



A guide to science advocacy

By Kevin J. Whittlesey

Advocacy is a critically important part of the activities that the Government Affairs Committee (GAC) undertakes on behalf of Materials Research Society (MRS) members. The GAC is constantly working to educate members of the US Congress and other policymakers about materials research and why it is important to the economy and to the scientific enterprise. But all scientists need to know how to be effective advocates.

This article aims to provide MRS members with insight into a few specific things that you can do to engage in advocacy on behalf of the materials research community. Advocacy is a very broad term that takes on many forms across a range of issue areas. Addressing all of the manifestations of advocacy is beyond the scope of this article. This is intended to highlight a few key ways in which MRS members can get involved.

1. Be informed.

An important first step to being an advocate is to keep up with current events, not only the mainstream news, but also news specifically pertaining to what is happening in Congress. The policy landscape can change quickly. Current events often have enormous impacts on policy as lawmakers respond to new developments, and it is important to keep track of the issues that are of interest to you.

Being aware of current events is important for several reasons. Issues can arise quickly, such as a new piece of legislation, which affects the MRS community either positively or negatively. Some of these might be the kind of issues that the MRS GAC sends out as a Public Affairs Alert, such as a possible funding cut to an important federal agency, seeking members to write letters. However, there may be other issues that affect your local community, institution, or research discipline, so you need to be able to identify those.

Another important reason to keep up with current events is to be aware of circumstances that might influence your advocacy efforts. What happens in the news has an enormous impact on the conversations and issues taken up by Congress. That can significantly influence the timing or framing of a particular position or issue that you want to advocate for. For example, when I was working in the US House of Representatives as the MRS/OSA Congressional Science and Engineering Fellow, an advocacy group was seeking support for a piece of legislation that would limit the FDA's authority to regulate certain kinds of food products. They made this request in the middle of an outbreak of a foodborne illness. Regardless of whatever the merits of their request might have been, the optics would

be terrible for any member of Congress to support that kind of request at that particular time. Timing can be everything in an advocacy effort!

There are a number of ways in which you can stay informed about recent science policy developments. Mainstream news outlets typically cover the Congressional budget process and other activities in Congress on some level, so mainstream news sources can be very helpful to know the overall landscape. In addition, there are a number of specialized news sources that cover US Congress and policy news more specifically. Some of these include *Politico*, *Roll Call*, and *The Hill*. Additionally, some professional societies with robust advocacy programs have their own newsletters about policy developments affecting the scientific community. The American Association for the Advancement of Science is particularly active in this area, even publishing an annual analysis of the federal budget for agencies and programs engaged in scientific R&D. The American Physical Society and the American Chemical Society both have large offices in Washington, DC, and thus actively track and publish news on Congress and policy developments affecting the physical sciences community.

2. Take action.

Once you have identified a particular issue or position to advocate for, where do you start? An easy, direct, and effective means of advocacy is to write a letter to your member of Congress to ask for his/her support for your position. Whether they be letters about issues developed by MRS or another advocacy group, or a personal letter about an issue affecting your particular area of research, letters to Congress are a critically important means of making your voice heard. Many of you might have participated in the Materials Voice Booth at MRS meetings. This resource provides a platform to write to your members of Congress and the White House about issues the GAC views as important to the materials research community. Writing letters is a good place to start, as some may find other approaches



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(e.g., face-to-face meetings in a Congressional office) to be intimidating.

But one might ask, are letters to Congress valuable and effective? Absolutely! Congressional offices have dedicated staff whose job it is to keep track of letters received from constituents and ensure the Congressperson is regularly updated regarding what their voters are saying. If multiple letters are received on a particular topic, those will be summarized and flagged with a count of the total number of letters received. If a single office receives hundreds or even thousands of letters on the same issue or topic, that will get their attention as something that is particularly important to the voters they represent. The member of Congress may use that to inform their votes, speeches, and legislation. Participating in letter writing campaigns to send standard letters developed by an advocacy group, such as those developed by MRS for Materials Voice, absolutely has an impact. If you are aware of a particular policy issue that impacts your institution or community, do not be afraid to write to your member of Congress. Offices are always happy to hear from their constituents, and you might raise an issue that they are unaware of. Most Congressional offices have a form on their website that you can use to submit letters.

Another very direct means of advocacy is to request a face-to-face meeting with your local representative. If you are a voter and a constituent, then you have a right to be heard. Every member of Congress, in addition to their national office in Washington, DC, has at least one local office in their Congressional district. You can request a meeting in the district office to express your opinion or a concern over an issue, such as funding levels for a particular government program that is important for your research. Many members of Congress have a form on their website that you can fill out to request a meeting. Others require a simple phone call to their main line to submit a meeting request, which will typically be followed up by the office scheduler to arrange a meeting with the member of Congress or, more likely, with a member of his/her staff. Meeting directly with your member of Congress or his/her staff provides

a unique opportunity to present your opinion about anything from funding for a particular agency to a policy issue.

3. Educate others.

Advocacy not only involves interacting with policymakers, but engaging others about the importance of a particular cause and getting them, in turn, to be advocates. Events such as the March for Science can effectively bring attention and mainstream media interest to science and the need for increased science advocacy; however, advocacy cannot be just a one day per year activity. Advocacy messages need to be ongoing narratives. We as scientists have an obligation to help inform the general public about the importance of science as it pertains to particular policy issues. For example, writing an op-ed piece for your local newspaper can be a good way to reach a broader audience and help them understand why, for example, sustained investment in materials research is important and the ways in which it affects their daily lives. Helping the general public understand how and why science benefits them is an important aspect of advocacy and something that we as scientists should be constantly vigilant of.

4. Get involved.

Advocacy happens at many levels. That means not only attempting to influence the positions of policymakers, but also including their work to get others to support their position. This is true at the local/regional level all the way up to national and international roles. You can seek opportunities to be in these types of leadership roles, whether they are appointed or elected.

A good place to start is to pursue leadership roles at your institution. This can provide the opportunity to influence areas of emphasis, new programs, and other decisions that can affect the institution as a whole. While many balk at taking on committee work and additional activities, these opportunities and access might allow you to be an advocate for science.

Another type of opportunity to advocate for science would be to actually work in a science policy role, either as a career or through fellowships or other short-term experiences. For example,



Congressional Fellowships and Congressional Science and Engineering Fellowships co-sponsored by MRS (www.mrs.org/congressional-fellows) and other societies (www.aaas.org/program/science-technology-policy-fellowships) are open to scientists at all career stages. While some individuals use these opportunities as a career transition into science policy, it is not uncommon for applicants to seek these kinds of fellowships during a sabbatical to learn more about the policy landscape. In such a role, you would have the opportunity to learn many aspects of advocacy from both sides of the table.

The ultimate advocacy role is from the inside; you could run for an elected office. Scientists are poorly represented among elected officials, in spite of the fact that science and technology play a role in many policy issues. Currently, there is only one PhD-level scientist in all of Congress. There is a clear need and interest to get more scientists into elected offices, from local offices, such as a school board, all the way up to state and national positions. This has led to the rise of groups such as 314 Action (www.314action.org), with the goal of electing more scientists and others from the STEM community into office. Science plays a vital role in many policy and economic issues, so having scientific voices in Congress is equally as important. No matter at what level you choose to advocate, there is a tremendous need, and your contributions will benefit us all. □