Applying for Academia
(Lessons, Hints, and Insights into the Application Process)

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Slides and links available on workshop resource page

Early Career Workshop
July 18, 2015
My Background

• Zachariah Heiden
  – Native of the Midwest (small town in southeast WI)
  – B.S. in chemistry and chemical engineering from UW-Madison
  – Ph.D. in chemistry from University of Illinois at Urbana-Champaign
  – Postdoc at University of Toronto
  – Postdoc at PNNL
  – Started at WSU in Fall 2013 as assistant professor in inorganic chemistry
What level of Schools?

• PUI (Primarily Undergraduate Institution)
  – Smaller schools tend to only have undergraduates and focus on teaching
  – Defined as a school awarding less than 20 Ph.D.’s in the last two years by NSF

• R1 (Research Institution)
  – Graduate programs
  – Tend to focus on the research part of a job application
What do Faculty Do?

• Teaching (1/3)
  – Contribution to BS Chemistry courses
  – Contribution to discipline specific courses
  – Contribution to Gen Ed courses (PUI)

• Research (1/3)
  – Often largest part of tenure decision at most levels

• Service (1/3)
  – Departmental (instruments, grants, committees)
  – School (committees)
  – Outreach
Types of Positions

• Tenure-track
  – Assistant Professor
  – Associate Professor
  – Professor/Department Chair
• Non tenure-track
• Visiting Professor
• Temporary/Part-time/Limited Term Lecturer
• Lecturer/Instructor
Chemistry Career Workshops

• Academic Employment Initiative (AEI)
  – Poster session during Sci-mix of Fall ACS Meetings
  – Abstract Deadline Mid-April
  – Great for PUI’s, not so much for R1’s
  http://www.acs.org/content/acs/en/education/students/graduate/gettingready/academiccareers/initiative.html

• Postdoc to Faculty Workshop
  – Recently included in Fall ACS Meetings as a workshop
  – Application end of April
  – Submit application package for review and comments
  http://www.acs.org/content/acs/en/education/students/graduate/gettingready/academiccareers/postoral-workshop-for-prospective-chemistry-faculty.html
AEI Poster Session

Use your poster to teach!

Boil down your complicated research to simple concepts!
Where to Look for Job Announcements?

- ACS Careers (http://chemistryjobs.acs.org/jobs) (or other professional society)
- Academic Keys (http://sciences.academickeyes.com/seeker_search.php)
- Academic Jobs Online (https://academicjobsonline.org/ajo/)
- Academic Careers Online (http://academiccareers.com/index.html)
- Science Careers (http://jobs.sciencecareers.org/jobs/)
- Higher Education Recruitment Consortium (www.hercjobs.org/)
- University Affairs (Canada) (http://oraweb.aucc.ca/pls/ua/ua_re)
- Indeed (http://www.indeed.com/)
- Human Resources Webpages
What to know about Job Announcements?

From ACS Careers

About the Department of Chemistry at the University of Washington

The University of Washington is one of the nation’s premier educational and research institutions. As the state’s flagship university, we are also the largest public and third-largest overall employer in the State of Washington, with over 25,000 talented individuals primarily located at campuses in Seattle, Everett, Tacoma, and Bothell performing a wide variety of academic, professional, technical, administrative, and support functions. We offer excellent benefits and outstanding learning opportunities.

View all our jobs

Employer Information

Application

Applications are invited for two or more full-time, tenure-track appointments in the Department of Chemistry. Outstanding candidates in all areas of chemistry and interdisciplinary areas involving chemistry are encouraged to apply. Appointments at the Assistant level are anticipated; appointment at the Associate level will be considered for exceptional candidates. University of Washington faculty members engage in teaching, research, and service to the University and society. Candidates will be expected to participate in undergraduate and graduate teaching and to develop innovative, vigorous, externally funded programs. Applicants must have a Ph.D. or equivalent appointment.

Please submit a curriculum vitae, statement of future research interests, and (at the Assistant Professor rank) three letters of reference online at https://academicjobsonline.org/ajo/jobs/1562. Priority will be given to applications received by October 5, 2012. All other inquiries should be directed to search@chem.washington.edu.

The University of Washington is an equal opportunity employer. The University is building a diverse faculty and strongly encourages applications from women and minorities.

