

BUSINESS ADDRESS:
Chemical Engineering Education
5200 NW 43rd St., Suite 102-239
Gainesville, FL 32606
PHONE: 352-682-2622
FAX: 866-CEE-0JRN
e-mail: cee@che.ufl.edu

EDITOR

Tim Anderson

ASSOCIATE EDITOR

Phillip C. Wankat

MANAGING EDITOR

Lynn Heasley

PROBLEM EDITOR

Daina Briedis, Michigan State

LEARNING IN INDUSTRY EDITOR

William J. Koros, Georgia Institute of Technology

PUBLICATIONS BOARD

• **CHAIR** •

C. Stewart Slater
Rowan University

• **VICE CHAIR** •

Jennifer Sinclair Curtis
University of Florida

• **MEMBERS** •

Pedro Arce

Tennessee Tech University

Lisa Bullard

North Carolina State

David DiBiasio

Worcester Polytechnic Institute

Stephanie Farrell

Rowan University

Richard Felder

North Carolina State

Tamara Floyd-Smith

Tuskegee University

Jim Henry

University of Tennessee, Chattanooga

Jason Keith

Mississippi State University

Milo Koretsky

Oregon State University

Suzanne Kresta

University of Alberta

Marcel Liauw

Aachen Technical University

David Silverstein

University of Kentucky

Margot Vigeant

Bucknell University

Donald Visco

University of Akron

Chemical Engineering Education

Volume 46

Number 2

Spring 2012

► **DEPARTMENT**

66 Chemical Engineering at the University of Wisconsin

► **CLASSROOM**

73 Tips for Busy New Professors

Phil Wankat

80 Text Messaging As a Tool for Engaging ChE Students

*S. Patrick Walton, Daina Briedis, Stephen D. Lindeman,
Amanda P. Malefyt, and Jon Sticklen*

97 A Controlled Drug-Delivery Experiment Using Alginate Beads

Stephanie Farrell and Jennifer Vernengo

► **RANDOM THOUGHTS**

87 Just-in-Time vs. Just-in-Case

Rebecca Brent and Richard M. Felder

► **CURRICULUM**

89 Career Coaching for Ph.D. Students

Joy L. Watson, Ed P. Gatzke, Jed S. Lyons

110 Experiential Learning and Global Perspective in an Engineering Core Course

Daniel J. Lacks, R. Mohan Sankaran, and Clever Ketlogetswe

118 Towards a Sustainable Approach to Nanotechnology by Integrating Life Cycle Assessment into the Undergraduate Engineering Curriculum

*Dmitry I. Kopelevich, Kirk J. Ziegler, Angela S. Lindner, and
Jean-Claude J. Bonzongo*

129 An Approach to Help Departments Meet the New ABET Process Safety Requirements

Bruce K. Vaughan

► **LEARNING**

135 PBL: An Evaluation of the Effectiveness of authentic Problem-Based Learning (aPBL)

Donald R. Woods

CHEMICAL ENGINEERING EDUCATION [ISSN 0009-2479 (print); ISSN 2165-6428 (online)] is published quarterly by the Chemical Engineering Division, American Society for Engineering Education, and is edited at the University of Florida. Correspondence regarding editorial matter, circulation, and changes of address should be sent to CEE, 5200 NW 43rd St., Suite 102-239, Gainesville, FL 32606. Copyright © 2012 by the Chemical Engineering Division, American Society for Engineering Education. The statements and opinions expressed in this periodical are those of the writers and not necessarily those of the ChE Division, ASEE, which body assumes no responsibility for them. Defective copies replaced if notified within 120 days of publication. Write for information on subscription costs and for back copy costs and availability. POSTMASTER: Send address changes to Chemical Engineering Education, 5200 NW 43rd St., Suite 102-239, Gainesville, FL 32606. Periodicals Postage Paid at Gainesville, Florida, and additional post offices (USPS 101900).