

Values

- develop student thinking and problem solving
- integrate real world issues with theories in STEM
- respond to employer needs and expectations
- use educational research and student assessment to inform innovations in education

Editor-in-Chief

P. K. Raju

Thomas Walter Professor
Director, LITEE
Department of Mechanical Engineering
270 Ross Hall • Auburn University, AL, 36849
Phone: (334) 844-3301 • Fax: (334) 844-3307
Email: pkraju@eng.auburn.edu

Managing Editor

Chetan S. Sankar

Thomas Walter Professor
Department of Management
415 West Magnolia Avenue, Suite 401
Auburn University, AL, 36849
Phone: (334) 844-6504 • Fax: (334) 844-5159
Email: sankacs@auburn.edu

Mission Statement

To promote high-quality undergraduate education in science, technology, engineering and mathematics through peer reviewed articles that provide

- Case studies and other innovations in education
 - Well founded in STEM content
 - Informed by educational research
 - Tested through assessment of impact on student learning
- Results from educational research that informs teaching and learning in STEM
- Recent developments that impact STEM education in such areas as policy and industry needs

Editorial Assistants

Kristen Billy
Department of Mechanical Engineering 270 Ross Hall,
Auburn University, AL 36849
Phone: (334) 844-3360 • Fax: (334) 844-3307
Email: kristen.billy@gmail.com

International Editorial Advisory Board Members

M. Dayne Aldridge, Adjunct Accreditation Director for Engineering, ABET, Washington, DC,

Timothy J. Anderson, Associate Dean for Research and Graduate Programs and Professor, Chemical Engineering, University of Florida, FL

Cynthia Atman, Director, Center for Engineering Learning and Teaching, University of Washington

Frank S. Barnes, Distinguished Professor, Electrical and Computer Engineering, University of Colorado, Boulder, CO

Larry D. Benefield, Dean, Samuel Ginn College of Engineering, Auburn University, AL

Myles Boylan, Program Director, National Science Foundation

John D. Bransford, James W. Mifflin University Professorship and Professor, College of Education, University of Washington, WA

James W. Camerius, Professor, Walker L. Cisler College of Business, Northern Michigan University, MI

K. Chandrasekaran, Dean and Professor, R.M.K. Engineering College, Kavaraipettai, Tamil Nadu State, INDIA

Tim Edlund, Past President, NACRA, Associate Professor, Earl G. Graves School of Business and Management, Morgan State University, MD

Don L. Evans, Faculty Emeritus, Mechanical & Aerospace Engineering, Arizona State University, AZ

Lyle Feisel, Retired, Dean Emeritus of Thomas J. Watson School of Engineering and Applied Science, Binghamton University, NY

Richard M. Felder, Hoechst Celanese Professor Emeritus, Department of Chemical Engineering, North Carolina State University, NC

Norman Fortenberry, Executive Director, American Society for Engineering Education, Washington, DC

Wallace T. Fowler, University Distinguished Teaching Professor, Department of Aerospace Engineering and Engineering Mechanics, The University of Texas at Austin, TX

Eli Fromm, Director, Center for Educational Research, Drexel University

Mythreyee Ganapathy, University Relations Manager, Microsoft India, Hyderabad, INDIA

Lothar Gaul, Director, Institut für Mechanik, University of Stuttgart, GERMANY

Alain Gerard, Professor, Laboratoire de Mecanique Physique, Universite Bordeaux, FRANCE

George Hairston, Retired Chairman, Southern Nuclear Operating Company, Inc., Birmingham, AL

Gerald S. Jakubowski, President, Rose-Hulman Institute for Technology, Terre Haute, IN

Mario Letelier, Director, Center for Research in Creativity and Higher Education, University of Santiago de Chile, CHILE

Lillian C. McDermott, Professor of Physics, University of Washington, WA

Patricia F. Mead, Professor, Optical Engineering, Norfolk State University, VA

Carolyn W. Meyers, President, Jackson State University, Jackson, MS

J. P. Moshen, Past President, American Society for Engineering Education (2009); Professor and Chair, Civil Engineering Department, University of Louisville, Louisville, KY

R. Natarajan, Director(Retired) Indian Institute of Technology; Chairman, Board for Information Technology Education Standards, Bangalore, INDIA

George Peterson, Executive Director, Accreditation Board for Engineering and Technology, Baltimore, MD

Winfred M. Phillips, Vice President for Research and Dean, Graduate School, University of Florida, FL

Russell L. Pimmel, Program Director, CCLI/DUE, National Science Foundation, Arlington, VA

Karl-Heinz Rau, Professor, Business School, Pforzheim University, GERMANY

William H. Rauckhorst, Senior Associate to the Provost and Professor of Physics, Miami University, OH

Sydney Rogers, Executive Director, Alignment Nashville, TN

Eric Sheppard, Dean, School of Engineering and Technology, Hampton University, VA

Larry J. Shuman, Professor and Associate Dean for Academic Affairs, School of Engineering, University of Pittsburgh, PA

Karl A. Smith, Morse-Alumni Distinguished Teaching Professor of Civil Engineering, University of Minnesota, MN

Nam P. Suh, President of the Korea Advanced Institute of Science and Technology (KAIST)

Gerard Voland, Provost, University of Michigan, Flint, MI

Phillip C. Wankat, Clifton L. Lovell Distinguished Professor of Chemical Engineering and Director of Undergraduate Degree Programs, Purdue University, IN

Steve E. Watkins, Professor of Electrical & Computer Engineering, University of Missouri Rolla, MO