

# The Competition for Academic Positions

## **People who are already faculty members but have decided to move from one institution to another**

This is now a common trend. Since competition is fierce people tend to accept the first position offered them and later become more discriminating in their choice of institution once they have established their ability to acquire funds and students and have published a few papers on their own. Some wait until they get tenure to launch their second move. These individuals on paper can easily outperform the credentials of most recent Ph.D.s with post-doctoral experience. Though academic jobs may be advertised as entry level positions at the rank of assistant professor, the competition is really open to all. Academic job ads are deliberately kept as open as possible in order to scout the market for the "best candidates" available. See [Volatility Profile of Academic Positions](#) to discover how important this is. You can correlate the appearance of a given job ad in trade magazines with the announcement in the department website of the new faculty member hired and, if you have good grapevine contacts, with hints of a faculty member intending to leave a department. One point to note is that moves are made between universities of the same status; that is, a faculty member from a research focused university will likely move to another with the same focus. Similarly, one from a primarily undergraduate institution tends to move to another of the same type. Rarely, is it the case that moves are made between primarily research and primarily teaching institutions. Those that are successful in doing this often have the support of a faculty member at the target institution who helps to pave the way for the transition to be made. Regionalism factors play heavily into this as well. Many of these moves from one university to another are initiated at conferences where parties from both sides can meet and negotiate terms of the deal, usually between technical sessions or over a meal.

## **Recent Ph.D.'s and post-docs who have degrees from biology, biochemistry, engineering, or physics departments**

The emerging areas of chemistry have pushed the envelope of who is being recruited in Departments of Chemistry. The trend to hire graduates from other disciplines is strong. It also says that chemistry departments do not believe that their own chemistry programs can provide a crop of people with the talent required to meet the demand for emerging areas in chemistry. This will change as Departments overhaul their programs and recruit more of these types of faculty. However, these new recruits tend to have short tenures in chemistry departments and end up at departments for which they would normally have applied in the first place, namely, biology, biochemistry, engineering and physics departments. The culture of chemistry departments is in transition and as yet cannot support the intellectual environment necessary for these individuals to flourish. Faculty members from traditional areas of chemistry still represent the majority of decision makers in departments. Again, this situation is expected to stabilize as the new wave faculty entrench themselves over time.

## **Recent Ph.D.'s and post-docs from big name groups in Canada and abroad**

These people come from groups whose supervisors are either Nobel Laureates, most cited chemists, authors of famous texts, or members of editorial boards of prestigious journals. Success by association is almost guaranteed. Beware that any negative experience with a big name advisor will severely damage any chances of success at securing academic positions. Their fame and influence are far reaching.

### **Recent Ph.D.'s and post-docs from influential supervisors in Canada**

These people come from groups whose supervisors are either chairs of departments, deans, members of granting committees, or executive members of chemical society boards. These are people who have clout in decision making and are active participants in shaping chemistry in Canada. Beware that any negative experience with a big name advisor will severely damage any chances of success at securing academic positions. Their fame and influence are far reaching in both positive and negative directions.

### **Recent trend to hire Ph.D.'s and post-docs from the United States**

Historically the chemistry knowledge brought to Canada came from the United Kingdom. The majority of retired and emeritus professors in Canada are British. This is now offset by a tide from the United States. However the tendency to hire Canadians is increasing, but these Canadians have significant post-doctoral experience from the United States especially if they are men. Women chemistry faculty members in Canada tend to have educational experiences with higher Canadian content and are more likely to post-doc in Europe in national laboratories and institutions. This may change as more women are hired and their competition pool may resemble that of their male colleagues.

## **References for Careers in Academia**

ACS Career Tips: Creating Solutions *Chem. Eng. News* **2022**, 100(20), 29.

ACS Career Tips: Optimize Your Schedule, *Chem. Eng. News* **2021**, 99(44), 53.

Heemstra, J. "Navigating Career Decisions: learning when to act quickly and when to slow down and deliberate", *Chem. Eng. News* **2021**, 99(44), 31.

Heemstra, J. "Independent Does Not Mean Alone: growing as a scientist means taking more ownership, not seeking less advice", *Chem. Eng. News* **2021**, 99(41), 31.

Heemstra, J. "Coping With Uncertainty – Again: moving into the academic year with COVID-19 still looming", *Chem. Eng. News* **2021**, 99(37), 25.

Halford, B. "The Year the Jobs Disappeared: candidates for academic positions in chemistry in the US and Canada saw opportunities vanish in 2020-2021 season", *Chem. Eng. News* **2021**, 99(33), 27.

Heemstra, J. "Choosing a Graduate Adviser: use your research skills to explore options and make an informed decision", *Chem. Eng. News* **2021**, 99(33), 25.

Mullin, R. "Wither the Postdoc? A sizzling pharmaceutical job market is streamlining the course to a career in chemistry", *Chem. Eng. News* **2021**, 99(33), 18.

Heemstra, J. "To Be a Great Mentor, Recognize That It's Not About You: each person you advise has different needs and preferences", *Chem. Eng. News* **2021**, 99(29), 27.

