized; (5) can plutons emplaced at shallow levels be related to crustal melting and migmatite formation at depth; and (6) which subdisciplines of the earth sciences should be brought together in collaborative projects aimed at developing a coherent picture of crustal melting.

*Field Trip:*

The conference location in the classic high-grade metamorphic terrane of central New England presents the opportunity to examine a number of well-characterized field occurrences of crustal melting and migmatite formation. A one-day field trip midway through the conference will allow many of the discussion topics to be argued "on the outcrop".

*Registration:*

Interested persons should write to Robert J. Tracy at the above address. They should note specific reasons for wanting to attend the conference, and include a description of past or present research relevant to the conference theme. Graduate students are welcome to apply, but should be actively involved in research related to crustal melting. Limited support will be available to a few qualified graduate students. Although most of the conference will be devoted to discussion, there will be opportunities for oral and poster papers to be presented. Persons interested in making a presentation should note this in their applications. The deadline for applications is February 1, 1986. The registration fee has not been established, but is expected to be approximately \$500 or less, to include lodging, meals, and the field trip.