Standing up for Science

Helen Pritchard, PhD student in Inorganic Chemistry at the University of Bristol, attended our recent Standing up for Science media workshop hosted by the Society of Chemical Industry in London on 25th May 2012.

When I was told about the Standing up for Science media workshop I was instantly intrigued, I am passionate about science and really enjoy getting people excited about it. Like many of my fellow researchers, the bulk of my funding comes from the Engineering and Physical Sciences Research Council (EPSRC) which is a government funded body. I feel a strong sense of obligation to not only justify the relevance of my research to my funding body, but to the people who have stumped up the money in the first place: the public. The Bristol Chemical Synthesis Doctoral Training Centre (BSC DTC) at the University of Bristol, do a lot of public engagement events to let people know what we are up to in the hope that some of our research will capture their imagination and transform what may seem like science-fiction into science-fact.

Part of my PhD involves reading scientific journals, even in the academic domain there is a large discrepancy in the quality of published research. In most instances, the small audience reading these journals is a specialist one. This is not the case with newspapers. They have abundant media resources at their disposal and cater to a vast audience but still so much “bad science” seems to be published. I would like to clarify what I mean by “bad science”: stories that are scare-mongering, poorly researched, and that make unfounded claims about things like health risks and the state of the environment, to name two common themes. Bad science gives the impression that science is just for scientists, that we are not to be trusted; this could not be further from the truth. Our job is to design experiments that, if performed correctly, will unequivocally prove or disprove a theory. There is no room for smoke and mirrors only clarity and evidence based claims.

There needs to be more clarity about statistics, evidence should not be cherry-picked and should always be contextualised. When talking with the journalists it soon became clear that they all loved science and did everything they could to report it as accurately as possible. However, the deadlines and time-frames which they have to adhere to are unthinkable by most people’s standards. They aim to check their sources publish the best work they can in the short time allotted. One of their main issues was with us as scientists being unable to contextualise our research with reference to our field as a whole and our inability to describe our work without the use of scientific jargon. It is important to remember who your audience is when describing your work in order that there is minimal miscommunication of your research in the press.

One of the main messages of the day is that even if you are called to give interviews always ask what the story is about and where it is going to be published so you can decide whether there is a distinct risk of you being misquoted. Ensure the person interviewing you understands the information you have given them to prevent your work being incorrectly reported. Some journalists aren’t interested in getting the story right, but you can write in to correct stories. Broadsheets will take your comments on board but the tabloids most probably won’t. Finally, utilise your press office, they have good contacts and are able to help you publicise your science to a receptive audience.