

### **Discussion**

After group reports, there was open discussion on several topics. The list below is compiled from these comments:

#### On the amount of subject material in the curriculum:

- Can we do all this new material in a 4-year curriculum?
- Should we abandon the BS degree, and make ChE a 5-year MS?
- 4-year BS is a K-12 problem - (?)
- in Europe it is common to have 5-year schools for technicians, others for engineering. Now changing to a 4 + 2 scheme.
- Companies are accustomed to the 4 year BS degree
- total content > 4 years is NOT a new question

#### On the prospect of specialized tracks within the ChE curriculum:

- should we emphasize tracks vs. graduates who can change technical areas?
- suggest a core, supplemented by minor tracks - not too specialized
- build around new paradigm to define a new core good for all
- we can't address ALL new technologies; however, we must attract new students, and so we must show them that they will be capable of qualifying for new technologies
- graduate entering industry learn in that industry - universities should emphasize fundamentals for life-long use in a variety of industries

#### On other concerns about the curriculum:

- can traditional content be reclassified in the new scheme?
- problem solving and critical thinking are key skills. We need to explore how to foster this in engineering education.
- Lehigh University offers a year-long course as a senior elective, called Opportunity for Student Innovation. It features teamwork with an industry sponsor.