About This Newsletter

Your first question upon opening Issue 1 of INTERSECTIONS – Materials Research & Science Policy may very well be “How did I receive this?” followed by “What is this anyway?” The answers to these questions are simply that at some point you expressed an interest in the affairs of your government concerning materials science and how they affect you, your colleagues, and the country as a whole. In the MRS Government Affairs Committee we share that interest. To communicate the efforts of the MRS Government Affairs Committee and to better educate our membership, we have developed INTERSECTIONS – Materials Research & Science Policy. In this introductory issue, we describe the intended purpose and content of this quarterly communication and provide you with our first newsletter, generated by the hard working, mostly volunteer members of the MRS Government Affairs Committee.

This publication is a reflection of the desire of the MRS Government Affairs Committee to better communicate with interested members. In the past we have received a fair response when asking for help in letter writing campaigns, Congressional Visits Day participation, and the drafting of op-ed pieces for submittal to newspapers across the US (to name just a few of the activities of the domestic MRS members). As a committee, we have found that with increased and consistent communication of the issues being debated in Washington, DC, your response to our calls to actions is even stronger. This, in turn, causes the messages sent by MRS to be greatly magnified, with the goal of benefiting the membership as a whole.

To strengthen the link between the committee and the membership, we are publishing a short electronic newsletter, to be distributed quarterly to interested members. The committee, and by association this newsletter, aims to be a non-partisan collection of materials science and engineering related items. INTERSECTIONS – Materials Research & Science Policy is envisioned primarily as an informational publication, with an occasional call to action that you are accustomed to seeing in the MRS Public Affairs Alert.

As a general rule of thumb, the committee attempts to maintain focus on basic science research, though the line between basic and applied materials science is often blurred. Members may be surprised to find the number of issues the MRS Government Affairs Committee focuses on that directly affect and benefit them. We hope you will find this newsletter an effective way to stay informed on the subjects that affect you and your colleagues occurring in and around Washington DC.

Many of the articles are expected to be recurring items in each quarterly issue, such as “What’s Happening in Washington?” New ideas, themes, and items will be added or removed based upon your input, so we are hoping for a wealth of constructive criticism in response to Issue 1 (Fall 2010). We also hope that you can use this newsletter to find out how to be active personally, find out who is using their voice to help you, or merely to stay informed. If you have not yet done so, you can start by participating in the MRS Government Affairs Committee survey (LINK) and enjoying the rest of Issue 1 of INTERSECTIONS – Materials Research & Science Policy.

A Letter from the Committee Chair

Duane B. Dimos

Greetings from the MRS Government Affairs Committee! I’d like to personally welcome you to our inaugural issue of the INTERSECTIONS – Materials Research & Science Policy. We hope that you will find this newsletter to be an important source of information about the intersection of materials research and government policy. Producing this newsletter content and the activities that it describes is a volunteer-powered effort. Besides informing you, we hope this newsletter will also catalyze you to become more involved in government affairs activities. If you would like to participate actively, please contact us at publicaffairs@mrs.org. Now, let me tell you a little bit more about the committee and what we do.
The MRS Government Affairs Committee is a group of MRS volunteers who are actively engaged in both policy and advocacy interactions with the government in order to ensure that priorities of the Materials Research Society membership are heard in Washington. With staff support from MRS Headquarters and our consultant in Washington, Mr. Ronald Kelley, our committee engages both the legislative and executive branch in making sure that materials-specific issues are appreciated in our government. This takes many forms, which are detailed in our newsletter, ranging from sponsoring Congressional Fellows in key lawmakers’ offices (many of whom later go on to work in policy positions related to scientific research), interacting with federal agencies in disseminating information to our membership on new research programs and funding opportunities, advocating directly to Congress through our Materials Voice and Congressional Visits Day programs, and participating with other scientific societies in order to speak with a stronger voice on policy issues important to the materials and research communities. Our key constituency is you, the MRS member, and we are working hard to make your voice heard! As you will see in this issue, we also produce content like the Advanced Materials for Our Energy Future booklet, which is the kind of work that makes cutting-edge materials science issues accessible to key Washington decision makers. In addition, the Government Affairs Committee participates in special task forces related to innovation, scarce materials, and international advocacy. The newsletters will provide you with a brief summary of the many hours of dedication that our committee members devote to public affairs activities. We hope that you enjoy it and, again, please contact us if you’d like to become more involved with the Government Affairs Committee.