ChemJobber "How to Send a Cold Email: lessons from Anthony Fauci's pandemic correspondence", *Chem. Eng. News* **2021**, 99(26), 27.

ACS Career Tips: Reemerging After COVID-19, *Chem. Eng. News* **2021**, 99(25), 38.

Heemstra, J. "How to Cope With Burnout: recognizing contributing factors is the first step", *Chem. Eng. News* **2021**, 99(25), 25.

Heemstra, J. "Defining Your Win: achieving goals is more fulfilling when you set the terms of success", *Chem. Eng. News* **2021**, 99(22), 21.

Heemstra, J. "Networking Doesn't Have to be Unpleasant: building a lasting relationship starts with a good conversation", *Chem. Eng. News* **2021**, 99(17), 35.

Heemstra, J. "Coping With Infertility, Miscarriage, and Unsuccessful Adoption: institutions can't take away the pain for individuals experiencing loss, but they can create policies to provide support", *Chem. Eng. News* **2021**, 99(13), 23.

Heemstra, J.; Sanford, A. "3 Tips for Making the Most of Your Grad Student Stipend: learning to manage your finances isn't so different from managing a research project", *Chem. Eng. News* **2021**, 99(8), 27.

ChemJobber "The Bitterness of Failure in the Lab: how to change our perspective on enduring hardships in science", *Chem. Eng. News* **2021**, 99(7), 27.

ACS Career Tips: How to Maintain a Positive Attitude, *Chem. Eng. News* **2021**, 99(7), 37.

Heemstra, J. "Love and the Lab: how a supportive life partner shaped my career", *Chem. Eng. News* **2021**, 99(5), 25.

Heemstra, J. "Don't Give Up. Your Mental Health is Worth Maintaining. Self-care during the pandemic is a marathon, not a sprint", *Chem. Eng. News* **2021**, 99(2), 29.

ACS Career Tips: Take Steps Toward Your Dreams, *Chem. Eng. News* **2021**, 99(1), 53.

ChemJobber "What's in Store for the 2021 US Chemistry Job Market? Hopeful vaccine news may get us on solid footing again in both academia and industry", *Chem. Eng. News* **2020**, 98(48), 33.

ACS Career Tips: Being Present to Present Virtually, *Chem. Eng. News* **2020**, 98(47), 44.

Heemstra, J. "What 2020 Has Taught Me About Adversity: we can't always prevent life's challenges, but we can keep growing through them", *Chem. Eng. News* **2020**, 98(47), 25.

ChemJobber "A Letter to My Daughters About Career Choices: choose a field you love, and be prepared to break down gender and racial barriers", *Chem. Eng. News* **2020**, 98(44), 25.

Heemstra, J. "We're All Science Communicators: Here's how to help those around you separate facts from myths", *Chem. Eng. News* **2020**, 98(43), 27.

Heemstra, J. "It's Not Bragging; It's Self-Advocacy: how to be more outspoken about your accomplishments and what you need to succeed", *Chem. Eng. News* **2020**, 98(27), 23.

Heemstra, J. "Why It's Important to Give and Invite Feedback: constructive criticism works best when it's a 2-way street", *Chem. Eng. News* **2020**, 98(5), 31.

"C&EN's Trailblazers: In this first annual issue, we celebrate women entrepreneurs in chemistry", *Chem. Eng. News* **2020**, 98(9), 30-71.

Heemstra, J.; Romero-Reyes, M. "How International Students Can Share Their Culture in the Lab", *Chem. Eng. News* **2020**, *98*(10), 27.

Heemstra, J. "Adapting to a New Normal: 4 tips on becoming more resilient during times of uncertainty", *Chem. Eng. News* **2020**, *98*(13), 25.

Howes, L.; Wang, L. "Faculty Cope With Coronavirus Shutdowns: with university labs shuttered by COVID-19, chemistry faculty are getting a crash course in how to stay productive", *Chem. Eng. News* **2020**, *98*(13), 16-19.

ChemJobber "Want a Faculty Position? Get Ready to Wait: use this time to prepare for when the academic job market comes back", *Chem. Eng. News* **2020**, *98*(18), 37.

Heemstra, J. "Tenure During a Time of Crisis: what can we learn now to make the tenure system more equitable", *Chem. Eng. News* **2020**, *98*(21), 35.

Gomollon-Bel, F.; Wang, L. "Tick Tock. Should We Stop the Clock? The COVID-19 pandemic exposes the need for more flexibility and support for tenure-track faculty", *Chem. Eng. News* **2020**, *98*(21), 30-34.

ChemJobber "How to Support and Promote Black Chemists: it's time to listen to their struggles and help advocate for their careers", *Chem. Eng. News* **2020**, *98*(23), 27.

Heemstra, J. "Getting Back to the Lab: here's what you need to know to keep expectations in check", *Chem. Eng. News* **2020**, *98*(24), 29.

Widener, A. "Stranded By the Pandemic", *Chem. Eng. News* **2020**, *98*(25), 30-36.

Parry, W. "COVID-19 Shakes Up Summer Internships: how companies, research experiences, and undergraduate students are adapting", *Chem. Eng. News* **2020**, *98*(26), 21-23.

