

Nanoscience and Nanotechnology: Present and Future

The President's Council of Advisors on Science and Technology (PCAST) has just released their review of the U.S. National Nanotechnology Initiative.¹ Among the major recommendations are increased support of commercialization efforts including nanomanufacturing, but not at the expense of support of science and engineering; better coordination between U.S. agencies; and increased efforts in nanoscience education and in understanding the societal impacts of nanotechnology. In addition, a forward-looking view of environmental health and safety for nanomaterials is promoted.²⁻⁴ The potential of commercialization and the significant impact on local, national, and global economies are reiterated. Also included in the recommendations is support for a program to make it easier for those with advanced degrees from U.S. institutions to obtain permanent resident status (green cards). A discussion of the areas of opportunity in nanotechnology includes nanomedicine, energy storage, environmental diagnostics and cleanup, nanocomposites, chemical and biological sensors, and nanomanufacturing.

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A discussion of the areas of opportunity for the next 10 years includes nanomedicine, energy storage, environmental diagnostics and cleanup, nanocomposites, chemical and biological sensors, and nanomanufacturing. Other studies in the U.S. and abroad are now identifying, addressing, and fleshing out these topics and the challenges involved. We look forward to presenting and contributing to these evolving discussions and to publishing the exciting results that follow.

On a related topic, last month, two of our editorial board mem-

bers who have performed extraordinary government service, Profs. Millie Dresselhaus and George Whitesides, were honored by the ACS and Dreyfus Foundation at the 240th American Chemical Society National Meeting in San Francisco. Please join me in congratulating them both! Prof. Dresselhaus received the ACS Award for Encouraging Women into Careers in the Chemical Sciences and spoke mainly on her work on carbon nanomaterials.⁵ A breathtaking daylong symposium celebrating materials chemistry was held in honor of Prof. Whitesides⁶ as the winner of the inaugural Dreyfus Prize in the Chemical Sciences. Speakers included Associate Editor Grant Willson, editorial board members Paul Alivisatos, John Rogers, and of course George Whitesides.

Lastly, we welcome Prof. Wolfgang Parak as our newest associate editor. Prof. Parak is a professor of physics at the University of Marburg; he will start handling manuscripts this summer but is already at work helping us chart the future of nanoscience, nanomedicine, and *ACS Nano*.⁷



Paul S. Weiss
Editor-in-Chief



IMAGE COURTESY OF WOLFGANG PARAK

Prof. Wolfgang Parak of the University of Marburg, Department of Physics, joins *ACS Nano* as an associate editor starting this summer.

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