

Newsletter

Vol.1 No.1 November 2002, Stony Brook

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COMPRES KICKS OFF

Starting on May 1, 2002, the National Science Foundation launched the Consortium for Materials Properties Research in Earth Sciences (COMPRES), a community infrastructure organization for Earth Science research and education.

Mission of COMPRES is to promote research and education in the area of Earth Science materials properties, provide user support at the Earth Science beamlines and other community facilities, identify and support areas of community experimental and scientific challenges. *(continued on page 2)*

From the Chair

Donald J. Weidner

COMPRES is formed to serve the high pressure Earth science community. Advocacy, infrastructure support, infrastructure development, education form the core of the tools that COMPRES will bear on this purpose. Driven by the need to capitalize on the research potential of national facilities, COMPRES was born, at first, as a means of providing support for synchrotron facilities. It became clear that support for facilities extends to developing the next genera-

(continued on page 2)

Jay Bass *the first elected president of COMPRES:*

It's a pleasure to welcome all of you to the first issue of the COMPRES newsletter. This should be a convenient way of periodically informing you of news and upcoming events to put on your calendar. Jihua Chen is doing us a great service by taking on the tasks of being Editor-in-Chief, staff reporter, layout designer, printer, etc. Thanks, Jihua.

There has been a lot of activity related to the management and structure of our consortium. NSF identified getting our organizational structure in place as one of the priorities for this year. Much progress was made

toward that end at our September meeting in Stony Brook, which many of you attended. We now have a set of community-sanctioned by-laws in place and each of our standing committees (Facilities, and Infrastructure Development) has a written set of guidelines stating their missions, responsibilities, and authority. There was a review of our progress to date at NSF in October. Don Weidner, Mark Rivers, Steve Sutton, and I attended that full-day meeting, *(continued on page 3)*



From the Chair

(cont'd)

tion of experimental capability and to providing access to the entire community. The former requires development projects, the latter requires an accessible educational program that quickly brings the researcher or student up to the needed level to operate the sophisticated facility. Community needs extend beyond the beam lines and include a myriad of issues that, when approached as a community, yields far reaching results. Pressure calibration is one of these issues. Few are willing to devote their valuable research time to pushing the calibration envelope. Furthermore, valuable time is wasted through excessive duplication. Community defined goals and methods provide a viable mechanism that will get the job done.

COMPRES is a community run consortium. All officers are elected, except for a President who is a full time employee. The community sets priorities and goals. The community runs some of the beam lines. The community executes the development projects. The community defines the educational programs.

Community based research runs counter to the cottage industry culture that we have enjoyed for so long. It brings new capabilities, but it comes at some cost. We must give up some of our sovereignty to work as a community. We will struggle to define the boundary between community and our own individual program. Intellectual property rights will need new definitions. I feel that this will be the challenge that will define the success of COMPRES. ■



COMPRES Kicks Off

(cont'd.)

The COMPRES consists of three divisions: Community Facilities, Infrastructure Developments and COMPRES Central. Institutions that are both educational and not-for-profit, chartered in the United States, with a major commitment to research in materials properties of Earth and planetary materials with a particular emphasis high-pressure science and technology, and related fields, including single or multiple campuses of multi-campus university systems, may become Members of the Organization. Foreign Affiliation is also possible. An Executive Committee oversees the operations of COMPRES, and a President is the chief executive officer of the Organization. Two standing committees oversee the Community Facilities and Infrastructure Developments programs respectively. The Community Facilities Standing Committee will evaluate the effectiveness of the service delivered by the community facilities, coordinate between facilities so as to maximize the community's effectiveness in using these facilities. This committee will consider the community's needs and recommend changes in the levels of support of all possible community facilities. The Infrastructure Developments Standing Committee oversees the developments of our tools, including all beamlines used by Earth scientists and equipment used in our labs, to improve the science that they support. This committee has the responsibility to assure that the development projects serve the needs of the community.

