

EDUCATION

Ph.D. Chemistry • Washington University, St. Louis

A.M. Chemistry • Washington University, St. Louis

B.S. Chemistry • University of Missouri-Rolla

EXPERIENCE

2011-PRESENT

Senior Manager • EAG Laboratories

- Discuss potential projects with new clients
- Design technical plans to address customer's needs and discuss pricing
- Write and issue quotations for projected analytical services
- Consult with Marketing and represent EAG at trade shows
- Strategize with management on how to achieve quality, sales, and scientific excellence
- Lead new hire recruiting efforts at EAG site
- Target personnel needs and interview candidates
- Manage three to five chemists (Bachelors, Masters, and Ph.D. level)
- Consult, plan, and supervise projects
- Communicate results to clients
- Responsible for technical accuracy of projects

2007-2011

Director – Specialized Services • Chemir, a Division of Evans Analytical Group

- Consult with Marketing and represent EAG at trade shows
- Strategize with management on how to achieve quality, sales, and scientific excellence
- Target personnel needs and interview candidates
- Manage three to five chemists (Bachelors, Masters, and Ph.D. level)
- Consult, plan, and supervise projects
- Communicate results to clients
- Responsible for technical accuracy of projects

2006-2007

Project Leader – Specialized Services • Chemir, a Division of Evans Analytical Group

- Manage three to five chemists (Bachelors, Masters, and Ph.D. level)
- Consult, plan, and supervise projects
- Communicate results to clients
- Responsible for technical accuracy of projects

2005-2006

Senior Analytical Chemist • Chemir, a Division of Evans Analytical Group

- Perform deformulations, contaminant ID's, failure analyses, legal projects
- Primary operator of FT-IR and SEM/EDXA instruments, responsible for instrument maintenance, qualification, and employee training

2004-2005

Teaching Lecturer in Chemistry • Washington University.

2004-2005

Postdoctoral Associate • Washington University.

- Investigation of surface chemistry in quantum-confined InP nanowires by ³¹P-NMR.

2004

Adjunct Instructor • East Central College

- Sole instructor for a survey course covering physics, chemistry, astronomy, and geology, designed for education majors.

1999-2004

Graduate Research Assistant • Washington University

- Synthesis of boron and boron nitride nanostructures by CVD. Characterization by XRD, SEM, EDS, TEM, SAED, and EELS.
- Developed separation and suspension protocol to create nanowire samples suitable for electron transport measurements.
- Participated in semiconductor nanowire device fabrication through photolithography with electrical engineers at UC-Irvine.

1998-2000

Graduate Teaching Assistant • Washington University

1998

Research and Development Chemist • Reliable Biopharmaceutical Corporation

- Synthesized ³⁵S and ¹⁴C radiolabelled versions of sulfated amino sugar for use as potential orally administrable anticoagulant drug at Washington University Medical School.
- Determined effectiveness of drug using human blood plasma and fibrometer.
- Participated in animal trial administering drug to rabbit.

1996-1997

Summer Intern • Reliable Biopharmaceutical Corporation

- Synthesized a series of sulfated amino sugars for use as potential orally administrable anticoagulant drug. Assayed intermediates using IR, polarimetry, HPLC, Karl Fischer, and UV-Vis.
- Developed titration using SDS titration to determine extent of sulfation achieved.
- Determined effectiveness of different amine linkers by correlating concentration of drug in human blood plasma with clotting time

PUBLICATIONS

- William M. Iko, Jenny Berven, Laurie A. Baeten, Colleen E. Rostad, David W. Rutherford, Carolyn J. Otten, and Paul Winter. United State Geological Survey Report. "Adverse Effects to Northern Shovelers from Exposure to Treated Wastewater from Central Front Range, Colorado, Wastewater Treatment Plants." Released July 27, 2010.
- C. Jones Otten, D. Wang, J. G. Lu, W. E. Buhro. "Electrical Properties of Boron Nanowires" Modern Aspects of Main Group Chemistry. Eds M. Lattman and R. A. Kemp. Washington DC: ACS books, 362-375 (2005).
- D. Wang, C. Jones Otten, W. E. Buhro and J. G. Lu. "Rectifying effect in boron nanowire devices." IEEE T. Nanotechnol. (2004) 3(2), 328-330. Also appeared in IEEE-NANO 2003 Conference Proceedings. Vol. 1, 48-51.

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- D. Wang, J. G. Lu, C. J. Otten and W. E. Buhro. "Electrical transport in boron nanowires" Appl. Phys. Lett. (2003) 83 (25), 5280-5282. Also selected to appear in AIP's Virtual Journal of Nanoscale Science & Technology, Dec. 29, 2003
 - C. J. Otten, O. R. Lourie, M-F. Yu, J. M. Cowley, M. J. Dyer, R. S. Ruoff, and W. E. Buhro. "Crystalline boron nanowires" J. Am. Chem. Soc. (2002) 124 (17), 4564-4565.
 - O. R. Lourie, C. R. Jones, B. M. Bartlett, P. C. Gibbons, R. S. Ruoff, and W. E. Buhro. "CVD growth of boron nitride nanotubes" Chem. Mater. (2000) 12, 1808-1810.
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HONORS AND AWARDS

- Graduated Magna Cum Laude from University of Missouri
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