ACS Career Tips: Zoomed Out? Here's How to Manage Expectations, *Chem. Eng. News* **2020**, *98*(30), 38.

Widener, A. "A Bright Spot in Training Black Scientists", *Chem. Eng. News* **2020**, *98*(34), 28-33.

Heemstra, J.; Garg, N. "Putting Mentoring First: when faculty focus on supporting their students, everybody wins", *Chem. Eng. News* **2020**, *98*(35), 25.

ChemJobber "It's Time to Reenvision the Faculty Hiring Process: chemistry can learn lessons from the academic hiring practices of other disciplines", *Chem. Eng. News* **2020**, *98*(37), 29.

Heemstra, J. "It's Wise to Explore Different Career Options: here's what grad students and postdocs can do to broaden their horizons – and how faculty can support them", *Chem. Eng. News* **2020**, *98*(39), 25.

Heemstra, J. "How Faculty Can Prevent Bullying: don't hide under your desk; you can help", *Chem. Eng. News* **2019**, *97*(47), 31.

Heemstra, J. "Being Bullied? Here's What to Do: recognize what's really going on, enlist support, and be kind to yourself", *Chem. Eng. News* **2019**, *97*(44), 27.

Heemstra, J. "On the Importance of Relationships in Science: your career is as much about the people as it is about the research", *Chem. Eng. News* **2019**, *97*(40), 26.

Heemstra, J. "When is it Time to Leave a PhD Program? Getting a master's degree is a decision, not a downgrade", *Chem. Eng. News* **2019**, 97(32), 23.

Heemstra, J. "Should Postdocs Compete or Cooperate? How to get the best of both worlds", *Chem. Eng. News* **2019**, 97(35), 34.

"Tales from the Postdoc: early-career scientists open up about their experiences and lessons learned", *Chem. Eng. News* **2019**, 97(35), 35-38.

Heemstra, J. "Creating a Supportive Mental Health Environment: faculty can do these 3 things to help their students struggling with mental health issues", *Chem. Eng. News* **2019**, 97(27), 23.

Heemstra, J. "How to Combat Impostor Syndrome: our insecurities can get the best of us. Here's how to turn those negative thoughts into positive actions", *Chem. Eng. News* **2019**, 97(19), 25.

Heemstra, J. "Meet C&EN's New Advice Columnist: Emory University chemistry professor and Twitter phenom Jen Heemstra will answer your questions in her monthly column", *Chem. Eng. News* **2019**, 97(13), 29.

ChemJobber "Lab Partners: on being in a relationship while in graduate school", *Chem. Eng. News* **2019**, 97(7), 33.

Wang, L. "The Chemistry Graduate School Experience: the journey to becoming a PhD can feel like a roller coaster. Here's how to hang on", *Chem. Eng. News* **2018**, 96(36), 16-37.

ACS Career Tips: Poster Presentations That Pop, *Chem. Eng. News* **2018**, 96(32), 45.

ChemJobber, "The Unwritten Rules of the Laboratory: when hoarding chemicals and other shared lab resources becomes a problem", *Chem. Eng. News* **2018**, 96(29), 27.

ChemJobber, "How to Overcome Your Fear of Public Speaking: with practice, you can turn your greatest weakness into a strength", *Chem. Eng. News* **2018**, 96(12), 25.

Tremblay, J.F. "Chinese Ph.D. Grads Are Staying Home: a strong job market in China means fewer Chinese seek postdocs overseas", *Chem. Eng. News* **2017**, 95(41), 23-25.

ACS Career Tips: Share a Love for Chemistry, *Chem. Eng. News* **2017**, 95(32), 37.

ChemJobber "An introvert's guide to networking: looking for ways to help others can ease the awkwardness of asking for help when job hunting", *Chem. Eng. News* **2017**, 95(29), 26.

ACS Career Tips: E-mail etiquette, *Chem. Eng. News* **2017**, 95(27), 37.

Jarvis, L.M. "A Year in the Life of a New Professor: inside the exhilarating, frustrating, messy transition to being the boss", *Chem. Eng. News* **2017**, 95(21), 34-48.

Wang, L. "Torn Between Work and a New Baby: grad students and postdocs get parental leave by law – why don't most know about it?" *Chem. Eng. News* **2017**, 95(1), 23.

ACS Career Tips: Getting It All Done *Chem. Eng. News* **2016**, 94(44), 44.

Widener, A. "Walking the Tenure Tightrope: attacks on the historical protections for academics have professors thinking about the value of the institution", *Chem. Eng. News* **2016**, *94*(37), 28-31.

Wang, L. "Moving On After Tenure Denial: rejection didn't end these chemists' careers; it created new opportunities", *Chem. Eng. News* **2016**, *94*(37), 32-33.

Arnaud, C.H. "Young Universities Ditch the Tenure System: start-up schools use contract-based employment models but still take academic freedom seriously", *Chem. Eng. News* **2016**, *94*(37), 34-36.