Open search!

Type of position

Application requirements

Position level

Deadline

How to apply
From ACS Careers

Know what you can teach!

Can apply to this position if can teach inorganic chemistry!
Temporary Positions

About Ohio University

Ohio University was chartered by the state of Ohio in 1804 and is the oldest university in the Northwest Territory. Located in the scenic Appalachian foothills of southeastern Ohio, it's classic residential campus is one of the most attractive in the nation.

View all our jobs

Job Description

The Department of Chemistry and Biochemistry at Ohio University invites applications for 3 full-time Visiting Assistant Professors, beginning August 27, 2012. These are non-tenure track, one year renewable positions. Teaching responsibilities may include lecture and/or laboratory courses in general, biochemistry, organic, physical, analytical chemistry and toxicology.

Applicants must complete the online quick application at http://www.ohiouniversityjobs.com/postings/3634 and attach required documents. Additionally, applicants will be prompted to key-in contact information of at least two reference letter providers who will receive an invitation via email to upload a letter of reference using a provided unique link.

Review of applicant materials will begin immediately and continue until successful candidates are identified. For full consideration apply by August 5, 2012.

Ohio University is committed to creating a respectful and inclusive educational and workplace environment. Ohio University is an equal access/equal opportunity and affirmative action employer with a strong commitment to building and maintaining a diverse workforce. Women, persons of color, persons with disabilities, and veterans are encouraged to apply.

NOTES:

3 openings.

Additional Salary Information: commensurate with experience
Know your Deadlines!!

Main Deadlines:

– September 1\textsuperscript{st}
– September 15\textsuperscript{th}
– October 1\textsuperscript{st}
– October 15\textsuperscript{th} (biggest deadline)
– November 1/2\textsuperscript{nd}
Faculty Application Packages

• Cover Letter
• CV
• Research Proposals (include summary page)
• Teaching Philosophy
• Transcripts (usually only requested by PUI’s)
• Research Budgets (rarely requested at application stage)
• Letters of Recommendation

**ALL MATERIALS MUST BE IN BY THE DEADLINE!**
Cover Letter

- More important than people think!
- Not specifically asked for
- 1-2 pages (keep short)
- Make sure to tailor to school applying to
- Tell them why you feel you can be a good candidate

November 14, 2010
Chair, Faculty Search Committee
ASU Department of Chemistry & Biochemistry
Arizona State University
Physical Sciences Building
Room D-102
PO Box 871604
Tempe, AZ 85287-1604

Dear Faculty Search Committee:

I am writing to apply for the assistant professorship in Chemistry as announced in Chemical and Engineering News. I am currently completing a postdoctoral position in the laboratory of Professor Douglas Stephan, at the University of Toronto, focusing on the development of metal-free asymmetric hydrogenation catalysts. I completed my Ph.D. in 2008 under the supervision of Professor Thomas Rauchfuss at the University of Illinois-Urbana-Champaign. My dissertation was entitled "Small Molecule Activation Using Transfer Hydrogenation Catalysts."
CV (Curriculum Vitae)

- Not a Resume! (usually 2-3 pages)
- Include Everything! (usually 4-5 pages)
- Contact Information
- Summary of Qualifications/Interests
- Education
- Research Experience
- Honors and Awards
- Teaching Experience
- Academic Service
- Professional Memberships
- Publications (highlight if invited)
- Presentations
- References

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Summary of Qualifications
- Inorganic and organometallic synthetic and mechanistic chemistry background with strong problem solving skills
- Coauthor of 15 peer-reviewed publications

Research Interests:
- Inorganic and Organometallic Chemistry
- Using spectroscopic techniques to understand reactivity at the molecular level

Education:
University of Illinois at Urbana-Champaign, Urbana, IL
Ph.D. in Chemistry
Professor Thomas B. Rauchfuss, Advisor
Dissertation Title: Small Molecule Activation with Transfer Hydrogenation Catalysts
2004-2008

