



OFFICE OF THE  
ASSISTANT DIRECTOR  
FOR MATHEMATICAL AND  
PHYSICAL SCIENCES

**NATIONAL SCIENCE FOUNDATION**  
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Dear MPSAC Members:

The MPS Advisory Committee (MPSAC) meeting is coming up next week and I want to bring you up to date on some items of interest that have taken place since our November 2009 meeting, and to let you know what I hope we will accomplish at the meeting.

It's been a very busy time for MPS; perhaps above all, the most important notes are that the FY 2010 appropriation has been enacted, and the FY 2011 budget request was submitted to Congress. We will be discussing the impact of these items on MPS science and education activities, both in my presentation to you and in the divisional breakout sessions that are planned for Thursday afternoon, April 1.

As you know, the Washington area was hit by three major snowstorms, two of which occurred within days of each other around the weekend of February 6-7. Both the Chemistry (CHE) and Mathematical Sciences (DMS) Divisions had been scheduled to host Committee of Visitors (COVs) meeting the week of February 8, but the storms resulted in the shutdown of the Federal government for almost all of that week, and the COVs were, of course, cancelled. The reports of the COVs would normally have taken place at our April 2010 meeting, but this will not happen as we had to reschedule both COVs for the last week in April (DMS) and first week in May (CHE). As both COVs have to be presented to a public plenary session of the MPSAC, we will be holding an additional meeting of the MPSAC (via teleconference) in the third week of June in order that the reports of the COVs be presented and discussion of these reports take place. The meeting will be publicly announced.

At our November 2009 meeting we initiated a major step in having members of the MPSAC become more involved in working together with us on strategic planning, including scientific and educational areas that MPS might develop in future budget requests. As you all know, the top priority of MPS is to support its core fundamental science programs, and we will be looking for advice from you as we plan for FY 2012. A significant fraction of our meeting will be devoted to this when the divisional breakouts take place on Thursday afternoon. These breakout sessions are particularly important as an opportunity for you to provide advice most effectively in the context of the divisions. The reports from these breakouts will be an important part of our planning not only for the budget submission for FY 2012, but also for broader long range strategic planning.

We also created six working groups, with representation both from MPS staff and from MPSAC members subcommittees, in the following areas: Broadening Participation, Climate, Computation, Energy, Life Sciences, and Science and Engineering Beyond Moore's Law/ Quantum Information Systems (SEBML/QIS). In addition, after the meeting, an additional working group on Matter by Design was created. All of these groups have been meeting via teleconference, and an important part of our April 2010 meeting will be devoted to hearing reports from these working groups and discussing their recommendations. These discussions are extremely important to MPS, and they will provide your input on areas to which we should be giving serious consideration as we prepare for the FY 2012 budget submission to Congress. I should also add that the Energy Working Group arranged for a one-day workshop that was held at NSF on March 15, and there will be an MPS-sponsored workshop on data-intensive science that will be held on March 29-30, just preceding our meeting. MPSAC members were/are part of the organizing groups of these workshops. All groups have prepared reports, which we will circulate in advance of the meeting. I am looking forward to our discussions of the working group reports and workshops.

It has been traditional at our meetings to meet with the NSF Director and/or Deputy Director at noon on Fridays. Unfortunately, because of their schedules, neither the



Director nor the Acting Deputy Director will be able to join us. As you know, Dr. Bement will be leaving NSF on June 1 to assume the post of Director of Purdue University's new Global Policy Research Institute. Dr. Bement has served as Director of the National Science Foundation since President George W. Bush appointed him in 2004. He also served as Director of the National Institute of Standards and Technology from 2001 to 2004. From 1989 to 1995, he was a member of the National Science Board. In these many years of public service, his commitment to the research and education enterprise of our country has been nothing short of amazing. We

shall miss his leadership, support, and counsel, and I am sure that all of you wish him well and success as he assumes his new duties at Purdue.

However, I am pleased that Thomas Kalil, Deputy Director for Policy at the Office of Science and Technology Policy (OSTP) and Senior Advisor for Science, Technology and



Innovation for the National Economic Council will be joining us at lunch on Friday, April 2. He has served on three committees of the National Academy of Sciences, including the Committee to Facilitate Interdisciplinary Research. He was the Deputy Assistant to President Clinton for Technology and Economic Policy, and the Deputy Director of the White House National Economic Council. He has led a number of White House technology initiatives, such as the National Nanotechnology Initiative and the Next Generation Internet and was also appointed by President Clinton to serve on the G-8 Digital Opportunity Task Force.

I am sure you are curious as to why I decided to have the April 2010 meeting of the MPSAC conducted as a "hybrid" meeting with some members here at NSF while others

are connecting via telephone and via web-based video. This is an experiment that I have previously conducted as Director of the Office of Cyberinfrastructure (OCI) and its current structure is somewhat parallel to that of MPSAC, with a number of working groups aligned with areas of interest to OCI. In that meeting we asked chairs of working groups to join us locally, with others joining virtually via remote tele-presence. This worked surprisingly well, and as NSF is encouraging us to use modern technologies to bring people together and reduce their travel we wanted to try this in MPS. I expect this will be effective, and look forward to your feedback.

In summary, we have deliberately kept the topics to be covered at this meeting to a minimum, focusing on the science and related activities as we begin to prepare for the FY 2012 budget request. Your advice will be particularly important to us.

The agenda for the meeting is attached. Also, material for the meeting will be available on the MPSAC web site at <http://www.nsf.gov/mps/advisory.jsp>

Sincerely yours,

Edward Seidel  
Acting Assistant Director