Widener, A. "Thinking Ahead in Graduate School: doctoral trainees know the odds of getting an academic job, study shows", *Chem. Eng. News* **2016**, *94*(19), 14. (Science 2016, doi:10.1126/science.aaf2061)

Halford, B. "Overwhelmed by Orgo: the crisis facing organic chemistry educators is not a new one, they say", *Chem. Eng. News* **2016**, *94*(13), 24-25.

Lockwood, D. "Balancing the Work-Life Equation: flexible scheduling is key to maintaining a sense of balance for many chemists and chemical engineers", *Chem. Eng. News* **2016**, *94*(13), 22-23.

Wang, L. "Struggling to Start a Family: for many chemists, issues of infertility and miscarriage hit close to home", *Chem. Eng. News* **2016**, *94*(6), 33-35.

Wang, L. "Managing Grad School Stress: grad students and professors open up about the impacts of graduate school on mental health", *Chem. Eng. News* **2015**, *93*(36), 59-61.

"How the Internet Changed Chemistry", series of articles in *Chem. Eng. News* **2015**, *93*(32), 11-34.

ACS Career Tips: the two-body opportunity, *Chem. Eng. News* **2015**, *93*(22), 36.

Wang, L.; Rovner, S.L. "Diversifying Academia: percentage of minority chemistry professors in academia remains low, new survey shows", *Chem. Eng. News* **2015**, *93*(20), 37.

Chua, G. "A Head Start for Singapore Students: extended internships give students an edge in chemistry-related fields", *Chem. Eng. News* **2015**, *93*(19), 36.

Morrison, J. "Christina Fields-Zinna: for this ACS scholar, chemistry paved the way to a satisfying career as a state toxicologist", *Chem. Eng. News* **2015**, *93*(17), 37.

Barton, T. "Superstars in Education: three stellar ACS members show deep dedication to chemistry students", *Chem. Eng. News* **2015**, *93*(17), 35.

Henry-Arnaud, C. "Revising the Curriculum: chemistry departments take an integrated approach to the traditional subdisciplines", *Chem. Eng. News* **2015**, *93*(9), 34-35.

ACS Career Tips: Don't Recycle Your Resume, Refresh It, *Chem. Eng. News* **2015**, *93*(5), 42.

ACS Career Tips: Write it Right, *Chem. Eng. News* **2015**, *93*(1), 34.

ACS Career Tips: How to make bad decisions, *Chem. Eng. News* **2014**, *92*(40), 50.

Jacoby, M. "The New Masters of Science: nontraditional master's degree programs aim to give students a foot in industry's door", *Chem. Eng. News* **2014**, *92*(39), 38.

Ainsworth, S.J. "New Professor Chronicles: recently ushered into academia, four chemists share the joys and tribulations of their new roles", *Chem. Eng. News* **2014**, *92*(36), 47.

Wang, L. "Turning Off the Lights: for emeritus professors, shutting down their research labs can be both challenging and deeply emotional", *Chem. Eng. News* **2014**, *92*(36), 50.

Ainsworth, S.J. "Words of Wisdom: C&EN readers offer advice to help assistant professors soar in their new roles", *Chem. Eng. News* **2014**, *92*(36), 52.

Davenport, M. "Enabling Research Experiences: a pioneering program prepares underrepresented undergraduates with disabilities to be leaders in science", *Chem. Eng. News* **2014**, *92*(35), 60.

ACS Career Tips: Educate Yourself – Over & Over, *Chem. Eng. News* **2014**, *92*(35), 72.

ACS Career Tips: Making a Case for Conferences, *Chem. Eng. News* **2014**, *92*(31), 34.

Ainsworth, S.J. "Dare to Dream: undergraduates set their sights on unconventional, enticing roles that will put their chemistry degrees to work", *Chem. Eng. News* **2014**, *92*(30), 42.

Arnaud, C.H. "Active Learning Beats Lectures: meta-analysis of 225 studies shows that active learning is consistently better across disciplines and class size", *Chem. Eng. News* **2014**, *92*(22), 31.

ACS Career Tips: And Today's Speaker Is..., *Chem. Eng. News* **2014**, *92*(18), 36.

Wang, L. "Teaming Up to Promote Diversity: four California universities join forces to boost the number of underrepresented minorities in faculty positions", *Chem. Eng. News* **2014**, *92*(18), 31.

Hernandez, R. "Mentoring New Faculty", *Chem. Eng. News* **2014**, *92*(12), 36.

Arnaud, C.H. "Preceptors Knit Classes Together: skilled scientists help University of Delaware life sciences students make connections between chemistry and biology", *Chem. Eng. News* **2014**, *92*(3), 40.

Jacoby, M. "Students, Start-Ups, and Biorenewability: Iowa State program helps grad students and postdocs launch their own biotech firms", *Chem. Eng. News* **2013**, *91*(43), 33.

Wang, L. "Canada's Master Appeal: Canadian chemistry masters' programs include extensive research experience, and U.S. companies have taken notice", *Chem. Eng. News* **2013**, *91*(35), 62.

