Chemistry Career Outlook 2009-2010

Chemistry Programs Available at Bemidji State University:
Major: Chemistry (B.A., B.S.), Science (Chemistry) Teacher Licensure (B.S.)
Fields of Emphasis: Chemistry, Biochemistry, Environmental Chemistry, Criminalistics
Minor: Chemistry
Department Website: http://www.bemidjistate.edu/academics/departments/chemistry

Major Highlights:
Chemistry is often called the "Central Science" because chemical knowledge is essential not only to chemists, but to biologists (through biochemistry, molecular biology, and environmental chemistry) and engineers (through materials science and polymers). A good knowledge of chemistry provides many options for graduate study and many options for career paths. The study of chemistry can be divided into two parts: analysis and synthesis. Analysis determines the identities of the components of a real world sample (a sample of polluted water, for example) and then measures how much of each component is present. Synthesis produces new, previously non-existent materials. Twenty-one million chemicals are known, and new ones are being produced all the time. Will you synthesize one that reduces pollution? Cures a dreaded disease? First-and second-year students interested in the chemistry major or minor are encouraged to discuss their career interests with members of the Department of Chemistry. This will allow good schedule planning, leading to on-time graduation.

Employment Areas:
The "Occupational Outlook Handbook" reports that chemists and materials scientists held about 94,100 jobs in 2008. Chemists accounted for about 84,300 of these, and materials scientists accounted for about 9,700 jobs. About 42 percent of all chemists and material scientists were employed in manufacturing firms—mostly in the chemical manufacturing industry. Firms in this industry produce plastics and synthetic materials, drugs, soaps and cleaners, pesticides and fertilizers, paint, industrial organic chemicals, and other chemical products. About 18 percent of chemists and material scientists worked in scientific research and development services; 9 percent worked in testing labs. Chemists and materials scientists are employed in all parts of the country, but they are mainly concentrated in large industrial areas.

Projected Demand for Chemistry Majors in Minnesota:
MnCareers reports that the outlook for chemists is good with about 780 individuals employed as chemists, and an average income of $31.50 per hour. Beginning salaries start at $19.50 per hour. Competition for positions is high. Chemists often pursue master's degrees and those involved in research positions are required to have doctorates. The largest area of growth for chemists is expected in drug manufacturing and research.

Projected Demand for Chemistry Majors Nationwide:
The DISCOVER guidance system reports that the nationwide demand for chemists is growing at a moderate rate, with a 0.9% expected growth rate per year. The average starting salary for a chemist was $49,000 annually in 2009. The According to the National Association of Colleges and Employers, beginning salary offers in July 2009 for graduates with a bachelor's degree in chemistry averaged $39,897 a year.

Placement Information for Chemistry Graduates:
There are many career opportunities for Bemidji State University chemistry graduates. For the 2008-2009 chemistry graduates with a Bachelor of Arts degree, 100% reported obtaining related employment within one year of graduation. For the 2008-2009 chemistry graduates with a Bachelor of Science degree 33.3% reported obtaining related employment within one year of graduation, while 40% are continuing their education. This does not include students who were not seeking employment, unavailable, or had unknown status.
A Partial List of Employers Who Have Hired BSU Chemistry Graduates:

Allina Health Systems
Altus Biologics
City of Baudette
City of Superior
Clay County
Co-operative Plating Company
Environmental Protection Agency
Hobart Laboratories
Konica Minolta
Mayo Clinic
Medtox Laboratories
MedX Scientific Inc.
MN Department of Natural Resources
Omicare Pharmacy
Owatonna Clinic
Proctor & Gamble
RMB Environmental Laboratories, Inc.
SolVay Pharmaceuticals
Target
Varian
Wyoming State Crime Laboratory
Anchorage School District
Annandale Middle School
Anoka-Hennepin School District
Area School Districts
Austin High School
Belgrade-Brooten-Elrosa School District
Bemidji Middle School
Bemidji School District
Bottineau School District
Breckenridge High School
Central MNChristian School
Chisago Lakes School District
Clearbrook-Gonvick School District
Crosby-Ironton School District
Eagle Valley High School
Ellicott City Public Schools
Grand Rapids School District
Great River School
Hastings School District
Headwaters Science Center
Humboldt High School
Independent School District #196
Independent School District #196
ISD #196
ISD #196
ISD #31
ISD #318
ISD 316
ISD 318
ISD 361
ISD 516/513
Leech Lake Tribal College
Little Falls Community Middle School
Little Falls Community Schools
Little Falls School District
Little Falls School District
Lower Yukon School District
Minneapolis Public Schools

