

635:403/404

Senior Ceramic Seminar

Department of Ceramic and Materials Engineering

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Description

Speakers, primarily from companies that employ our graduates, present technical seminars on selected topics. They also describe their career paths, the job content for graduates in their companies, the outlook for employment in their industry. Factors employers look for in interviews and factors which lead to success in a career are also discussed.

Objectives

The course is designed to (1) present students with information about different types of entry level positions: process/product development, prototype manufacturing, plant engineering in both large and small companies, sales and marketing and graduate education; (2) to provide examples of career paths for recent graduates as well as engineers that are late in their careers; and (3) provide exposure to industrial technology in a variety of industries that manufacture or use ceramic materials.

Prerequisites

There are no prerequisites for this class.

Attendance

This is a required course.

Projects

No projects are included in this class.

Texts

No texts are used in this class.

Topics Covered

Week	Topic	Speaker	Organization
1	Interviewing Skills	Prof. D. Niesz	Rutgers University
2.	Sales and Marketing Careers	Prof. R. L. Lehman	Rutgers University
3.	Dental Porcelain	Mr. L. Panzera	American Thermocraft
4.	Boron Chemistry	Mr. R. Smith	U. S. Borax
5.	Advanced Batteries	Dr. Glenn Amatucci	Telecordia
6.	Finish Grinding of Ceramic Materials	Mr. C. Sideridis	Ferro Grinding
7.	Manufacture of Alumina Ceramics	Dr. J. Chakraverty	Ferro
8.	Manufacture of Glass Tank Refractories	Mr. R. Duncan	Corhart Refractories
9.	Fiber Optic Device Manufacturing	Dr. G. Puc	Lucent
10.	Patents	Dr. V. Janus	Johnson & Johnson
11.	Sales of Specialty Ceramic Packages	Mr. A. Pagkalinawan	Kyocera
12.	High Priority Alumina Powders	Dr. E. Anderson	Reynolds
13.	Ceramic Transducers in Medical Ultrasound	Dr. D. Waller	Agilent
14.	Manufacture of SiC Refractories	Dr. D. Hurley	Saint Gobain

Grade

The grade is based on attendance.

Contributions of Course to Meeting the Professional Component

The students are exposed to real develop cases from industry of process and product engineering for development, manufacture and sale. This illustrates the engineering standards and realistic constraints required are involved in industrial practice.

Relationship of Course to Program Objectives

The cases presented by the speakers, the career-path histories of the speakers and the discussion of the job content at several companies for several different types of jobs help the students prepare for productive careers and, through real examples, it shows them the importance of the program outcomes and assessments to their careers.