Wang, L. "Hong Kong's Education Overhaul: reforms to undergraduate curriculum aim to push the country toward innovation by unleashing students' creativity", *Chem. Eng. News* **2013**, *91*(35), 60.

Ainsworth, S.J. "Helping Hands in Puerto Rico: through mentoring and research programs, professors on the island help their students soar in chemistry", *Chem. Eng. News* **2013**, 91(35), 58.

Drahl, C. "Careers Demystified: symposium lays out myriad options for chemical biology students", *Chem. Eng. News* **2013**, 91(27), 32.

Williams, S. "China Homecoming: as funding grows, more Chinese chemists who have studied abroad are returning home to become professors", *Chem. Eng. News* **2013**, 91(23), 34

Halford, B. "Postdoc Pains and Gains: the experience may be getting more difficult, yet many chemists find it is both necessary and fulfilling", *Chem. Eng. News* **2013**, 91(20), 41

ACS Career Tips: Writing a Winning Award Nomination, *Chem. Eng. News* **2013**, 91(18), 50

Arnaud, C.H. "Mixed Reactions to Education Proposals: community lauds ACS report on improving graduate education but doubts recommendations' feasibility", *Chem. Eng. News* **2013**, 91(9), 51

Wang, L. "Shaking Up the Status Quo: chemistry professors enliven their lectures by helping students see real-world connections", *Chem. Eng. News* **2012**, 90(37), 53

Arnaud, C. "Boot Camp for Professors: workshop for starting chemistry faculty focuses on developing teaching skills", *Chem. Eng. News* **2012**, 90(36), 76

ACS Career Tips: Perfect Your Presentations, *Chem. Eng. News* **2012**, 90(36), 80

ACS Career Tips: Managing Your Online Image, *Chem. Eng. News* **2012**, 90(32), 42

Wang, L. "Embracing Change: chemistry faculty at HBCUs (historically black colleges and universities) adapt to new normal", *Chem. Eng. News* **2012**, 90(21), 41

Rovner, S.L. "Chemistry's Liaisons: chemical biologists bridge the divide between two fields", *Chem. Eng. News* **2012**, 90(12), 49

Cassiday, L. "Research Renaissance: liberal arts colleges", *Chem. Eng. News* **2011**, 89(4), 48

Pittman, D. "Changing their Ways: as students continue to flock to drug development, chemistry departments adapt their programs" *Chem. Eng. News* **2010**, 88(49), 47

Wang, L. "International Experience: rise of world-class research hubs in Asia and the Middle East entices young faculty to move abroad", *Chem. Eng. News* **2010**, 88(47), 39

Everts, S. "Branding Chemists: the Eurobachelor brand normalizes chemistry undergraduate degrees across Europe", *Chem. Eng. News* **2010**, 88(45), 56

Arnaud, C.H. "The Future of Textbooks", *Chem. Eng. News* **2010**, 88(39), 63

Halford, B. "Professors Cry Foul Over Website", *Chem. Eng. News* **2010**, 88(8), 41

Ginsberg, J. "Academe as a Career Launchpad: academic chemists who get a taste of government or industry jobs have few regrets", *Chem. Eng. News* **2010**, 88(4), 37

Wang, L. "Learning Chemistry Online: despite a slow start, distance learning is gaining ground in chemistry education", *Chem. Eng. News* **2009**, 87(36), 97

Petkewich, R. "Spectacular Scientific Talks", *Chem. Eng. News* **2009**, 87(17), 44

Petkewich, R. "Entrepreneurs in Academia: chemistry professors start small businesses to catapult their research from lab to market", *Chem. Eng. News* **2009**, 87(16), 28

Rovner, S.L. "The Lecturing Life: by shouldering a sizable teaching load, lecturers have become an indispensable part of chemistry departments", *Chem. Eng. News* **2009**, 87(10), 32

Kemsley, J. "Postdocs Feel Job Crunch: as recession deepens, postdocs find themselves caught in a difficult academic job market", *Chem. Eng. News* **2009**, 87(4), 32

Wang, L. "Head of the Class: Ph.D. chemists carve out satisfying careers", *Chem. Eng. News* **2009**, 87(3), 81

Raber, L.R. "Women Now 16% of Chemistry Faculty", *Chem. Eng. News* **2008**, 86(51), 40

Moore, K.J. "International Internships: research opportunities abroad offer students unique opportunities for career development, personal growth, and intercultural exchange", *Chem. Eng. News* **2008**, 86(44), 57

Richmond, G.L. "Being a Scientist and a Mother", *Chem. Eng. News* **2008**, 86(42), 64

Barr, K.J. "Launching a Science Career", *Chem. Eng. News* **2008**, 86(39), 44

"Communities of Practice", *Chem. Eng. News* **2008**, 86(36), 63

Rovner, S.L. "Chemical Educators Overcome Obstacles: professors who research chemical education surmount early skepticism to pursue a career they love", *Chem. Eng. News* **2008**, 86(13), 37

Marasco, C.A. "Negotiating an Academic Job Offer", *Chem. Eng. News* **2008**, 86(3), 63

Ainsworth, S.J. "Making the Industry-to-Academia Shift", *Chem. Eng. News* **2007**, 85(45), 57

