

# MDW IV: 10–12 July 2003

## TENTATIVE PROGRAM



(v 4.0, 11 March 2003)

○ OPENING (LUNCHEON SESSION)

C. L. Dym (Harvey Mudd C), "Issues and Fixes: One Greybeard's View."

W. A. Wulf (NAE and U Virginia), "*As Yet Untitled*."

○ EC 2000: A CHANGE AGENT FOR ENGINEERING EDUCATION?

J. W. Prados (U Tennessee), "Keeping the Vision Alive: The Road Ahead for ABET and EC 2000."

J. F. Volkwein, Co-PI, L. R. Lattuca, P. T. Terenzini, L. C. Strauss and J. Sukhbaatar (Pennsylvania State U), "Engineering Change: A Longitudinal Study of the Effects of EC2000."

J. A. Shaeiwitz (West Virginia U), "The Use of Design Projects for Assessment of an Engineering Program."

○ DRIVERS AND REWARDS IN ENGINEERING ACADEMIA

R. H. Todd and S. P. Magleby (Brigham Young U), "Evaluation and Rewards for Faculty Involved in Engineering Design Education."

C. L. Magee (MIT/Ford), "Engineering Education Needs, Possibilities."

John H. McMasters (Boeing), "Influencing Engineering Education: One [Aerospace] Industry Perspective."

○ NEW DESIGNS OF ENGINEERING EDUCATION AND STUDENT LEARNING

S. D. Sheppard (Stanford U), "Engineering Education: An Effective Transition From Student to Junior Engineer?"

J. Turns, R. S. Adams, A. Linse and C. J. Atman (U Washington), "Bridging from Research to Practice in Undergraduate Engineering Design Education."

D. Ollis (North Carolina State U), "Multidisciplinary Design: Established Practices and New Initiatives in the SUCCEED Coalition."

D. Grasso (Smith C), "Engineering A Liberal Education at Smith College: Curricular and Pedagogical Innovation."

R. E. Miller and/or M. E. Moody (Olin C), "*On Olin's new curriculum.*"

○ DESIGN AS MOTIVATOR AND INTEGRATOR ACROSS THE CURRICULUM

J. M. Feland III, L. J. Leifer and W. R. Cockayne (Stanford U), "Comprehensive Design Engineering."

L. Carlson and J. Sullivan (U Colorado), "*Using design across the K-16 engineering curriculum to integrate fundamental math and science theory.*"

R. Devon and S. Bilen (Penn State U), A. McKay and A. de Pennignton (U Leeds), P. Seraferro (Ecole Centrale de Lyon) and J. Sanchez Sierra (Universidad de Navarra), "The Rise of Integrated Design."

W. H. Wood (U Maryland Baltimore County), "Decision-Based Design: A Vehicle for Curriculum Integration."

○ MULTI-SCALE "ANALYSIS AND REDUCTIONISM" VS "DESIGN AND SYNTHESIS"

J. Bonadio and K. Tupper (U Washington), "A Science and Literature Partnership: Designing Interdisciplinarity in Engineering Education."

C. D. Pionke, E. Seat and J. R. Parsons (U Tennessee), "Analysis vs. Design: Why the *Versus?*"

R. Stephens (Boeing), "*Engineering education: Understanding market dynamics and needs or applying engineering skills to create products?*"

G. B. Olson (Northwestern), "*Do We Need a National Engineering Foundation?*"

○ ETHOS, ETHICS AND DESIGN IN ENGINEERING EDUCATION

T. Meijknecht (Delft U of Technology), "*How is the Spirituality of Engineering Taught or Conveyed?*"

C. Newman, M. Bauer, J. Mankoff and A. M. Agogino (UC Berkeley),  
"Perceptions of the Design Process: An Examination of Gendered Aspects  
of New Product Development."

R. Devon (Penn State U), P. McReynolds (Gonzaga U) and I. Van der  
Poel (TU Delft), " Design Ethics: The Social Ethics Paradigm."

○ MDW IV WRAP-UP: WHAT HAVE WE LEARNED? WHAT SHOULD WE DO?

Moderated discussion designed to pull together the workshop's intellectual  
threads and solicit intended plans for individual, team and collective  
actions.