Medical Technologist
Research Chemist
Water & Sewer Maintenance
Engineering Technician II
Environmental Assessment
Chemist
Chemist
Quality Control Chemist
Account Executive
Progenitor Cell Lab Technologist
Forensic Technologist
Forensic Lab Screener
Natural Resource Technician
Pharmacy Technician
Patient Accounts
Quality Assurance Lab Technician
Laboratory Analyst
QC Analyst
Managed Care
Chemist
Trace Evidence Examiner
Science Teacher
Science Teacher
Middle School Life/Earth Science Teacher
Substitute Teacher
Environmental Science Teacher
Science Teacher
Seventh Grade Science Teacher
Science Teacher
Science Teacher
Science Teacher
Science Teacher
Science Teacher
Teacher
Sixth Grade Teacher
Technology Specialist/Testing
Classroom Teacher
Science Teacher
Science Teacher
Science Teacher
Science Teacher
Science Teacher
Teacher
Education Program Assistant
Science Teacher
Teacher
High School Science Teacher
Teacher
Teacher
Middle School Science Teacher
Grade 7 Science Teacher
Science Teacher
Science Teacher
Science Teacher
Science Teacher
Teacher
Science Teacher
Instructor
Seventh Grade Science Teacher
Science Teacher
Science Teacher
Sixth Grade Science Teacher
Science Teacher
Science Teacher
Fridley, MN
Cambridge, MA
Baudette, MN
Superior, WI
Moorhead, MN
St. Paul, MN
Duluth, MN
Bemidji, MN
Edina, MN
Rochester, MN
St. Paul, MN
St. Paul, MN
Lake Itasca, MN
Crystal, MN
Owatonna, MN
Green Bay, WI
Detroit Lakes, MN
Baudette, MN
Minneapolis, MN
Cary, NC
Cheyenne, WY
Anchorage, AK
Annandale, MN
Coon Rapids/Anoka, MN
Hill City/Remer, MN
Austin, MN
Belgrade, MN
Bemidji, MN
Bemidji, MN
Bottineau, ND
Breckenridge, MN
Prinsburg, MN
Lindstrom, MN
Clearbrook, MN
Crosby, MN
Eagle Bend, MN
Ellicott City, MD
Grand Rapids, MN
St. Paul, MN
Hastings, MN
Bemidji, MN
St. Paul, MN
Eagan, MN
Apple Valley, MN
Rosemount, MN
Apple Valley, MN
Bemidji, MN
Grand Rapids, MN
Clerkina, MN
Grand Rapids, MN
International Falls, MN
Round Lake, MN
Cass Lake, MN
Little Falls, MN
Little Falls, MN
Little Falls, MN
Little Falls, MN
Mountain Village, AK
Minneapolis, MN
A Partial List of Employers Who Have Hired BSU Chemistry Graduates (continued):

- Minneapolis School District Teacher, Minneapolis, MN
- MN Dept of Natural Resources Wildland Firefighter, Bemidji, MN
- Pequot Lakes School District Middle Level Science Teacher, Pequot Lakes, MN
- Sam Houston Middle School Science Teacher, Irving, TX
- Sartell High School Science Teacher, Sartell, MN
- Solvay Pharmaceuticals QC Chemist I, Baudette, MN
- Springfield Public Schools Science Teacher, Springfield, MN
- St. Louis County Schools Teacher, Babbitt, MN
- St. Mark's School Science Teacher, St. Paul, MN
- St. Mary's Mission School Science/Health Teacher, Red Lake, MN
- St. Michael-Albertville High School Science/Physics Teacher, Albertville, MN
- St. Paul Public Schools Teacher, St. Paul, MN
- St. Philip's School Teacher, Bemidji, MN
- Warroad High School Chemistry/Environmental Studies Teacher, Warroad, MN
- Wheaton Area High School 7-12 Science Teacher, Wheaton, MN
- White Bear Lake High School Science Teacher, White Bear Lake, MN
- Winona Public Schools Science Teacher, Winona, MN

Colleges and Universities Where BSU Chemistry Graduates Have Gone to Continue Their Education:

- Bemidji State University, Bemidji, MN
- Dartmouth College, Hanover, NH
- Iowa State University, Ames, IA
- Montana State University, Bozeman, MT
- New Mexico State University, Las Cruces, NM
- North Dakota State University, Fargo, ND
- Oregon State University, Corvallis, OR
- Trinity Evangelical Divinity School, Deerfield, IL
- University of Alabama, Birmingham, AL
- University of Illinois, Urbana, IL
- University of Iowa, Iowa City, IA
- University of Kansas, Lawrence, KS
- University of Minnesota-Duluth, Duluth, MN
- University of Minnesota, Minneapolis, MN
- University of Minnesota College of Pharmacy, Minneapolis, MN
- University of North Dakota, Fargo, ND
- University of North Dakota, Grand Forks, ND
- University of North Dakota Sch of Medicine, Grand Forks, ND
- University of Washington, Seattle, WA

Note 1: Some of the above job/career titles require advanced degrees or specialized training.

Note 2: Degrees alone do not get students jobs. Internships, summer jobs, volunteer work, part-time jobs, work-study positions, and active participation in student organizations on campus are all ways to become more competitive in a tight job market.

Note 3: Personal Competencies. It is also recommended that individuals be competent in a variety of communication methods, and computer skills are a must.

Bibliography:

- Annual Graduate Follow-Up Study 1997-2009, Bemidji State University, Bemidji, MN (2010)
- Bemidji State University Undergraduate Catalog 2006-2008, Bemidji State University, Bemidji, MN (2009)

For more information, please contact the Career Services Office in 102 Sanford Hall or call us at 218-755-2038 or toll free at 800-657-3726.