Department of
BIOPRODUCTS AND
BIOSYSTEMS ENGINEERING

UNIVERSITY OF MINNESOTA
Driven to Discover℠

Assistant Professor Biomass Degradation/Preservation
Department of Bioproducts and Biosystems Engineering
College of Food, Agricultural and Natural Resource Sciences
College of Science and Engineering
University of Minnesota

The Department of Bioproducts and Biosystems Engineering, a multidisciplinary department composed of engineers and scientists, is seeking a suitable candidate to fill a 9-month tenure-track faculty position in biological degradation of bio-based resources and materials with 50% research and 50% teaching responsibilities. Microbial pathways to deconstruct plant tissues have long been studied in a pest management context, particularly in wood durability, but these pathways are increasingly being studied in nature and harnessed for bioconversion of plant biomass. This has diversified the organisms being studied and broadened definitions for bio-based resources and materials. Bio-based resources include wood, agricultural crop residues, and other biomass. Bio-based materials include forest products, bio-based composites, and polymeric lignocellulose derivatives.

Responsibilities

Teaching

Teaching responsibilities will include both undergraduate and graduate courses in bioproducts and biosystems engineering, sustainable systems management, and environmental sciences; including the influence of organisms such as fungi, bacteria, and insects on bio-based products and bioremediation, and industrial and environmental microbiology. Courses will serve a diverse body of students.

Research

The successful candidate will develop a strong, extramurally-funded research program involving fundamentals and applications of microbiology (including bacterial and fungal biology and plant-pathogen interactions) related to the biological degradation or protection of bio-based resources and materials.

Qualifications

Required Qualifications

Ph.D. in Microbiology, Biochemistry, Wood Science, Bioproducts and Biosystems, Biochemical or Agricultural Engineering, Mycology, Plant Pathology, Forest Products, or related disciplines with demonstrated experience/background in biological degradation of bio-based resources and materials. Applicants should have a strong publication record in relation to biodegradation of bio-based materials, and evidence of the potential to initiate and sustain a strong extramurally-funded research program. Ph.D. must be obtained by date of appointment.

Preferred Qualifications

A proven track record for interacting collaboratively with scientists and engineers across various disciplines. Evidence of innovative approaches to teaching at both the undergraduate and graduate level. Postdoctoral experience beyond the PhD. Evidence of effective teaching with diverse audiences; excellent written and oral communication skills; demonstrated experience in obtaining external funding; and the proven ability to support the University's commitment to equity and diversity. Successful candidate is expected to excel in teaching, research and outreach and contribute to the overall success and mission of the department, college and the university.

Salary and Benefits

Salary is competitive and commensurate with experience and qualifications. The University's outstanding fringe benefits package includes participation in the University's faculty retirement program; group life, medical, and dental insurance plans; and sabbatical, semester, and parental leave opportunities. Detailed benefits information is available at:

http://humanresources.umn.edu/benefits

Application Instructions

Interested applicants should submit a curriculum vitae; cover letter; 2-3 page statement of research plans and experience; 1-2 page statement of teaching experience and philosophy; and names and addresses of three references; a brief statement (up to one page) describing interest, experience with, and commitment to diversity and inclusiveness to the online application system described below Review of applications will begin February 01, 2018 and continue until the position is filled. If you have any questions, please feel free to contact the chair of the search committee, Dr. Brett Barney, at bbarney@umn.edu or 612-626-8751.

Please apply online via the University of Minnesota Employment System:
https://humanresources.umn.edu/jobs , Job ID 321387.

Please visit the following links to learn more about the Department of Bioproducts and Biosystems Engineering, www.bbe.umn.edu and the College of Food, Agricultural and Natural Resource Sciences, www.cfans.umn.edu. Any offer of employment is contingent upon the successful completion of a background check.

The University of Minnesota provides equal access to and opportunity in its programs, facilities, and employment without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. As an institution committed to demonstrating excellence through diversity, the College of Food, Agricultural and Natural Resource Sciences and the University are committed to hiring a diverse faculty and staff, and strongly encourage candidates from historically underrepresented groups to apply. We welcome you to visit our college's Diversity and Inclusion web page at: http://www.cfans.umn.edu/diversity/