



## **Post-Doctoral Position in Theoretical Mechanics**

The University of California, Santa Barbara (UCSB), is commencing a basic research program to establish Virtual Tests for high temperature ceramic composite materials. This activity will be supported within the new National Hypersonic Science Center, Structures and Materials, which is funded by NASA and the U.S. Air Force Office of Scientific Research.

The overall program involves a number of institutions, led by Teledyne Scientific Co., in Thousand Oaks, California (Drs. David Marshall and Brian Cox). Effort immediately relevant to Virtual Test development involves participants at The University of California, Berkeley (Professor Robert Ritchie), The University of Texas, Arlington (Professor Peter Kroll), and the University of Miami (Professor Qingda Yang),

UCSB has an opening for a post-doctoral fellow within this program under the supervision of Professor Robert McMeeking. The successful candidate will be involved in computational mechanics, image analysis, theoretical fracture mechanics and heat transfer, modeling hierarchical microstructures, multi-scale modeling, and statistical and probabilistic modeling, especially in the interpretation of data. Close collaboration is essential with experimenters in fracture mechanics, X-ray computed tomography, and high temperature experimentation, as well as with other theorists in quantum and classical molecular dynamics.

The entire Virtual Test development program will be executed in a collegial environment, with strong interactions expected across the different disciplines necessary to the overarching goals. For this particular position, frequent interaction is envisaged with Dr. Brian Cox at Teledyne Scientific, approximately one hour from Santa Barbara.

Interested persons should contact Professor McMeeking at [rmcm@engineering.ucsb.edu](mailto:rmcm@engineering.ucsb.edu). It is expected that the position will be filled by January, 2010.