

THE PENNSYLVANIA STATE UNIVERSITY  
Department of Chemical Engineering

**Chemical Engineering Colloquium**  
**ChE 590**  
**Spring 2013**  
**Tuesday 1:00 – 2:15 PM Room 140 Fenske**

**Instructor:** Manish Kumar  
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**Course Objectives:** 1) To increase awareness of career choices after your PhD here at Penn State and to encourage career planning early in your PhD.  
2) To further the ability to give effective oral presentations of technical material through practice and evaluation of others.

**Course Outline:**

**On an occasional Basis:**

- a) Recent PhD grad talks:  
How and why I got an industry job after my PhD and what I like about it?  
What I wish I had done differently during my PhD?
- b) Academic CV review
- c) Industrial Resume Workshop

**Week 1: (01/08/12)**

Intro, Overall layout of class, Survey, Input.  
HW 1 assigned (Resume or Academic CV, due 01/29/12)  
Speaking assignment description (Presentations start 02/07/12, in alphabetical order of last name, 2 or 3 per class, will post schedule next week)

**Week 2: (01/15/12)**

Career Paths after your Penn State PhD and preparing for it – Andrew Zydney  
My Career Path – Manish

**Week 3: (01/22/12)**

- a) The academic search process – Mike Janik, Assoc. Prof. of Chemical Engineering and Head, Faculty Search Committee, Natural gas faculty search, ChE.
- b) How and why I got an academic job? - Asst. Prof., Penn State
- c) Elements of an academic job application - Speaker TBD

**Week 4: (01/29/12)**

- a) Elements of an academic job application (contd.)
- b) Making good presentations – Manish Kumar

**Weeks 5-15:** (02/05/12 – 04/23/12)

Student presentations – graded. Instructor will provide help with reviewing slides and even practice on request. Schedule will be more firmly set after we have guest speakers scheduled.

**Student Presentation Information**

- Each student will give an oral presentation on a technical topic of his or her choice. The topic will normally correspond to current or past research performed by the student.
- During one class period, a lecture on speaking and preparing effective presentation materials will be given.
- The presentation should present a background adequate for the talk to be understood by a chemical engineer, the specific aims of the research, experimental, simulation or theoretical methods, results and conclusions. Connections to known material should be made and emphasized. The presentation should be timed for 20 minutes, a typical length for a conference presentation.
- Students are encouraged to discuss their topic, send drafts and get feedback on their draft presentations from the instructor.
- Starting on Feb 5<sup>th</sup> [or later if a industry talk or another interesting talk is scheduled], each student will give the final talk. These talks will be followed by a questioning period of about 5 minutes. This is also typical of a conference talk. Time limits will be strictly kept. During this period, class will last for only one hour [two or three students per day].
- All students except those presenting that week will turn in written evaluations of the speakers. Evaluators will be asked to provide a point score in four categories, along with written comments. The point scores will be averaged to give the final score to each presenter. The highest score will be the Chemical Engineering Colloquium winner, who will receive a \$250 prize provided by the department. A runner-up prize of \$100 will also be given out.
- A projector is available in our classroom. You may use your own laptop or bring your talk on a memory stick and use the classroom computer.

**Grading** Students are required to attend all presentations, provide feedback during the practice talks, turn in evaluations of each presenter, and participate in the technical discussion that follows. Students that meet these requirements will be given an A grade in the course. Absences, missing evaluations and non-participation in class will result in a lowered grade. A poorly prepared presentation will also result in a lowered grade.