**What’s Happening in Washington**

At the beginning of each MRS Government Affairs Committee meeting, the question “What’s happening in Washington?” usually sets the tone of the discussion. As a group, we look to our MRS Washington consultant and representative to fill us in on the current events and climate on Capitol Hill. His insights help us direct our efforts and keep the issues on the horizon in focus. Our consultant, Ron Kelley, will help us quarterly update you on the current climate in the nation’s capital. Far more timely news organizations exist to focus on the specific details, so in this column you can expect to see the issues we believe will become focuses for letter writing campaigns and opportunities for you to get ahead of the issues and inspire you to contact your representatives in Washington.

This issue’s content is a prospective for the next session of Congress. What is expected to be addressed before and during a busy mid-term election season?

The mid-term elections in early November are anticipated to cause a number of shifts in the US Congress. It now appears that the House of Representatives will either switch in majority control or, at the very least, be more evenly balanced between Democrats and Republicans after these elections. There are very competitive races also occurring in the Senate, but with less likelihood that Republican control will occur in that chamber. The Congressional year will end with a full awareness of the election’s results when the Congress returns for a lame-duck session. During that short period in November and possibly December the most likely issues Congress will be addressing are the FY2011 budgets and the personal tax policies that are expiring at the end of this year. Other topics on the agenda will depend largely on the results of the election and the expected chance for getting additional legislation through in a lame-duck Congress.

America COMPETES legislation reauthorization is currently in consideration by Congress. The House has passed their version of the bill and the Senate is going to address their version in the remaining days of 2010. It is not clear yet whether we will have the reauthorization of this bill on this schedule. If not, it will have to be reconsidered in the next legislative calendar. This bill addresses the importance of growing our research investment at NSF, DOE Office of Science, and NIST. It also reauthorizes some very important education programs that impact our global competitiveness.

FY2011 appropriations for research have always been an important priority for MRS advocacy. We hope to see these bills finalized before the end of the calendar year, but there is some very real possibility that there may be a further continuation of the previous year’s level of funding into early next year. If this should occur the level of growth will suffer from another “continuing resolution” action by Congress.

We fully expect that we will have a number of new members of Congress that will need to be educated on the importance of science and innovation and in particular to the critical role that materials research plans to our future for energy, defense, and our overall
economy. The White House and their Executive Branch will continue to outline their priorities and challenges as they draft plans for FY2012 budgets and their objectives for the federal government in the coming year. MRS will continue to work with the Executive Branch to support the importance of science and research funding.

In October we saw the release of a report by the National Academy of Sciences reviewing the nearly five year old “Rising Above the Gathering Storm” (begun in 2005 with distribution in 2007) and now updated by the original authors. It is subtitled as “rapidly approaching category 5” and points to how drastic the situation is with American competitiveness – some progress has been made in some areas but not nearly enough progress by Congress overall. It is now available to the public. Click here to read the report.

Advanced Materials for Our Energy Future

It can be surprisingly difficult to generate a list of basic and applied materials science research areas that directly affect broadly defined hot-button topics such as “energy” in the world today, particularly in short, high-pressure meeting atmospheres encountered at events such as the annual Congressional Visits Day. Faced with the difficulty of quickly describing the importance of materials to scientists and politicians alike, the MRS Government Affairs Committee led a multi-society initiative that resulted in a beautifully-crafted booklet highlighting materials uses, needs, and solutions for energy technology. You will find it helpful in your conversations with your non-materials colleagues, and even as you seek to see the big picture of materials research in the world today.

Advanced Materials for Our Energy Future has been developed as a thorough, but accessible, reference tool for policy makers, media professionals, educators, and any individual interested in learning more about the materials technologies that form the basis of energy creation, conservation, and delivery. It was designed to complement recent studies of science and technology needs related to energy by focusing on the role of materials technologies in energy efficiency, energy supply, environment protection, and job creation. The content was researched and prepared by a panel of materials science and engineering experts, each offering particular knowledge and insights into current technologies, as well as the next stage of materials development. Click here to download a copy.