Marasco, C. "Roads Less Taken" *Chem. Eng. News* **2007**, 85(36), 61

Borman, S. "Fellows Are An Independent Lot: non-tenure-track research positions offer alternative career paths" *Chem. Eng. News* **2007**, 85(20), 62

Shussett, N.U. "Wired for Learning: teachers are tapping into youths' digital savvy to take science education into the future" *Chem. Eng. News* **2007**, 85(20), 66

Petkewich, R. "Natural Products Niche: scientists can find rewarding jobs outside academia or the pharmaceutical industry" *Chem. Eng. News* **2007**, 85(20), 54

Petkewich, R. *Chem. Eng. News* **2007**, 85(1), 37 "Getting an Advanced Degree on the Job."

Morrissey, S.R. "10 Tips to Help You Get a Faculty Job: faculty from around the country share stories to help candidates 'ace' the interview process", *Chem. Eng. News* **2006**, 84(36), 102

Petkewich, R. "No Substitute for Experience: chemical engineering students at all levels can benefit from 'learn and earn' opportunities", *Chem. Eng. News* **2006**, 84(36), 99

Everts, S. "Evolving the Doctorate: Carnegie initiative inspires reshaping of PhD programs to fit modern times", *Chem. Eng. News* **2006**, 84(36), 89

Rovner, S.L. "Two-Body Solution: how dual-chemist couples found happiness, job satisfaction, and work/life balance", *Chem. Eng. News* **2006**, 84(19), 35

Jacoby, M. "Entrepreneurial Science: university program gives scientists marketplace experience in business development", *Chem. Eng. News* **2006**, 84(14), 37

Amato, I. "Silent Chemistry: the obstacles for deaf students to become molecular scientists are shrinking, but it's still hard", *Chem. Eng. News* **2006**, 84(12), 53

Hanson, D.J. "Red Flag for Research: industry-sponsored academic research is heading down a treacherous path", *Chem. Eng. News* **2005**, 83(47), 49

Mehta, A. "A Long, Hard Road: M.D.-Ph.D. training can take more than a decade, but it has great rewards for researchers", *Chem. Eng. News* **2005**, 83(36), 84

Barry, D.A. "A Lesson Plan for Chemists: graduate students have more options to practice teaching before hitting the job market", *Chem. Eng. News* **2005**, 83(36), 80

Yarnell, A. "Chemistry Meets Biology: international summer school brings students of both disciplines closer together", *Chem. Eng. News* **2005**, 83(36), 78

Rovner, S.L. "Tips for Teachers: report details methods to heighten the impact of undergraduate science and engineering education", *Chem. Eng. News* **2005**, 83(30), 55

Pepling, R.S. *Chem. Eng. News* **2005**, 83(29), 53 "Different Kind of Wet Lab: chemists dive into job opportunities in the marine sciences."

Halford, B. *Chem. Eng. News* **2005**, 83(28), 36 "Reaching Out to Aspiring Scientists: graduate students teach lessons in nanoscience, high-tech microscopes at local high schools."

Borman, S. *Chem. Eng. News* **2005**, 83(27), 24 "Renewed Focus on Academic Mentoring: mentoring programs meet a critical need for chemists just starting academic careers."

Marasco, C.A. *Chem. Eng. News* **2005**, 83(20), 55 "Mentornet Supports Women in Science: e-mentoring website is dedicated to furthering women's progress in science and technology"

Rovner, S.L. *Chem. Eng. News* **2005**, 83(14), 65 "Cool Courses: science educators enhance the appeal of chemistry for non-majors and majors alike."

Casey, C.P. *Chem. Eng. News* **2005**, 83(13), 69 "The ACS Academic Employment Initiative"

Borman, S. *Chem. Eng. News* **2004**, 82(47), 75 "Chemistry in the News: teaching chemistry in the context of news helps students see the real-world implications of science"

Rovner, S.L. *Chem. Eng. News* **2004**, 82(46), 37 "Academic R&D Spending Trends: chemical research sector showed emphatic growth in 2002, topping the average for science as a whole"

Yarnell, A. *Chem. Eng. News* **2004**, 82(38), 58 "Breaking with Tradition: recent chemistry Ph.D.s find a welcome home in departments other than chemistry"

Mehta, A. *Chem. Eng. News* **2004**, 82(38), 62 "What's Up, Postdoc? Being a postdoc isn't easy, but new programs and organizations are here to help"

Kuck, V.J. *Chem. Eng. News* **2004**, 82(38), 64 "Transformation of the Top 10: chemistry recruiters will find more women and fewer foreigners at traditionally favored schools"

Henry, C.M. *Chem. Eng. News* **2004**, 82(38), 66 "Europe Seeks to Harmonize Degrees: universities introduce Eurobachelor to promote comparability among chemistry programs"

Gilman, V. *Chem. Eng. News* **2004**, 82(35), 32, "Hand Jive: summer researchers – deaf and hearing – at James Madison put a twist on hands-on learning"

Casey, C.P. *Chem. Eng. News* **2004**, 82(31), 44 "Graduate Education Focus at Philadelphia National Meeting"

