

## CHEMISTRY RÉSUMÉS

1. There is no absolute right format. This is your personal work, so create a résumé that represents you well and that you like. However, be sure that you follow basic guidelines:
  - A. Make sure your résumé says the most about you in the fewest number of words (one page is recommended for bachelor's level students, 2 pages for graduate students...but there are some exceptions, e.g. more than ten years of employment experience).
  - B. Be consistent with your format! Margins, bolding, capitalization, bullet points, and style must be consistent as well as order and style of information.
  - C. Proofread for typing and spelling accuracy.
2. Only items leading directly to setting up an interview should be included. Keep your résumé specific to the job you are applying for, even if that means having different résumés for different jobs. (E.g. one résumé for research-related positions and another for sales positions) Salary requirements, supervisor's names, abbreviations, clichés, reasons for leaving jobs, personal opinions and personal information such as height, weight, age, marital status, etc. should be excluded.
  - A. Required Categories: (Heading) Name, Home Address, Phone Number (Note: Be sure your phone number is prominent. Employers who cannot find--or read--your telephone number will not call!), Email Address; (Body) Education (incl. GPA if above a 3.0; do not include your collegiate GPA if you do not yet have one), Experience (Work and/or Activities).
  - B. Optional Categories: (Body) Objective or Summary of Qualifications, Relevant Coursework, Honors & Awards, Activities or Leadership, Credentials, Skills (technical skills only: computer, lab, languages), Publications, Presentations, Professional Affiliations, and Other.
3. If you do include an objective, be sure that it shows your career goals. It must be narrow and specific and include your strengths as they apply to the position. (e.g. To utilize my education in Chemical Engineering and excellent communication skills as a Product Engineer at a growing company to create advanced products in a team setting)
4. Both the résumé and cover letter should be examples of your best work! Maintain a positive tone by excluding negative aspects of your experience.
5. Choose a conservative font such as Helvetica, Times, Courier, Geneva, New York, Palatino, or a Sans Serif font no smaller than 10 and no larger than 14. Include as much "white space" as possible for easier scanning by the employer, maintaining approximately 1" margins.
6. Make your résumé look professional. If you make a hard copy, use only a laser printer on good quality bond paper. Use white, off white, or a light blue or gray, 8-1/2" X 11" bond paper. (Remember that your potential employer may photocopy your résumé, so be sure that the paper is not too dark or "blotchy" to photocopy well!).
7. Be specific with dates, job titles, employers, interests, and accomplishments. Items within each section should be in reverse chronological order (most recent first and back from there). Be complete and descriptive without being too long. Always be completely accurate and truthful!
8. Use what is called telegraphic style. Omit all personal pronouns (I, we, they, you, etc.). Use incomplete sentences in list form (no paragraphs!) without punctuation.
9. Use results oriented, "action verbs" in describing your experience. Words such as administered, coordinated, developed, created, implemented, managed, and prepared are keys in telling employers what you have accomplished. Use past tense unless you are describing a job you are currently doing (in which case present tense or past tense is acceptable). Career Services has additional recommendations for action verbs.
10. Do not staple, paper clip, fold, or put your résumé in a folder. Use the larger 9" X 12" envelopes if you have to mail your résumé and be sure watermarks (if your paper has them) are right-side up.

For more information or assistance with a résumé or other job search question, please contact us at:  
School of Chemical Sciences Career Services

105 Noyes Laboratory  
217-333-1050 • [careers@scs.illinois.edu](mailto:careers@scs.illinois.edu) • <http://careers.scs.illinois.edu/>

## EXAMPLE 1: Entry-Level BS Chemist

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### JOHN T. LEIBOWITZ

2334 S. Austin Rd, Apt. B, Champaign, IL 30301 | johnl@illinois.edu | 217-555-1212

#### EDUCATION

BS, Chemistry, with Honors; Minor concentration: Russian  
University of Illinois, Urbana-Champaign, IL, Expected May 2022

- Honors thesis: "Synthesis of bis-dipyridyl complexes of divalent transition metals"
- Advisor: Professor Nina R. Young
- GPA 3.55/4.00

#### EXPERIENCE

Research Assistant, Professor Nina R. Young  
University of Illinois, Urbana-Champaign, IL, August 2019-Present