COMPRES will also nurture and interact with the Grand Challenge programs that are identified by the community and submitted directly to the NSF. Technical advances position new themes for a high yield of scientifically significant result. These themes typically include a continued development component along with pursuing specific scientific goals. They are typically multi-institutional. The Grand Challenges will help generate new capabilities at community facilities that can then become part of the generally offered experimental facilities. The Grand Challenges will utilize the facility and educational infrastructure of the COMPRES core program and will return a focused vision that will lead further development of the community facilities. ■

President Message

(cont'd)

which was chaired by Bob Schock. The IF panel is reviewing the written materials we presented to NSF, and the IF panel will soon be sending a report to NSF with their reaction. We'll provide some information on this report in a future newsletter.

The upcoming December AGU meeting is going to be a busy one. We will be having an informational meeting about COMPRES on Friday, Dec. 6 at the Marriott (see list of activities). This meeting is aimed at informing potential new members about our consortium. A number more specific meetings for the standing committees and groups involved with the Grand Challenges are also being arranged. If any of you wish to participate in either the Facilities or Infrastructure Development committee meetings, please contact Quentin Williams (quentw@rupture.ucsc.edu) or Jim Tyburczy (jim.tyburczy@asu.edu). Finally, a workshop related on the West Coast Synchrotron facility will be held at Lawrence Berkeley National Lab on Dec. 11. Contact Simon Clark (smclark@lbl.gov) or Raymond Jeanloz (jeanloz@uclink.berkeley.edu) for information.

Search for permanent President: A search committee has been formed and an ad will be published soon. Contact Dave Walker for information (dwalker@ldeo.columbia.edu).

Miami Workshop on the Future of High-Pressure Mineral Physics: There will be a community workshop in Miami on the current status and future of our field. We will be trying to define a vision for high-pressure Earth science research. The results of this workshop will be written up a report for NSF. For information on attending the workshop, please contact me.

I encourage all of you to send me comments and suggestions on consortium activities, or subjects should be published in our newsletter.

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The First COMPRES Meeting

On September 14-15, COMPRES held its first meeting at Stony Brook. Fifty eight scientists from about 30 institutions across the country attended the meeting. The attendees discussed and proved

the by-law, elected the officers, and codified the operation procedure of COMPRES.

Jay Bass from the University of Illinois at Urbana-Champaign is elected as the first-term President. Donald J. Weidner from the State University of New York at Stony Brook is elected as the Chair of the Executive Committee. Other elected committee members include: Jay Bass, Tom Duffy (Princeton University), Russell Hemley (Geophysical Lab) and Shun Karato (Yale University). Two sub-committees, Facilities Standing Committee and Infrastructure Standing Committee are formed to oversee the major scientific and research programs. Elected committee members include, Facilities Standing Committee: Quentin Williams (Chair), Harry Green, Mark Rivers, Mike Brown, Yingwei Fei; Infrastructure Standing Committee: Jim Tyburczy (Chair), Pam Burnley, Raymond Jeanloz, Dave Walker, Yanbin Wang. ■



COMPRES Coming Events:

- Informational Meeting (Town Hall) Friday, Dec. 6 at 5:30-6:45, Marriott Hotel, Sierra H.
- Mineral Rock Physics Reception, Saturday Dec. 7, 5:45-7, Room 124 Moscone.
- Infrastructure-Development Committee Meeting, Sunday Dec. 8, Restaurant. Meet at 11:30 AM on the upper landing of Moscone (above the escalators). Contact: J. Tyburczy.
- Multi-anvil User Group Meeting, Sunday Dec. 8, 3:00-5:00, room 262 Moscone.
- Facilities Committee Meeting, Monday, Dec. 9, 12:00 noon. Restaurant. Contact: Q. Williams.
- Executive Committee Meeting, Tuesday, Dec. 10, 12:00 noon, Marriott Hotel, Sierra E room.
- West Coast Synchrotron Workshop, Wednesday Dec. 11, LBNL room 6-2202 of ALS, 8:30-4:50.
- Workshop: Future of High Pressure Mineral Physics, Newport Beachside Hotel & Resort, Miami, Florida. March 22-23, 2003.

COMPRES Central Office Opened for Business

Sponsored by SUNY research foundation, the COMPRES central office opened for business in the ESS building on Stony Brook campus in October. The central office consists of one president office, two reception desks, one meeting room on the upper level, and three visitor offices, one computing facility area, one gathering area on the lower level.