Rovner, S.L. *Chem. Eng. News* **2004**, 82(25), 36 "Where Are They Now?: C&EN catches up with seven professors we profiled at the start of their careers in 2000"

Henry, C.M. *Chem. Eng. News* **2004**, 82(18), 33 "Undergraduates in the Research Lab: faculty at undergraduate institutions share successful strategies and experiences"

Zurer, P.S. *Chem. Eng. News* **2004**, 82(16), 45 "Initiative Targets Faculty Recruiting: ACS's Academic Employment Initiative aims to broaden chemistry's traditional hiring practices"

Gilman, V.; Schulz, W.G. *Chem. Eng. News* **2004**, 82(14), 67 "U.S. Schools Losing Foreign Talent: visa hurdles prompt international students to pursue chemistry graduate studies elsewhere"

Heylin, M. *Chem. Eng. News* **2004**, 82(13), 48 "Chemistry Grads Decline in 2002: graduating classes dip again from recent highs but are still at about average levels"

Casey, C.P. *Chem. Eng. News* **2004**, 82(9), 46 "ACS's Academic Employment Initiative"

Crim, A.F.; Poulter, C.D. *Chem. Eng. News* **2004**, 82(8), 42 "Whither the 'ACS Directory of Graduate Research' ?"

Gilman, V. *Chem. Eng. News* **2004**, 82(5), 83 "North Pacific Paradise: In Washington and Oregon, academic excellence meets amiable living environments"

Henry, C.M. *Chem. Eng. News* **2004**, 82(4), 47 "Improving the Post-Doc"

Dalton, L.W. *Chem. Eng. News* **2004**, 82(1), 39 "Chemical Technicians: responsibilities are growing for technicians as baby boomer generation starts to retire"

Henry, C.M. "Back to School: high school teaching attracts both younger and midcareer chemists with advanced degrees", *Chem. Eng. News* **2003**, 81(47), 47

Marasco, C.A. *Chem. Eng. News* **2003**, 81(43), 58 "Faculty Scorecard: Numbers of Women Nudge Up Slightly"

"Graduate Education and Beyond", *Chem. Eng. News* **2003**, 81(39), 41

Jacobs, M. "Educating Chemists for the Future: conference explores different ideas on how to reform chemistry curricula and inspire students", *Chem. Eng. News* **2003**, 81(31), 34

Berkowitz, J. "Graduate schools held to account: report says graduate schools must do more to help students complete Ph.D.s", *University Affairs*, **March 2003**, 31.

Mullens, A. "Academia's caste culture: review of *Hidden Academics: Contract Faculty in Canadian Universities*, by Indhu Rajagopal", *University Affairs*, **February 2003**, 37.

Berkowitz, P. "The long haul: how many terms do graduate students need to finish their degrees? How many actually complete them? A new Canadian study sheds light on a perennial issue", *University Affairs*, **February 2003**, 8.

Zundel, P. "Nurture your teachers and help them grow", *University Affairs*, **January 2003**, 17.

Williams-Jones, B. "University-industry relations and some lessons from biotech", *Canadian Chemical News* **2003**, 55(4), 20.

"What's up in the ivory tower? Industry needs an accurate concept of what goes on in Canada's universities", *Canadian Chemical News* **2003**, 55(4), 16.

Pappone, J. "Joint forces: Canadian industry and academia team up to forge a globally competitive future", *Canadian Chemical News* **2003**, 55(4), 11.

Wilkinson, S.L. "Keeping Students From Cutting Corners: chemical educator explores why students cheat and offers methods to limit misconduct in the lab", *Chem. Eng. News* **2003**, 81(15), 51.

Gottselig, M.; Oeltjen, L. "Choosing a grad school", *Chem. Eng. News* **2003**, 81(15), 4.

Tremblay, J.-F. "Security measures impede U.S. visits: foreign students, scientists, and business people cannot obtain U.S. visas on time, if at all", *Chem. Eng. News* **2003**, 81(11), 40.

Borman, S. "Nontraditional teaching: online conference focuses on methods that enhance or replace conventional lecture format", *Chem. Eng. News* **2003**, 81(10), 45.

Heylin, M. "Anatomy of a chemistry class: data from NSF and elsewhere pinpoint who earned chemistry degrees during the 1999-2000 academic year and where they earned them", *Chem. Eng. News* **2003**, 81(6), 31.

Tonelli, A.E. "Balancing teaching and research", *Chem. Eng. News* **2003**, 81(6), 5.

Letters to the Editor: "Opportunities for B.S., M.S. chemists", *Chem. Eng. News* **2003**, 81(4), 6.

Morrow, G.W. "Superprofs", *Chem. Eng. News* **2003**, 81(4), 7.

Wilkinson, S.L. "The Plight of Part-Time Faculty: many must find their reward in the joy of teaching, as these uncertain jobs often pay little", *Chem. Eng. News* **2003**, 81(1), 34.

Andraos, J. "Filling the Gap: Outreach activities can attract young people to a career in the chemical sciences, but something more is needed to keep them there. A new online database and virtual career resource centre may fill this need", *Canadian Chemical News* **2002**, 54(2), 26.

