

**Graduate Student Positions available**  
**Center for Biofilm Engineering, Chemical and Biological Engineering Department**  
**Montana State University**

Dr. Gerlach's research group currently has openings for Ph.D. students in the areas of

- 1) **Reactive transport in porous media with emphasis on mineral-precipitating biofilms**
- 2) **Development of biofilm-based technologies for the sequestration of carbon dioxide**
- 3) **Biofilm control using supercritical fluids**

Required Qualifications: Bachelors degree in Chemical and Biological Engineering or a related field (e.g. environmental engineering, civil engineering, microbiology, biotechnology, or similar), strong interest in quantitative analysis of complex biological systems

Preferred Qualifications: M.S. degree in engineering or a related field. Laboratory experience in microbiology and analytical chemistry

Minimum Annual Stipend (dependent on project and scholarships): \$1500/month Ph.D.; \$1200/month M.S.; tuition is usually covered.

Dr. Gerlach is an associate professor in [Chemical and Biological Engineering](#) at [Montana State University](#) as well as an adjunct, associate faculty with the world renown [Center for Biofilm Engineering](#), the [Thermal Biology Institute](#) (TBI), [MSU's NSF-IGERT program in Geobiological Systems](#), and the [Department of Microbiology](#) at MSU. Dr. Gerlach has a history of training engineering students in fundamental and advanced microbiological and molecular biological techniques necessary for research and development in bioengineering and microbiologist in biological engineering techniques and approaches. Dr. Gerlach is also the director of the [Environmental and Biofilm Mass Spectrometry user facility](#) at MSU, consisting of several liquid and gas chromatographs coupled to traditional detectors as well as quadropole, ion-trap, and inductively coupled plasma mass spectrometers.

[Bozeman](#) is located in the Gallatin Valley in the heart of the Rocky Mountains. Approximately 50,000 people live in the Gallatin Valley with backgrounds and cultures as diverse as the Montana landscape. From cattle ranchers to high tech engineers, the area is home to people who have come to appreciate the outdoors and an unmatched quality of life. Despite its safe small town feel, Bozeman prides itself on offering community activities and programs typically available only in larger, metropolitan areas. In addition, a wide variety of world class outdoor recreational opportunities are available right outside town and that's why it is easy to understand why Bozeman ranks as one of the nation's most livable cities.

[Bridger Bowl Ski Resort](#) is located 20 minutes drive from the university and [Big Sky Ski Resort](#) is located 45 minutes away. Bozeman is just an hour drive from [Yellowstone National Park](#) and a 6 hour drive from [Glacier National Park](#). Within minutes of the city, one has access to world class trout fishing, hunting, mountain biking, kayaking, rock climbing, cross-country skiing, downhill skiing and hiking.

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*Qualified candidates should contact Dr. Gerlach at Associate Professor, Chemical and Biological Engineering, Center for Biofilm Engineering, Room 366 EPS, Montana State University, Bozeman, MT 59717-3980, Phone: 406-994-4770, FAX: 406-994-6098, E-mail: [robin\\_g@biofilm.montana.edu](mailto:robin_g@biofilm.montana.edu), [http://www.erc.montana.edu/~robin\\_g](http://www.erc.montana.edu/~robin_g)*