- Synthesized organic ligands and inorganic compounds, on large and small scales, using anaerobic techniques
- Produced complexes of divalent first-row transition metals; studied their interaction with dioxygen
- Characterized products with  $^1\text{H}$  NMR, UV-vis, and IR spectroscopy as well as X-ray crystallography and magnetic susceptibility

Teaching Assistant, Undergraduate Inorganic Chemistry  
University of Illinois, Urbana-Champaign, IL, Fall 2019

- Planned and led help sessions and recitations twice per week for 20+ students
- Coordinated materials, conducted lab sessions, and graded lab reports

#### COMPUTER EXPERIENCE

- Navigate Mac OS, DOS, MS Windows, X windows, and UNIX
- Proficient in MathCAD, Excel, MS Word, AmiProd, MatLab
- Acquainted with Cambridge Structural Database and Inorganic Crystal Structure Database

#### COURSEWORK

- Completed, in addition to required courses, graduate-level biochemistry (4 hours), instrumental analysis (2 hours), bioanalysis lab (2 hours), and computational chemistry lab (2 hours)
- Attended workshop/conference on bioinorganic chemistry

#### AWARDS

- Dean's List, August 2018-January 2020
- Grant recipient from the General Electric Foundation, Summer 2019

#### ACTIVITIES

- Member, Alpha Delta Chi honor society, January 2019-Present
- Private music tutor (cello), January 2018-Present
- Volunteer, Urbana Food Bank, Fall 2018

## **JOHN T. LEIBOWITZ**

2334 S. Austin Rd, Apt. B, Champaign, IL 30301 | johnl@illinois.edu | 217-555-1212

### **REFERENCES**

Professor Nina R. Young, Department of Chemistry  
University of Illinois at Urbana-Champaign  
112 Gorder Drive, Box 6-788  
Urbana, IL 61801  
217-555-1212  
nyoung@illinois.edu

Professor Rodney Tree, Department of Chemistry  
University of Illinois at Urbana-Champaign  
900 Gorder Drive, Box 8-200  
Urbana, IL 61801  
217-555-1212  
rtree@illinois.edu

Professor James Orney, Department of Mathematics  
University of Illinois at Urbana-Champaign  
122 Simpson Avenue, Box 7-407  
Champaign, IL 61820  
217-555-1212  
jorney@illinois.edu

## EXAMPLE 2: Entry-Level PhD Chemist

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### ERNSTINE WILLIAMS

123 Gorder Drive  
Iowa City IA 52240  
ewilliams@illinois.edu  
319-555-1212

#### EDUCATION

*PhD, Physical Chemistry*, University of Illinois at Urbana-Champaign, IL Anticipated Dec 2022

- Thesis title: "Photochemical Studies of Heterogeneous Reactions in the Atmosphere"
- Advisor: Professor Anton Bruckner

*BS, Chemistry*, Central College, Pella, IA May 2017

- GPA 3.91/4.00, *Summa Cum Laude*
- Thesis title: "Computer simulation of ozone reactions"
- Advisor: Professor J. P. Morgan.

#### RESEARCH EXPERIENCE

*Graduate Research Assistant*, University of Illinois, Urbana-Champaign, IL Dec 2017-Present

- Advisor: Professor Anton Bruckner
- Developed a new, highly sensitive technique for the measurement of photochemical reactions on heterogeneous surfaces
- Modeled the kinetics of heterogeneous photochemical atmospheric reactions
- Gained experience in all types of optical investigations of photochemical processes
- Led Advanced Physical Chemistry and Advanced Kinetics laboratories

*Summer Intern*, Exxon Research and Development, Houston TX Summer 2016

- Supervisor: Dr. Chuck Johnson
- Studied gas-phase reactions on various heterogeneous catalysts of industrial importance using spectroscopy

*Undergraduate Research Assistant*, Central College, Pella, IA Jan 2013-May 2015

- Advisor: Professor J. P. Morgan
- Constructed new experimental equipment parts
- Used computer modeling to determine efficiency of equipment

*Summer Intern*, University of Illinois at Urbana-Champaign Summer 2014

- Worked independently in the laboratory of Professor Ivan P. Oakes
- Studied chlorofluorocarbons reacting with water droplets using spectroscopy

#### PATENT

- Peach, J. R.; Petrov, V.; Goldstone, W.; **Williams, E.** Catalyst for the cycloamination of butenes, US Patent 4 333 219, March 24, 2015