Include total number
Research Proposals

• **Start working on them early!**
• Let your Letter writers/other people see them!
• Think outside the box
• Something that has impact where you can define yourself!
• Read more broadly to get ideas
• Need to think about funding
• Read National Academies Reports ([http://www.nap.edu/](http://www.nap.edu/))
• Graphics are important!! (be able to describe your proposal in pictures)
• Proposals should be about 3 pages (total length of about 10 pages)
• Three proposals often required (include summary page)
• Do not overwhelm your students
• Nice to include undergraduates
Teaching Philosophy

- More important for PUI’s
- Teaching Interests (new classes, look at program)
- Teaching Experience
- Outreach?
- Don’t just say online teaching
- Why is teaching important to you?
- Think about good teachers in your life and explain why effective
- How grade/assess student understanding
- How structure classroom settings
- ~ 1 page for R1, ~3 pages for PUI
Letters of Recommendation

• Ask your letter writers for permission!
• Be organized!
• **Give them ample time to meet deadlines!**
• Don’t worry about burdening your letter writers by applying to >50 schools
• Send them your proposals!!!
• Often need three sometimes four

Northwestern University – Due Date: October 15th

Please send letter of recommendation to:
  Chair of Search Committee
  Department of Chemistry
  Northwestern University
  2145 Sheridan Road
  Evanston, IL 60208-3113

Central Michigan University – Due Date: October 15th

Please send letter of recommendation to:
  Chair
  Search Committee
  Department of Chemistry
  Dow 268
  Central Michigan University
  Mount Pleasant, MI 48859-0001
Application Time Frame

- Apply September-October
- Application Review Process (November-December)
- Interview Process (December-January)
- Offers Sent Out (January – February)
- Responses Needed by time graduate students visit (Feb-March)
- Temporary positions advertised (Jan-Jun)
- Start Position (June-August 2013)
Faculty Application Review Process

• Search committee of 3-5 faculty review and narrow down applicants to top 10 (usually over email)
• Committee meets, narrows list to top 5-10 that will often be phone interviewed
• Top 3 candidates invited for one-two day interview
• Search committee meets after each interview and at the end of all the interviews
• Search committee makes recommendation to Department and Dean
• Once offered, negotiations of hiring terms negotiated with the Dean
Faculty Application Review Process for R1’s

- Receive 100-200 applications (sometimes 500)
- Average chemistry applicant (1 publication/year grad school and 2 publications/year postdoc)
- Often can easily remove ½ as don’t apply to announcement
- Search Committee often from different backgrounds
- Invite 3-5 (usually 3) for on site interview (2 days, give two talks, meet professors, students, deans)
Tips for getting through the first round

Preliminary Screen (Minimal Requirements):
• Ph.D. or equivalent degree in an area closely related to (search field)
• Training or research experience in (search field) (as evidenced by graduate thesis topic, publication record, research funding and/or post-doctoral experience)
• Proposed research focus is in an area of (search field)
• Three letters of recommendation
• Does the applicant meet the minimal requirements for this position?
Tips for getting through the first round

Background:
- Training and experience including postdoctoral
- Publications
- Qualifications to teach undergraduate and graduate courses in (field of study)
- Potential to supervise undergraduate and graduate research in (field of study)
- Training in (field of study)

Research:
1. Proposed research
   - In area of (field of study)
   - Innovation, creativity and originality
   - Feasibility at University/College
   - Potential for funding (mechanism, agencies)
2. Communication skills (writing):
Research Budgets

• Startup for Three Years
• Don’t be toooooo much! For chemistry, big schools < $1 million, mid-range schools around $500-$600K
• Make a list of wants/needs and things nice to have
• Lab space?
• Overhead?
• Group Size?
• Student Cost?
• Instruments?
Questions to Answer in a Faculty Interview

• What do you want to be known for in 5/10 years?
• How do you plan to fund this research?
• If you could only fund one project, which one would it be and why?
• What is the biggest discovery that could come out of this research?
• What would you say are the top three discoveries in the last five/ten years?
• What do you want to teach?
• What instrumentation do you need?
• Who would you collaborate with in the department?
Final Tips from Zach

• **Start proposals early!!!!**
• If not sure you want to apply to academics; try to put together an application package
• Keep a notebook of ideas
• Get business cards (great place to keep notes)
• Have people read your proposals!!!
• **Get organized!!!!!!**
• If first don’t succeed, refine application, and apply again!
• Try not to be the first interview for a given search