## **286e** Undergraduate Programs in Chemical and Biological Engineering in China *Xue-Ming Zhao*

Before 1998, there were different undergraduate programs dealing with chemical engineering and biological engineering in different Universities of China: Chemical engineering and Biochemical engineering in Departments of chemical engineering; Fermentation engineering and technology in Department of food engineering; Microbial pharmaceutical engineering in Medical Universities. In 1998, through several years education reform discussions, the above undergraduate programs have been reorganized into three B.S. Degree programs but in two fields: Chemical engineering (in more than 130 universities) and Pharmaceutical engineering(in about 140 universities) in Chemical engineering discipline, Biological engineering (in 148 universities) in biological engineering discipline. There are In Tianjin University, the above three B.S. Degree programs are still in the same School of chemical engineering and technology, because those programs have the common basic intellectual core, but have also different new specialistic knowledge. In this presentation, according to the national education reform program led by Tianjin Universities and other Universities, we will introduce our experiences from education reform of chemical and biological engineering of China, also discuss some problems we have met.