

Visa and Global Outsourcing Needs of, and Impacts on, the Chemical Process Industries

This symposium, which was held at the Philadelphia National Meeting in August 2004, presented several viewpoints on visa and global outsourcing issues including the individual member, government, and the corporate sector. Historical perspectives and emerging issues in immigration and offshore outsourcing were discussed.

Presenters: Abstracts, biographies and presentations

- ❖ [Dennis Chamot: Globalization of Chemical Research: Historical Trends vs. Rosy Scenarios](#)
- ❖ [Ross Armbricht: Industrial R&D in the People's Republic of China: Notes from the Pioneers](#)
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The sponsor was the Division of Professional Relations. Co-sponsors were the Committee on Economic and Professional Affairs and the Business Development & Management Committee.

Globalization of Chemical Research: Historical Trends vs. Rosy Scenarios

Dennis Chamot (ACS Director-at-Large, National Research Council of the National Academies)

Current trends in globalization affect much more than chemical R&D. Understanding what is happening now requires an understanding of technology and work flow trends that have been developing over the past 200 years. I will summarize some of the broad developments, and draw implications, both positive and negative, for today's chemical professionals competing in a rapidly changing world.

Presentation: [Globalization of Chemical Research: Historical Trends vs. Rosy Scenarios](#)

Industrial R&D in the People's Republic of China: Notes from the Pioneers

Ross Armbrecht (President , Industrial Research Institute)

The number of western companies establishing laboratories in the People's Republic of China continues to grow in spite of a list of issues. These include, among others, intellectual property protection, difficulties actualizing promised government incentives, compensation differences between local hires and expatriates (particularly returnees), and establishing partnerships with universities and local businesses. This presentation highlights the experiences of these laboratories, why they are located in China, why China encourages them, some recommendations from the pioneers, and the outlook for these laboratories.

Presentation: [Industrial R&D in the People's Republic of China: Notes from the Pioneers](#)

Offshoring of Chemistry R&D Jobs: Personal Responses to the Threat

John Borchardt (Owner, Southaven Communications)

Offshoring of chemistry jobs is an important but complex issue for chemists. For example, European drug firms have recently opened major U.S. R&D centers. At the same time, other U.S. companies are reducing U.S. chemical R&D employment while opening R&D centers in Asia and other countries. Some U.S. firms are also posting R&D problems on websites where chemists from all countries can compete in solving the problem with the winner receiving a cash reward. Meanwhile, relatively more chemists are working for smaller firms that are less likely than larger ones to open R&D centers and plants employing chemists in other countries.

While these trends will be briefly discussed, the focus of the presentation will be on how chemists can manage their careers to reduce the possibility that it will be their jobs that will be moved offshore.

Presentation: [Offshoring of Chemistry R&D Jobs: Personal Responses to the Threat](#)

There is No Looming Shortage of Chemists

Gene Nelson (Independent Consultant)

Basic premise: There is considerable public domain information that is consistent with the perspective that with today's glutted S&E labor markets, the lifetime of a chemistry "career" is a decade or two, at best. Given the paradoxical U.S. Dept. of Census result that science Ph.D.s have a lower median income than holders of science master's degrees and the recognition that the opportunity cost of a Ph.D. degree is typically twelve to fifteen years of B.S. level income, or about \$500K presently, the rationality of pursuing a chemistry Ph.D. is in question - particularly in light of the employer practice of cutting employee's positions just shy of them attaining 40 years of age, when the employee enjoys the theoretical protections of the Age Discrimination Act of 1967, as amended.

Presentation: [There is No Looming Shortage of Chemists](#)

Hiring the Foreign National Scientist: An Industrial Workforce Need and Immigration Issue

Ron Webb (Senior Manager, Doctoral Recruiting, Procter & Gamble)

To be successful in industrial research and development, U.S. corporations need to be able to hire the best talent. This includes doctoral scientists who are U.S.-born as well as those coming to us from other countries around the world. Each year in this country, non-U.S. citizens receive about 30% of all the doctoral degrees that are conferred in chemistry. In some departments, the proportion of foreign national students exceeds 50%. However, the ability of U.S. corporations to employ such individuals is constrained by such immigration issues as the availability of temporary work visas (H1B) and the ability to obtain Permanent Residency status for their new hires. This presentation will discuss such issues in detail and highlight how they impact workforce development for the future.

Presentation: [Hiring the Foreign National Scientist: An Industrial Workforce Need and Immigration Issue](#)

Emerging Issues in Immigration: How to Obtain Immigration Benefits in Light of New Security Measures and Visa Processing Delays

Jeffrey Pitts (Attorney, Fragomen, Del Rey, Bernsen & Loewry)

The traditional methods to bring research and scientific talent into the United States continue to undergo close scrutiny by the Department of Homeland Security. With the addition of new security measures, visa application interviews, and export control reviews at American Embassies and Consulates, visa applicants face increased hurdles in coming to the United States. This presentation will discuss the traditional visa categories used for employing scientific and research personnel in the United States, as well as some recent developments in the immigration laws that can impact securing top talent.

Presentation: [Emerging Issues in Immigration: How to Obtain Immigration Benefits in Light of New Security Measures and Visa Processing Delays](#)

Government's Role In Offshore Outsourcing

Brian Dougherty (Director, ACS Office of Legislative and Government Affairs)

State and federal policy makers have responded to constituents' concerns about offshore outsourcing by proposing an array of potential legislative changes. Learn how your elected officials are trying to balance the needs of workers, companies, and society at large on this issue and the implications for the chemical enterprise.

Speaker gave an oral presentation without slides.