## PUBLICATIONS

- **Williams, E.**; Morgan, J. P. “Computer simulation of ozone reactions.” *J. Phys. Chem.* 2016, 88, 124-126.
- Kline, B. J.; **Williams, E.**; Bruckner, A. “The detection of fluorocarbon-water complexes in the atmosphere.” *J. Phys. Atmospheric Sci.* 2016, 14, 428-431.
- **Williams, E.**; Bruckner, A. “A novel optical technique for the measurement of atmospheric chlorofluorocarbons.” *J. Instrum. Anal.* 2015, 135, 1214-1218.
- Davis, J.; **Williams, E.**; Bruckner, A. “A critical review of the kinetics of heterogeneous photochemical atmospheric reactions.” *Chem. Rev.* 2014, 45, 120-145.

## AFFILIATIONS

- American Institute of Chemical Engineers Jan 2016-Present
- American Chemical Society Aug 2013-Present

## TEACHING EXPERIENCE

*Laboratory Teaching Assistant*, UIUC Department of Chemistry Spring 2019  
Experimental Techniques in Chemical Biology

- Restructured the course design and the syllabus, designed and optimized experimental protocols and prepared materials for each experiment
- Instructed graduate students with various chemical biology techniques
- Created and graded problem sets and exams, and graded notebook entries
- Received Teaching Excellence Award

*Tutor*, American Chemical Society, Urbana, IL Oct 2017-May 2019

- Conducted one-on-one tutoring sessions to assist middle school students in completing homework
- Participated in community outreach events to spread awareness of current chemistry related events to students on campus

## References Page

You *may* choose to set up a separate page of references (set-up as above; 3-5 references...could be a combination of academic & industrial supervisors, focus on contacts from graduate-level work)

## **EXAMPLE 3: Chemist With Postdoctoral Experience**

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# Anika Patel

1835 Eisenhower Circle  
Albuquerque NM 87185  
505-555-1212  
apatel26@sandia.gov

### **EDUCATION**

PhD, Chemistry, University of Chicago (Chicago, IL), 2019

- Thesis title: “Studies of Structure and Dynamics of Liquid Supported Monolayers”
- Advisor: Professor Wilson Albright

MS, Chemistry, University of Chicago (Chicago, IL), 2015

- Advisor: Professor Wilson Albright

BS, Chemistry, University of Southern Florida (Tampa, FL), 2013

- Thesis title: “Photochemistry and Photophysics of Cyclopropylphenols”
- Advisor: Professor Stuart Anthony

### **RESEARCH EXPERIENCE**

Postdoctoral Fellow, Sandia National Laboratory (Albuquerque, NM),  
2019-present

- Developed novel signal amplification for detecting and sizing single RNA samples
- Designed and implemented an efficient system for the mass spectrometric separation and identification of individual molecules

Research Assistant, University of Chicago (Chicago, IL), 2015-2019

- Advisor: Professor Wilson Albright
- Maintained operational responsibility for Professor Albright's laser facility for the measurement of ultrafast kinetics of chemical phenomena in bulk liquid and at air-water interfaces
- Investigated the molecular properties, orientation, kinetics, and relaxation phenomena at liquid and solid interfaces by nonlinear optical techniques
- Led Advanced Physical Chemistry and Optical Methods of Analysis laboratories

Undergraduate Research Assistant, University of South Florida (Tampa, FL),  
2010-2013

- Advisor: Professor Stuart Anthony
- Studied photochemistry and photophysics of p-cyclopropylphenols both experimentally and theoretically

Research Assistant, Oak Ridge National Laboratory (Oak Ridge, TN), Summer 2011

- Supervisor: Dr. Leopold Wiseman
- Studied chlorofluorocarbons excited by gamma radiation using spectroscopy

