



International Center for Materials Research
Summer School on
Advanced Thermostructural Materials



The NSF-sponsored International Center for Materials Research (ICMR) is pleased to announce a residential fortnight-long summer school on Advanced Thermostructural Materials, focused on materials needs in selected energy conversion technologies. The school will be held August 6-19, 2006, at the campus of the University of California, Santa Barbara. The format will be tutorial, with emphasis on fundamentals and examples from current research by the speakers. The tentative plan is to dedicate the mornings to lectures and the rest of the day to discussion groups, software and experimental demonstrations, and student posters.

The technologies of primary interest are gas turbine engines, solid oxide fuel cells and nuclear reactors. The program will include (i) overview lectures to highlight the role of materials in these technologies and the critical issues, (ii) tutorials on modeling tools and applications to high temperature problems, including thermodynamic modeling, phase equilibria, diffusion, microstructure evolution, thermal properties and mechanics of deformation and failure; and (iii) special materials topics such as advanced alloys, thermal and environmental barrier coatings, high temperature composites, interconnects, and other multi-material systems and interfaces.

The organizing committee comprises A.G. Evans, T.D. Bennett and C.G. Levi. The ICMR summer schools are coordinated by A.K. Cheetham (ICMR Director) and J. Ybarra (Program Coordinator).

We welcome applications for the Summer School from graduate (PhD) students, post doctoral fellow and early career faculty. Participants are expected to be actively involved in thermostructural materials research. Local hospitality, meals, and housing will be provided. Partial travel support may be available.

How to apply:

Applicants should follow application instructions presented on the ICMR website: <http://www.icmr.ucsb.edu/programs/schools2006.html>. For further details, please contact the ICMR Program Coordinator, Jennifer Ybarra, at Ybarra@icmr.ucsb.edu. The application deadline is March 1, 2006.

For further details, please contact the ICMR Program Coordinator, Jennifer Ybarra, at ybarra@icmr.ucsb.edu

Tentative Lecturers

J. Ågren
(KTH-Stockholm)

A.C.F. Cocks
(Oxford Univ.)

K. Hemker
(Johns Hopkins)

J.W. Hutchinson
(Harvard)

D. Marshall
(Rockwell Scientific)

G.H. Meier
(Univ. Pittsburgh)

D.R. Mumm
(UC Irvine)

S.R. Phillpot
(Univ. Florida)

T.M. Pollock
(Univ. Michigan)

H.J. Seifert
(Univ. Florida)

A. Van der Ven
(Univ. Michigan)

A. Virkar
(Univ. Utah)

B. Wirth
(UC Berkeley)

T.D. Bennett
D.R. Clarke
A.G. Evans
C.G. Levi
R.M. McMeeking
G.R. Odette
F.W. Zok
(UC Santa Barbara)