# Big Roles for Nanocenters

At the beginning of September 2015, for the second time,[1] nanocenter directors from around the world met to share our experiences, goals, and challenges. We found common ground in providing platforms for scientists, engineers, and others across fields both to make basic discoveries in nanoscience as well as to leverage the advances of nanoscience and nanotechnology in science, engineering, medicine, business, and other areas.[2]

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**Nanocenter directors from around the world gathered in Beijing earlier this month to discuss challenges and opportunities for nanoscience and nanotechnology. Included in these discussions were (left to right) *ACS Nano* editors Andre Nel, S.T. Lee, and Paul Weiss, *Chemistry of Materials* editor Jillian Buriak, and *ACS Nano* editors Mark Hersam and Andrey Rogach.**

We likewise see special roles for our nanocenters in interacting with the public to explain what nanoscience and nanotechnology are. As noted here previously, we feel that it is imperative to reach the public to explain and to share key issues in scientific exploration, technology, medicine, commercialization, and safety. Not succeeding in this effort will result in science fiction filling that void, with fictional disasters turning into disasterous collapses in support for and perhaps even opposition to our field.[3]

One key opportunity that we see is to use the skills we have developed in learning to work together across fields and the tools of nanoscience and nanotechnology to tackle significant problems in other fields.[2] We have seen this happen, for example, with the BRAIN Initiative in the United States and in other areas.[4] We anticipate both leadership by and support from the nanoscience and nanotechnogy communities in these national and international efforts. We noted that our trainees are in great demand across a wide variety of industries, not only for their training, which could be useful in commercializing nanoenabled products, but also for their skills in thinking, working, and communicating across disciplinary boundaries.

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Additional questions posed relate to how our field will be considered in the coming years. Will nanoscience and nanotechnology become core disciplines, or perhaps initiatives whose

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time has arced and eventually passed, or will we maintain our position bridging fields and opening up opportunities across many fields of science, engineering, and medicine? While the answer is not known, we believe that the result will be strongly affected by our activism in all of the areas discussed. We look forward to engaging you and the entire community in these endeavors, as well as to identifying opportunities and reporting significant efforts and advances.

As in 2013, the directors' forum was held just prior to ChinaNANO, and we again celebrated our award lectures at the conference. Our *ACS Nano* lectureship award winners, Prof. Maurizio Prato of the University of Trieste, Prof. Peidong Yang of the University of California, Berkeley, and Prof. Hua Zhang of Nanyang Technological University share their perspectives on nanoscience and nanotechnology in articles specially commissioned in celebration of these awards.[5,6]

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