Congressional Fellows Corner

MRS annually supports Congressional Science and Engineering Fellows to broaden awareness about the value of scientific and engineer-government interaction among society members and the US federal government. (Details on the program can be found on the MRS Web site). In this recurring space, the Fellows will have the opportunity to describe their perspective on the legislative process and experiences as they work on the staff of a member of Congress or a congressional committee. In this first issue, let us introduce you to our current MRS/OSA Congressional Fellow, Dr. Ashley White.

Dr. White has recently accepted an appointment in Sen. Franken’s office to work on a portfolio of education topics as a fulfillment of her fellowship activities. Her biography below can also be found on the MRS Web site, along with information on our Congressional Fellowships and the application process which is currently open for the 2011-2012 year. Applications will be accepted through January 7, 2011.

Dr. White earned her Ph.D. in Materials Science from the University of Cambridge in 2010, as a British Marshall Scholar and NSF Graduate Research Fellow. Her research focused on developing carbon nanotube-reinforced hydroxyapatite bone graft materials with improved mechanical properties. Following her Ph.D., Dr. White remained at the University of Cambridge as a post-doctoral associate working on the removal of carbon nanotubes from body tissue using laser irradiation. While at Cambridge, Dr. White was heavily involved in teaching, serving as Co-Director of the Science and Engineering Experiments for Kids program, instructing undergraduates, and developing laboratory courses. Additionally, she served on administrative committees, both in the Department of Materials and elsewhere in the university.
In 2005, Dr. White received her B.S. in Materials Science and Engineering from Virginia Tech, along with a B.A. in Music Performance. As an undergraduate, she gained research experience through several Research Experience for Undergraduate programs, DOE internships, work abroad, and at Virginia Tech. An accomplished violinist, she has served as President of the Cambridge Graduate Orchestra, performed with various orchestras and chamber groups, and spent time in Paraguay and Mexico doing research and teaching related to youth orchestras.

Dr. White's interest in policy began in high school while volunteering for political campaigns. She has continued to develop this interest during her time at Virginia Tech and University of Cambridge, serving as an officer in political societies. While her particular policy interests include nanotechnology, education, and immigration, she looks forward to the opportunity to experience first-hand the political process and how science policy is addressed across a broad range of issues during her fellowship tenure.

Government Affairs at the 2010 MRS Fall Meeting

**Materials Voice – Your Voice Resonating on Capitol Hill**
Monday, November 29 through Thursday, December 2
8:00 am-4:00 pm

A tried and true method of making your voice heard is to put it in writing. It sounds trivial, but the act of sending a piece of mail (or email) can make a difference, especially when amplified with the combined voices of your colleagues. Through *Materials Voice*, we work to make the act of speaking up even easier by providing draft letters on current issues of importance to the materials research community, search tools to find your representative, and ready to send templates for you to write in your own concerns. At the **2010 MRS Fall Meeting** in Boston, the Materials Voice booth will be open and actively seeking civic minded materials researchers willing to write to their legislators. We invite you to stop by (or even help!). We’ll be right across from Registration in the Hynes Convention Center. All you need is a US-based zip code and 5 minutes to write your legislators!

**Science Policy Forum - APS/MRS Energy Critical Elements Policy Study Briefing**
Monday, November 29
4:30-6:00 pm

Increasing demands for energy applications combined with the expanded use of many new and often scarce elements – e.g. rare earth elements, tellurium, indium, and other unique elements - have been gaining attention by government, private industry, and global metals and mineral producers. The purpose of the joint policy study is to evaluate constraints on availability of energy critical elements that might inhibit the large scale deployment of new technologies for the production, transmission, efficient use, or conservation of energy, and to make recommendations that would help avoid those obstructions.

The policy study is a joint effort between the American Physical Society Panel on Public Affairs and the Materials Research Society Government Affairs Committee with assistance from members of the geological community.

**Government Agency Presentations – Materials Research Priorities**
Tuesday, November 30 6:00 pm NSF  6:45 pm DARPA  7:30 pm NIST/TIP
Thursday, December 2 6:00 pm DOE  6:45 pm AFOSR  7:30 pm NIH

Be sure to attend to hear an overview of programs and funding opportunities in the area of materials research.

**Feedback**

You have received this newsletter as a result of your subscription to our MRS Public Affairs Alerts or your participation in our Materials Voice letter-writing campaigns.

We welcome your feedback and invite you to submit topics for consideration in future issues of this newsletter. Please send your comments to [publicaffairs@mrs.org](mailto:publicaffairs@mrs.org).