### **AFFILIATIONS**

American Chemical Society, 2012-present

American Physical Society, 2015-present

Optical Society of America, 2015-present

# Anika Patel

Page 2

- PUBLICATIONS** **Patel, A.**; Albright, W. “A critical review of the structure and dynamics of liquid supported monolayers.” *Chem. Rev.* 2019, 45, 320-362.
- Davis, B.; **Patel, A.**; Ickes, H.; Albright, W. “Method for the preparation of monolayers of denatured RNA.” *Biol. Chem.* 2018, 111, 124-127.
- Patel, A.**; Davis, B.; Ickes, H.; Albright, W. “The detection of monomeric RNA samples.” *J. Biol. Chem.* 2017, 104, 4439-4445.
- Patel, A.**; Albright, W. “A novel signal amplification for the detection of single RNA samples.” *J. Instrum. Anal.* 2016, 134, 214-218.
- PRESENTATIONS** **Patel, A.**; Albright, W. “Liquid Supported Monolayers: Structure and Dynamics.” Oral presentation at the National Meeting of the American Chemical Society, March 2018.
- Patel, A.** Anthony, S. “Photophysical analysis of p-cyclopropylphenol.” Poster presentation at the University of Chicago Chemical and Physical Sciences Conference, January 2017.
- AWARDS** Phi Beta Kappa, 2013  
Oak Ridge National Laboratory’s Prestige Award, 2011

## References Page

You *may* choose to set up a separate page of references (set-up as above; 3-5 references...could be a combination of academic & industrial supervisors, focus on contacts from graduate & post-doc-level work)

## EXAMPLE 4: Academic Curriculum Vitae

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# Huang Wang

1400 North County Road  
Zurich, Switzerland A94724M

huang.wang@org.ethz.ch  
+41 1 362-7933

## EDUCATION

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PhD, Chemistry, Cornell University, Ithaca NY, December 2014

- GPA: 4.0/4.0

MS, Chemistry, Cornell University, Ithaca NY, May 2012

- GPA: 4.0/4.0

BS, Chemistry, Pennsylvania State University, State College PA, May 2010

- GPA: 3.82/4.00
- Dean's List, 2008-2010

## RESEARCH EXPERIENCE

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Postdoctoral Fellow, Swiss Federal Institute of Technology (ETH), Zurich, Switzerland,  
December 2014-Present

Advisor: Prof. Eric Hubbert

- Designed and constructed large (>108 members) random gene libraries to investigate the frequency of occurrence of catalysts in protein sequence space
- Using binary patterning, 8 of the 20 standard amino acids, and chorismate mutase as a design scaffold, selected catalytically active variants at a frequency of 1 in 10,000 from a library that was 80% randomized versus the wild-type sequence
- Used iterative cycles of directed evolution and genetic selection to produce 40-fold improvements in the catalytic efficiency of a novel engineered homo-hexameric chorismate mutase

Graduate Researcher, Cornell University, Ithaca, NY, July 2010-August 2014

Advisor: Prof. Richard Barrett

Thesis title: "The Biosynthesis of Thiamin in E. coli: Biosynthesis of the Thiazole Moiety"

- Used several approaches in investigating the biosynthesis of thiamin, including chemical synthesis of thiazole precursors, purification and characterization of several E. coli and B. subtilis enzymes involved in the biosynthesis
- Utilized high-resolution mass spectrometry to track the generation of transient protein modifications during the sulfur transfer

Undergraduate Researcher, Pennsylvania State University, State College, PA,  
August 2007-May 2010

Prof. Julia P. Huang

- Expressed and purified 6 mutants of sperm whale myoglobin from 80-L fermentations and measured their rates of heme orientation isomerization using paramagnetic region NMR spectra
- Discovered that long-range mutations exert a strong influence on the binding site of myoglobin



## **PUBLICATIONS**

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*(List all publications, reverse chronological order, on a CV)*

## **TEACHING EXPERIENCE**

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Lecturer, Swiss Federal Institute of Technology (ETH), Zurich, Switzerland, Fall 2016

- Presented eight 90-minute lectures in Biological Chemistry I, an introductory biochemistry course for chemistry majors

Teaching Assistant, Swiss Federal Institute of Technology (ETH), Zurich, Switzerland, January 2015-May 2016

- Supervised a PhD student, 3 MS students, and 2 undergraduate students

Teaching Assistant, Cornell University, Ithaca, NY, Fall 2013

- Directly supervised 4 undergraduate students
- Assisted with graduate-level biological chemistry course
- Assisted with introductory organic laboratories and lecture courses

Chemistry Department Tutor, Pennsylvania State University, State College, PA, August 2009-April 2010

- Conducted review sessions for general and introductory organic chemistry
- Held one-on-one help sessions for students

