Meeting Global Challenges by Investing in Nanoscience and Nanotechnology

ith the outcome of the US presidential election now decided and with the current economic turmoil, there has been a palpable sense of uncertainty in what the future will bring. I would argue that we as a community are poised to guide that future in a positive direction, to accelerate the recovery of both our economy and the divisions between us, and to address many of the greatest issues that we face. On these pages, we try to lay out the challenges ahead, and to point out opportunities for significant advances. We have already seen thoughtful discussions on biomedicine, energy, and making the world greener. We will continue to showcase such areas, in targeting our stated

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the world greener.^{2–6} We will continue to showcase such areas, in targeting our stated goals of pointing out challenges and opportunities and of opening up the communication between the fields of science and engineering.

Along these lines, I am delighted to announce that ACS Nano has been accepted for indexing in MEDLINE/PubMed back to Volume 1, Issue 1. This will bring our work to an ever broader community and will enable even greater impact in the biomedical world.

The potential of nanoscience and nanotechnology research to address some of the world's greatest challenges will play a significant role at the Spring American Chemical Society National Meeting in Salt Lake City, Utah, March 22—26, 2009. We have partnered with the ACS Technical Divisions to develop thematic programs and a range of symposia along these lines, to discuss and to advance the state of each of these fields. As the time draws near, we will highlight some of the meeting's plenary talks and the special interdisciplinary symposia. I am looking forward to the meeting and to seeing you there!

I have also had the good fortune in the last few months to be included in workshops focused on identifying and overcoming the challenges of developing new nanoscale tools. These were sponsored by the Department of Energy, the National Institutes of Health, and the National Science Foundation. In part, these workshops have been an acknowledgment that new and improved tools will enable and drive further advances. The level and intensity of the meetings have shown how serious the efforts are to support and to accelerate these advances. It has become clear that not only must such developments be funded but also new funding and support mechanisms will be required to sustain such work and to train the critical cadre of talented and creative scientists and engineers involved. We will highlight a number of such efforts around the world in issues to come.

Please let us join together in making the future brighter, greener, and healthier through nanoscience and nanotechnology. We have much work to do, but also many opportunities for significant exploration, important contributions, and great excitement ahead.

Paul S. Weiss Editor-in-Chief

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