Farr, M. "'Til degree do we part: for a graduate student, the relationship with your faculty supervisor may be the most important of your academic career", *University Affairs*, **November 2002**, 10.

Mulroney, C. "Universities, colleges face staffing crunch: with rising enrolment and a surge in retirees, schools compete to woo faculty", *Globe & Mail*, June 21, 2002, p. C1.

Alphonso, C. "Media stars bloom in groves of academe: a growing number of professors are stepping out of their classrooms and research labs, and into the limelight", *Globe & Mail*, June 21, 2002, p. C2.

Oberman, M. "Tenured posts among budget casualties: if trends continue, most Canadian academics could soon be on contract", *Globe & Mail*, June 21, 2002, p. C3.

Letters to the Editor: "Being a good professor", *Chem. Eng. News* **2002**, 80(51), 4.

Henry, C.M. "Women Welcome: symposium spotlights departments with positive environment for women", *Chem. Eng. News* **2002**, 80(38), 106.

Long, J.R. "Women still lag in academic ranks", *Chem. Eng. News* **2002**, 80(38), 110.

Wilkinson, S. "Industry's Wish List for Academia: Hamline University reshapes science curriculum to better meet the needs of industrial employers", *Chem. Eng. News* **2002**, 80(37), 34.

Rouhi, A.M. "A Blind Man's Vision: young Australian's passion for chemistry drives him far beyond what his eyes can see", *Chem. Eng. News* **2002**, 80(35), 36.

Zurer, P.S. "An Educational Experience: Duke's chemistry department regroups after experimenting with an innovative first-year course", *Chem. Eng. News* **2002**, 80(34), 31.

Breslow, R. "The Welcome Mat", *Chem. Eng. News* **2002**, 80(27), 3.

Rouhi, M. "Green chemistry earns a Ph.D.: The University of Massachusetts, Boston, now offers a Ph.D. track in green chemistry", *Chem. Eng. News* **2002**, 80(16), 42.

Charbonneau, L. "Government ends two-tier hiring policy for faculty", *University Affairs*, December 2001, p. 27.

Rushowy, K. "Hunt on for 15,000 professors: universities face loss of teachers, influx of students", *Toronto Star*, January 15, 2001.

Kuck, V. "Refuting the Leaky Pipeline Hypothesis: data reveal that the pool of women Ph.D. chemists is sufficient but under-utilized", *Chem. Eng. News* **2001**, 79(47), 71.

Jacoby, M. "Taking the Pulse of Undergrad Research: survey of predominantly baccalaureate schools reveals trends in scientific research practices", *Chem. Eng. News* **2001**, 79(43), 59.

Byrum, A. "Women's Place in Ranks of Academia", *Chem. Eng. News* **2001**, 79(40), 98.

Zurer, P.S. "Survival 101 for New Instructors", *Chem. Eng. News* **2001**, 79(37), 37.

Breslow, R. "No So General Chemistry", *Chem. Eng. News* **2001**, 79(31), 5.

Dagani, R. "Chemistry's High School Heroes: former members of the U.S. Olympiad team have followed their hearts into science, math careers", *Chem. Eng. News* **2001**, 79(26), 35

Zurer, P.S. "Teaching Organic Chemistry: working cooperatively in groups, students take responsibility for mastering material", *Chem. Eng. News* **2001**, 79(16), 43

"New Voices in Chemistry", *Chem. Eng. News* **2001**, 79(13), 51. ACS 125<sup>th</sup> Anniversary Issue

Hanson, D. "Postdoc Issues Highlighted: low compensation, professional development dominate NAS assembly", *Chem. Eng. News* **2001**, 79(11), 15.

Raber, L. "Ph.D.'s Sound Off: chemists believe graduate school leaves them inadequately prepared for industrial careers", *Chem. Eng. News* **2001**, 79(8), 65

Brennan, M. "Mentoring Tenured Women Chemists", *Chem. Eng. News* **2000**, 78(36), 46

Wilkinson, S.L. "Starting From Scratch: new professors share their experiences", *Chem. Eng. News* **2000**, 78(25), 41

Henry, C.M. "Reinventing the Master's Degree: new programs aim to provide alternatives to the Ph.D. and the M.B.A.", *Chem. Eng. News* **2000**, 78(22), 65.

Busch, D.H. "The academic workforce: is it impairing education?", *Chem. Eng. News* **2000**, 78(17), 57.

Raber, L. "Status Quo Questioned at Ph.D. Workshop", *Chem. Eng. News* **2000**, 78(1), 28.

Mallan, C.; Rushowy, K. "University funding to be tied to jobs record", *Toronto Star*, March 15, 2000.

Calamai, P. "Lure of U.S. never broke chemist's bond with Canada: ground-breaking Albertan [Raymond Lemieux] has thrived in 'boondocks'", *Toronto Star*, November 23, 1999.

Talaga, T. "U of T to hire 500 new profs: hundreds of boomer-age faculty to retire", *Toronto Star*, January 25, 1999.