## **AWARDS AND AFFILIATIONS**

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- American Chemical Society Member, 2010-present
- NIH Biochemistry Training Grant, 2012-2014
- NIH Molecular & Cell Biology Training Grant, 2013-2014
- Teas Scholarship in Chemistry, Pennsylvania State University, 2008-2010

## **OTHER POSSIBLE CATEGORIES??**

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*(May wish to include things like leadership experience, outreach, technical/lab skills, etc.....whatever you think may be important to the particular institution)*

## **REFERENCES**

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*You may choose to set up a separate page of references (This candidate would list academic/research references.)*

# ACTION VERBS

## Leadership & Organizational Skills

Achieved  
Acquired  
Acted  
Adapted  
Administered  
Approved  
Arranged  
Ascertained  
Assembled  
Attained  
Audited  
Budgeted  
Catalogued  
Charged  
Chartered  
Completed  
Complied  
Conducted  
Controlled  
Decided  
Delegated  
Determined  
Directed  
Drove  
Earned  
Effected  
Eliminated  
Enhanced  
Ensured  
Exceeded  
Excelled  
Executed  
Expanded  
Guided  
Headed  
Hired  
Implemented  
Improved  
Increased  
Indexed  
Instigated  
Instituted  
Inventoried  
Kept  
Led  
Logged  
Managed  
Marketed  
Motivated  
Observed  
Ordered  
Organized  
Overcame  
Participated  
Performed  
Planned  
Prepared  
Presided  
Procured  
Projected  
Provided  
Ran  
Recommended  
Recorded  
Recruited  
Reorganized  
Scanned  
Scheduled  
Strategized  
Streamlined  
Succeeded  
Supervised  
Supported  
Unified  
Won

## Research Skills

Analyzed  
Appraised  
Classified  
Coded  
Collaborated  
Collected  
Compared  
Constructed  
Contrasted  
Contributed  
Coordinated  
Designed  
Detected  
Diagnosed  
Discovered  
Dissected  
Distributed  
Engineered  
Examined  
Experimented  
Explored  
Extracted  
Formulated  
Innovated  
Inquired  
Inspected  
Interpreted  
Invented  
Investigated  
Made  
Manipulated  
Maximized  
Minimized  
Modeled  
Modified  
Monitored  
Obtained  
Oversaw  
Pioneered  
Produced  
Proposed  
Reported  
Researched  
Reviewed  
Solved  
Specialized  
Stimulated  
Studied  
Summarized  
Surveyed  
Synthesized  
Theorized  
Transformed  
Verified

## Technical Skills

Applied  
Assessed  
Calculated  
Computed  
Correlated  
Devised  
Documented  
Estimated  
Financed  
Handled  
Integrated  
Maintained  
Operated  
Programmed  
Repaired

## Creative Skills

Built  
Conceived  
Conceptualized  
Created  
Developed  
Established  
Fashioned  
Founded  
Generated  
Initiated  
Inspired  
Launched  
Originated  
Piloted  
Revised  
Shaped  
Symbolized  
Tailored  
Visualized

## Teaching & Helping Skills

Advised  
Advocated  
Aided  
Allocated  
Approved  
Assessed  
Assisted  
Attended  
Cared  
Checked  
Clarified  
Coached  
Collaborated  
Conducted  
Cooperated  
Counseled  
Demonstrated  
Developed  
Diagnosed  
Directed  
Educated  
Enabled  
Encouraged  
Evaluated  
Examined  
Explained  
Facilitated  
Followed  
Fostered  
Guided  
Helped  
Illustrated  
Implemented  
Influenced  
Informed  
Inspired  
Instructed  
Lectured  
Led  
Mentored  
Planned  
Prompted  
Proposed  
Represented  
Reviewed  
Served  
Shaped  
Solicited  
Supported  
Sustained  
Taught  
Trained  
Tutored  
United

## Communication Skills

Addressed  
Advertised  
Answered  
Arbitrated  
Authored  
Clarified  
Communicated  
Compiled  
Composed  
Consulted  
Contacted  
Corresponded  
Critiqued  
Debated  
Delivered  
Demonstrated  
Drafted  
Edited  
Explained  
Informed  
Interviewed  
Introduced  
Mediated  
Moderated  
Narrated  
Negotiated  
Notified  
Offered  
Persuaded  
Presented  
Promoted  
Proofread  
Publicized  
Published  
Questioned  
Referred  
Related  
Responded  
Spoke  
Translated  
Wrote