BUSINESS ADDRESS: Chemical Engineering Education 675 Wolf Ledges Parkway, Suite 2459 Akron, OH 44309-2459 PHONE: 352-682-2622 email: cee@che.ufl.edu

EDITOR Donald P. Visco, Jr., University of Akron

ASSOCIATE EDITOR Joseph H. Holles, New Mexico State University

ASSOCIATE EDITOR & LIFELONG LEARNING EDITOR Lisa G. Bullard, North Carolina State University

ASSISTANT EDITOR & PROBLEMS EDITOR David Silverstein, University of Kentucky

> ASSISTANT EDITORS Allison Godwin, Purdue University

Monica Lamm, Iowa State University

Justin Shaffer, Colorado School of Mines

Troy Vogel, University of Notre Dame

ACCESS EDITOR Carlos Rinaldi, University of Florida

PUBLICATIONS MANAGER Erin Stevic

#### PUBLICATIONS BOARD -

• CHAIR • Milo Koretsky Tufts University

• VICE CHAIR • Adrienne Minerick Michigan Technological University

#### • MEMBERS •

Jason Bara (Alabama) Taryn Bayles (Pittsburgh) Lorenz Biegler (Carnegie-Mellon) Daniel Burkey (Connecticut) Jennifer Cole (Northwestern) Matthew Cooper (NC State) John Falconer (Colorado) Laura Ford (Tulsa) Ashlee Ford Versypt (Buffalo) LaRuth McAfee (Delaware) Polly Piergiovanni (Lafayette) Stewart Slater (Rowan) Uttandaraman Sundararaj (Calgary)

# Chemical EngineeringEducationVolume 56Number 2Spring 2022

#### ► CLASSROOM

- 90 How Chemical Engineering Students Have Changed Over Two Decades: A Perspective from Georgia Tech Mark R. Prausnitz, Christian M. Cuba-Torres, Nian Liu, Yunki Lee
- 103 Development and Implementation of a Low-Cost Desktop Learning Module for Double Pipe Heat Exchange Olivia May Reynolds, Aminul Islam Khan, David B. Thiessen, Prashanta Dutta, Olusola O. Adesope, Bernard J. Van Wie
- A Brief Investigation of Exam Questions Posted to Tutoring Websites:
  A Darker Side of Modern ChE Education Javier Huayta, Zachary S. Campbell, Matthew E. Cooper

## **> DRAWN TO ENGINEERING**

113 Avoiding Shell Shock When Trying Something New Lucas Landherr and family

#### ► CLASS AND HOME PROBLEMS

**125** Novel Spreadsheets to Enhance Learning of Rigorous Equilibrium-Based Methods for Multicomponent Separations *Amparo Gómez Siurana, Alicia Font Escamilla* 

## **FOOD FOR THOUGHT**

**135** We Have Standards *Margot Vigeant* 

#### ▶ PROFESSIONAL DEVELOPMENT

137 A Decade with DYSS: Lessons Learned and Looking Forward Brittany P. Bishop, Cole A. DeForest

#### IN MEMORIAM

- 147 H. Scott Fogler Sharon Glotzer
- **153** Tribute to a Role Model *Richard Felder*

#### ► OTHER

- **102** Book Review: A Guide to Hazard Identification Methods, 2nd Edition, by Frank Crawley Tracy Carter
- 122 Book Review: Success and Creativity in Scientific Research: Amaze Your Friends and Surprise Yourself, by David Sholl
  - David F. Ollis
- 124 Teaching Tips: A Visual Approach to Measuring Blend Time in an Agitated Vessel

Kevin J. Myers, Eric E. A. Janz

CHEMICAL ENGINEERING EDUCATION [ISSN 0009-2479 (print); ISSN 2165-6428 (online)] is published quarterly by the Chemical Engineering Division, American Society for Engineering Education. Correspondence regarding editorial matter, circulation, and changes of address should be sent to CEE, 675 Wolf Ledges Parkway, Suite 2459, Akron, OH 44309. Copyright © 2022 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. Valid defective copies replaced if returned within 90 days of publication. Write for information on subscription costs and for back copy costs and availability. POSTMASTER: Send address changes to Chemical Engineering Education, 675 Wolf Ledges Parkway, Suite 2459, Akron, OH 44309. Periodicals Postage Paid at Gainesville, Florida, and additional post offices (USPS 101900). https://journals.fbc.org/cee/index