

Introductory Statement

New Frontiers in Chemical Engineering Education is a series of workshops whose aim is to specify an undergraduate chemical engineering curriculum that

- builds on our unique position in engineering
- attracts the best and brightest students
- is valued by industry
- contains a good supply of examples, contributed from the wide community of chemical engineering
- uses the best available practices for instruction

The series is funded by the National Science Foundation and conducted under the auspices of the Council for Chemical Research.

Workshop II was held in the Crowne Plaza Austin Hotel and Executive Meeting Center, in Austin TX, on 2003 April 8-10. The participants were

Last Name	First Name	Affiliation
Armstrong	Bob	MIT
Bequette	Wayne	RPI
Brazel	Chris	Alabama
Cano	Manny	Shell
Cerro	Ramon	Alabama Huntsville
Chauhan	Anuj	Florida
Chuang	Steven	Akron
Daugherty	Patrick	UC Santa Barbara
Dudukovic	Mike	Washington U
Edgar	Tom	Texas
Ekerdt	John	Texas
Georgakis	Christos	Polytechnic U
Gossage	John	Lamar
Hackleman	David	Oregon State
Hall	Kenneth	Texas A&M
Harrison	Graham	Clemson
Johnson	Duane	Alabama
Kao	Cammy	Stanford
Kilpatrick	Peter	NC State
McCarthy	Joe	Pittsburgh
McRae	Greg	MIT
Miller	William	Northwestern
Olbricht	Bill	Cornell
Prudich	Michael	Ohio
Rajagopalan	Raj	Florida
Rawlings	Jim	Wisconsin
Rogers	Bridget	Vanderbilt
Rousseau	Ron	Georgia Tech
Thien	Michael	Merck Research Lab
Turton	Richard	West Virginia
Watson	Ted	Colorado State

New Frontiers in Chemical Engineering Education

Austin Workshop

Proceedings

2003 Apr 8-10

Weber
Wiesner

Fred
Ted

Tennessee
Texas Tech

The meeting Facilitator was Jeannette Gerzon of Belmont MA; additional planning and support were provided by Barry Johnston and Melanie Miller of MIT.

Workshop II was charged to arrange the subject matter of chemical engineering based on four organizing principles, as developed in Workshop I:

- molecular transformations
- quantitative analysis
- multiscale analysis
- systems approach/synthesis.

and then to explore how this material might be organized into a curriculum.

The Proceedings for Workshop II comprise

- Executive Summary
- Overview by Armstrong
- Session 1: knowledge, skills, attributes, and examples
- Session 2: connections among the organizing principles
- Session 3: approaches to a curriculum
- Summary Report by Rawlings and Thien
- Conclusion by Armstrong