



UNITED STATES GOVERNMENT  
**M E M O R A N D U M**

**DIRECTORATE FOR MATHEMATICAL AND PHYSICAL SCIENCES**

**Date:** October 28, 2008  
**From:** Assistant Director, MPS  
**Subject:** **MPS Advisory Committee Meeting November 5-7, 2008**  
**To:** MPSAC Members

It is a pleasure to welcome you to the upcoming meeting of the MPS Advisory Committee (MPSAC) to be held November 5-7 at the offices of the National Science Foundation in Arlington, Virginia.

The meeting will begin with a special orientation session of the MPSAC the afternoon of Wednesday, November 5, where new members will be briefed on activities of NSF, MPS, and Divisions within MPS. Continuing members are also welcome to attend these briefings.

I want to welcome new members to the MPSAC: Dr. James Berger (Duke University), Dr. Daniella Bortoletto (Purdue University), Dr. Barbara Finlayson-Pitts (University of California at Irvine), Dr. Irene Fonesca (Carnegie Mellon University), Dr. Suzanne Hawley (University of Washington), Dr. Ramesh Narayan (Harvard University and the Harvard-Smithsonian Center for Astrophysics), Dr. Sharon Neal (University of Delaware), Dr. John Peoples, Jr. (Fermilab), Dr. Elsa Reichmanis (Georgia Institute of Technology), and Dr. Geoffrey West (Santa Fe Institute).

I also want to thank the members of the MPSAC who have just rotated off for all of their efforts on behalf of MPS over the last three years: Dr. Douglas Arnold (University of Minnesota), Dr. Cynthia Burrows (University of Utah), Dr. Claude Canizares (MIT), Dr. Rhonda Hughes (Bryn Mawr College), and Dr. Jose Onuchic (University of California, San Diego).

Dr. Patrick Gallagher of the National Institutes of Standards and Technology (NIST) is no longer a member of the MPSAC as he is now the Deputy Director of NIST and is also carrying out the responsibilities of the Director as the NIST Director position is vacant. I am sure that all of us wish him well. In view of the fact that this announcement came quite recently, I have asked Dr. Monica Olvera de la Cruz of Northwestern University to remain on the MPSAC for an additional year.

Dr. Michael Witherell (University of California, Santa Barbara) has also rotated off the Advisory Committee, and I want to thank him for his leadership of the MPSAC as Chair for the past two years. His service has been invaluable to MPS and to NSF.

Dr. Robert Williams (Space Telescope Science Institute) had originally agreed to serve as Chair of the MPSAC during this year, but he has informed me that while he can continue to be a member of Committee, he is unable, for personal reasons, to serve as Chair. However, I am very

pleased to announce that Dr. Iain Johnstone (Stanford University) has agreed to be the Chair of the MPSAC. The staff of MPS and I are looking forward, as I am sure you are, to working with him on MPSAC matters.

It is with great pleasure that I note that Dr. Mostafa El-Sayed of the Georgia Institute of Technology and who rotated off the MPSAC on October 1, 2006 was presented with National Medal of Science by President George W. Bush at a ceremony that took place in September at the White House ([National Medals of Science 2007](#)). I also note that Dr. John Huchra of the Harvard-Smithsonian Center for Astrophysics and Harvard University and who rotated off the committee on October 1, 2006 is now President of the American Astronomical Society. Another member of that class, Dr. Venkatesh Narayanamurti of Harvard University, will be joining us at our meeting (see below). Also, Dr. Douglas Arnold, who rotated off the committee on October 1, 2008, is the President-elect of the Society for Industrial and Applied Mathematics (SIAM) and becomes its President on January 1, 2009.

Our meeting in November will take place immediately after the Nation's presidential elections, and I am sure you will be wondering what impacts the newly elected administration will have on science and technology, on NSF, and on the mathematical and physical sciences. It is clearly too early for me to report to you on this question, as we will be meeting with transition staff in the weeks following the election.

NSF is currently operating under a continuing resolution. The NSF FY 2009 budget is still before Congress, and an appropriations bill for NSF has yet to be passed by Congress and signed into law by the President. This resolution provides NSF with funding until March 6, 2009 at a level equal to the levels we received in FY 2008. The FY 2008 level for MPS was approximately 1.5% above the FY 2007 level. The impact of the current continuing resolution on our Divisions will be discussed by the Division Directors in their presentations to you Thursday morning and in the breakout sessions Thursday afternoon. In addition, the NSF FY 2010 budget request will become public in February 2009 when the President presents his budget request for FY 2010 to Congress.

Over the last few months MPS senior staff has been developing a long-range plan for the Directorate for the period 2010 – 2015. This plan is still in draft form, but we will be posting it in the "For MPSAC Members" section of the MPSAC web site at [http://www.nsf.gov/events/event\\_summ.jsp?cntn\\_id=112329&org=MPS](http://www.nsf.gov/events/event_summ.jsp?cntn_id=112329&org=MPS). We would welcome your comments and suggestions for this plan. There will also be a discussion of the MPS Facilities Plan.

There are three agenda items that I would like to bring to your attention.

The first is a presentation Thursday morning by Dr. Venkatesh Narayanamurti of Harvard University of the report of the MPSAC Subcommittee Light Source Panel. The Panel was charged to provide guidance to MPS regarding future NSF stewardship and/or partnership in support of coherent light source facilities and instrumentation. Specifically, it was asked to report on the current view of opportunities for future research using major advanced light source facilities, and what facilities are envisioned to carry out such research in the U.S. In addition, we

sought the Panel's opinion on what it saw as the most effective role for the NSF in helping to develop, construct, instrument and operate such facilities. I am sure that this report will be of great interest to the community. As the report does not become a public document until it is presented to and accepted by the MPSAC please do not distribute it.

The second item will take place Thursday afternoon, and will be a discussion of the MPS Strategic Co-Investment (SCI) concept. We began discussions on this topic at the April 2008 meeting and at that time we agreed that a more fully developed concept would be presented at our upcoming meeting.

The third item will be a presentation on Friday morning by Dr. John Henry Scott of the Office of Science and Technology Policy. I am sure that the perspective he will offer will be of considerable interest. In addition, I expect that Friday morning will be devoted to a continuation of discussion of these and items that arose from your meetings with the Divisions as well as preparation for our luncheon discussion with the Director of NSF, Dr. Arden Bement, Jr.

I have included a conflict-of-interest form that must be completed by each MPSAC member. Although you may have filled one out in the past, it is important that this be updated. Please bring the completed form to the meeting as it must be provided to our General Counsel's office.

Dr. Morris Aizenman, the Senior Science Associate in MPS, serves as a liaison between the Advisory Committee and the MPS Directorate. Should you have questions or suggestions concerning activities of the Committee, please contact him at 703-292-8807 or by email at [maizenma@nsf.gov](mailto:maizenma@nsf.gov). Ms. Kamaria Salau, has already sent you information concerning travel and hotel arrangements. Should you have any questions concerning your travel, you may reach her at 703-292-8806 or by email at [ksalau@nsf.gov](mailto:ksalau@nsf.gov).

I look forward to a productive meeting and to seeing you in November.

Sincerely yours,



Tony F. Chan  
Assistant Director