



#### **PUBLISHER**

David H. Colby (212) 591-7125 davec@aiche.org

#### **EDITOR-IN-CHIEF**

Kristine Chin (212) 591-7662 krisc@aiche.org

#### **TECHNICAL EDITOR**

Cynthia Fabian Mascone (212) 591-7343 cyntm@aiche.org

#### **ASSOCIATE EDITOR**

Rich Greene (212) 591-8677 richg@aiche.org

#### **ASSISTANT EDITOR**

Karen Simpson (212) 591-7337 kares@aiche.org

#### ART DIRECTOR

Fran Fresquez (212) 591-8669 franf@aiche.org

# PRODUCTION COORDINATOR

Andrew Triana (212) 591-7987 andrt@aiche.org

#### INTERN

Danielle Deutsch (212) 591-7317 danid@aiche.org

#### **CONTRIBUTING EDITORS**

Irene Kim

### **WASHINGTON EDITOR**

Darlene Schuster (202) 962-8690 dc@aiche.org

#### **REGULATORY EDITOR**

William A. Shirley (888) 674-2529 envtllaw@earthlink.net

#### **PATENT LAW EDITOR**

M. Henry Heines (415) 576-0200 mhh@townsend.com

#### **SOFTWARE EDITOR**

Roy V. Hughson rhughson@pipeline.com

## COPY EDITOR

Arthur Baulch (212) 591-7377 arthb@aiche.org

# CLASSIFIED ADVERTISING

Daniel A. Johnson (212) 591-7683 danij@aiche.org

## **AIChE**

AMERICAN INSTITUTE OF CHEMICAL ENGINEERS

THREE PARK AVENUE NEW YORK, NY 10016-5991 www.aiche.org

## EDITORIAL ADVISORY BOARD

William W. Doerr Factory Mutual Research Corp.

Stevin H. Gehrke
Kansas State University

Dennis C. Hendershot Rohm and Haas Co.

Robert F. Hoch Consultant

Laura A. Hofman

H&R Technical Associates

Kenneth Kamholz Consultant

Stephen P. Lombardo

The Coca-Cola Co. Jerry L. Robertson

Jerry L. Robertson Consultant

Bruce Vaughen DuPontTeijinFilms

#### **AIChE**

General Inquiries 1-800-AIChemE (1-800-242-4363)

Education Services (212) 591-7770

Career Services

(212) 591-7524 Meetings/Expositions

(212) 591-7324

Member Activities/Services (212) 591-7329

Reprint Sales 1-800-635-7181 ext.8110 Fax: (717) 633-8929 ghallman@tsp.sheridan.com

#### **EXECUTIVE DIRECTOR**

John Sofranko johns@aiche.org

## **GROUP PUBLISHER**

Stephen R. Smith steps@aiche.org



# **Editorial**



# Moving forward

reating some semblance of normalcy is, for many, one way of coping with the tragic events of September 11, 2001. In the September 16th edition of the Sunday *New York Times*, reporter Ellyn Spragins writes, "Returning to normal life as quickly as possible is surprisingly meaningful." I, for one, am someone who takes comfort in routines. And it is with this thought in mind that I will write an abbreviated editorial on the topic I selected prior to these heinous acts.

Amidst all the hype about nanotechnology, it may become difficult to discern fact from fiction. While the future of nanotechnology is undoubtedly bright, there are some applications that are here and now, and there are others that are in the distant future. For example, in the news article by contributing editor Irene Kim (pp. 10–14), the Univ. of Michigan's Lajos Balogh states that "dreams about building nanorobots are conceptually beautiful, but it might take a million years to make them." Meanwhile, nanoclays are already finding their way into injection-molded parts and coatings.

After concluding her research, Kim points out that the consensus among researchers is that progress in this area will be evolutionary, not revolutionary, and that applications will begin to appear with increasing frequency; and as markets scale up, so will processes. Evidence of markets scaling up can already be seen. Mitsubishi Corp. and Mitsubishi Chemical Corp. recently announced their intent in establishing a joint venture, Frontier Carbon Corp., which is expected to produce fullerenes at a rate of 1,500 tons/yr by 2004. Nanomaterials, as Max Lake from Applied Sciences notes, may eventually go from high-priced specialties to everyday status, like aluminum in the last century. "Aluminum was so precious that they used it to decorate the Washington Monument. Now we use it to wrap sandwiches."

In order to get a better grasp of the power of nanotechnology, many conferences are being dedicated to this topic. For instance, the National Nanotechnology Initiative has sponsored a meeting entitled "Small Wonders: Exploring the Vast Potential of Nanoscience." This meeting was rescheduled from September 13, 2001 to March 21, 2002. For more information, go to www.nano.gov. Also, at AIChE's Annual Meeting (Reno, NV; Nov. 4–9; www.aiche.org/annual), there is a topical conference on "Nanoscale Science and Engineering." This conference is composed of thirteen sessions, including modeling and simulation of nanoscale systems, nanostructured biomaterials, and synthesis and creation of novel nanoporous materials.

Many thanks to all of our readers for calling and asking about our well-being. *CEP* would also like to express our heart-felt sympathies to all those who have lost loved ones in New York, Washington and Pennsylvania. AIChE is working towards making a difference to those who were affected by the tragedy. As the plan develops, chemical engineers will be given the opportunity to join the Institute in this effort.

Kristine Chin Editor-in-Chief krisc@aiche.org