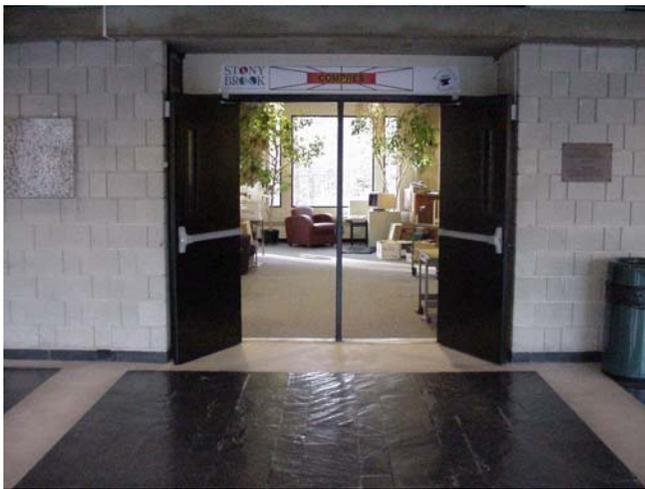
Central Office Snapshots

Upper-left: Main entrance from the first floor of ESS Bldg.

Lower-left: Ann Lattimore, COMPRES administrative Assistant at her reception desk.

Upper-right: Upper level of the office complex with the president office on the right and meeting room on the left.

Lower-right: Lower level with three visitor offices and gathering area.



Post Doctoral Associates Positions in High Pressure Research

The Mineral Physics Institute at Stony Brook University in conjunction with COMPRES grand challenge programs is accepting applications for postdoctoral research associates. The Institute expects to make three such appointments which can begin as early as January 2003. These non-tenured appointments will be for one year with possible renewal for an additional year.

Successful applicants will be expected to work with our research programs in high pressure rheology, elasticity and synchrotron X-ray studies using existing facilities in the High Pressure Laboratory and analytical laboratories of the Mineral Physics Institute and *in situ* X-ray diffraction using synchrotron radiation installations at Brookhaven National Laboratory and APS - Argonne National Laboratory.

Applications are invited at any time. We encourage candidates to develop a research plan with an Institute staff member. Women and minorities are encouraged to apply. Candidates should send curriculum vita, a statement of research plan, and arrange for three letters of reference to be sent to:

Donald J. Weidner (Donald.Weidner@sunysb.edu)

Director

Mineral Physics Institute, ESS Bldg. SUNY
Stony Brook, NY 11794-2100

The University at Stony Brook is an Affirmative
action/equal opportunity educator and employer.

Search for the COMPRES permanent President

COMPRES, a community-based initiative funded by the National Science Foundation, seeks a Director. The COMPRES initiative has as its major objectives the facilitation and development of infrastructure for community efforts in geological materials research, much of it at high pressures and temperatures. Examples include support and enhancement of community beam-line facilities, development of standard community experimental protocols and materials sources, and educational outreach activities. The Director sought will be the chief executive officer, working in conjunction with a steering committee, with the goal to advance the aims of the COMPRES initiative. Initially the organizational headquarters of COMPRES will be at SUNY Stony Brook. Qualifications: Ph.D in Mineral Physics; national recognition and reputation for accomplishments in this field as well as demonstrated leadership and administrative abilities and strong interpersonal skills are required. Familiarity with the operations of national facilities preferred. Duties: Interact with funding agencies; oversee COMPRES operations at national facilities; oversee COMPRES development projects; organize and lead COMPRES meetings; oversee COMPRES budget. COMPRES is an AA/EEO. Applications may be sent to

Dave Walker

Lamont-Doherty Geological Observatory
Columbia University
Palisades, NY 10964

dwalker@ldeo.columbia.edu

for immediate evaluation with a desired starting date of 1 May 2003.



Call for the Newsletter Input

The Newsletter is designed to report new happenings around the COMPRES, and more importantly, breakthroughs in the facility development, scientific research and education programs of COMPRES. Please send your input to the COMPRES central office.



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