Full-time, Tenure-track Faculty Position in Data Analytics/Decision Science in Sustainable Biomaterials
Department of Sustainable Biomaterials, Virginia Tech, Blacksburg, Virginia

The Department of Sustainable Biomaterials at Virginia Tech (sbio.vt.edu) is seeking applicants for a faculty position in data analytics/decision science in sustainable biomaterials. This position is open rank and can be filled at the assistant, associate, or professor level. This is a full-time, tenure-track position available August 2019.

Position description

We are seeking a colleague with formal quantitative training and a demonstrated interest in applying quantitative tools, techniques, and skills in manufacturing or business environments, as well as in linking our academic interests to real-world, private sector businesses in the following areas: data mining, statistical process control, analytical modelling, business intelligence, big data analytics, and statistical analysis, as they relate to the biomaterials and packaging industries.

The successful candidate will have demonstrated excellent teaching, including the ability to develop and teach several courses (undergraduate and/or graduate) in these areas. Demonstrated interest in aligning overall programming to real-world manufacturing/business environments is essential. We are seeking an individual who has the ability to better link our programming to the private sector, establishing strong partnerships that would result in research funding, graduate student research projects, undergraduate research projects, internships, and permanent employment for our students. Supervision of graduate students is expected. The appointment is approximately 50 percent research and 50 percent teaching. Service to the department, college, university, and professional societies and organizations is expected.

The ability to develop a strong, externally funded research program and publication record is essential for success at Virginia Tech. Applicants must provide evidence of the skills necessary to secure external funding and evidence of a research track focused on data analytics/decision science as applied to manufacturing/business intelligence. The specific research specialty is open, but preference will be given to candidates who can strengthen research collaborations at Virginia Tech through investigations and projects involving data-driven modeling and/or analysis of large/complex data sets.

Required qualifications

- Ph.D. in wood science, sustainable biomaterials, packaging, decision science, industrial engineering, supply chain management, information technology, operations research, business information technology, statistics, or a closely related field.
- Experience in data mining, statistical process control, analytical modeling, business intelligence, or big data analytics.
- Demonstrated ability in the following areas:
    - Developing and maintaining a nationally recognized research program.
    - Publishing high-quality refereed publications.
    - Teaching a minimum of two undergraduate courses and one graduate course.
    - Effectively working with students, faculty, staff, and industry partners from diverse ethnic, cultural, and socio-economic backgrounds.
    - Mentoring graduate and undergraduate students.

- Applicants seeking appointment at rank of associate or assistant professor must have a demonstrated record of scholarly accomplishment that meets department, college, and university expectations for appointment at that rank. For appointment at rank of professor, considerable demonstrated scholarly activity worthy of North American and/or international recognition is required.

Preferred qualifications

- Teaching, research, and/or industry experience in the areas of marketing, packaging, green building systems, green engineering, business intelligence, and/or manufacturing applied to renewable-based industries.
- Demonstrated potential or proven record of collaboration, scholarship, research funding, and teaching effectiveness, and shared values of inclusion and service.

Application process

Candidates must apply online at listings.jobs.vt.edu/.

Application materials should include the following information:
- Curriculum vitae
- Cover letter expressing a statement of interest in the position
- Separate statements of research and teaching interests
- Names, titles, and complete contact information for three references

An official transcript for highest degree earned is required prior to the start of employment for the selected candidate.

Questions and inquiries may be addressed to Dr. Henry Quesada (quesada@vt.edu), chair of the search committee.

Application review will begin January 21, 2019, and continue until the position is filled. The start date for the position is no later than August 10, 2019.

Equal opportunity/affirmative action statement

Virginia Tech does not discriminate against employees, students, or applicants on the basis of age, color, disability, sex (including pregnancy), gender, gender identity, gender expression, genetic information, national origin, political affiliation, race, religion, sexual orientation, or veteran status, or otherwise discriminate against employees or applicants who inquire about, discuss, or disclose their compensation or the compensation of other employees or applicants, or on any other basis protected by law. For inquiries regarding non-discrimination policies, contact the Office for Equity and Accessibility at 540-231-2010 or Virginia Tech, North End Center, Suite 2300 (0318), 300 Turner St. NW, Blacksburg, VA 24061.

About Virginia Tech

Virginia Tech, founded in 1872 as a land-grant institution, is currently ranked as a Top 25 Public University by U.S. News & World Report and a Top 25 Public Research University by the National Science Foundation. Through a combination of its three missions of learning, discovery, and engagement, Virginia Tech continually strives to accomplish the charge of its motto: *Ut Prosim* (That I May Serve). As the commonwealth's most comprehensive university and its leading research institution, Virginia Tech serves a diverse population of 30,000+ students and 8,000+ faculty and staff from over 100 countries, and is engaged in research around the world.

Virginia Tech's main campus is located in the New River Valley, nestled in the heart of the beautiful Appalachian Mountains. Blacksburg offers the charm of a small town combined with the modern conveniences of a metropolitan area, and is a short driving distance from abundant public land, including the Monongahela, George Washington, and Jefferson National Forests and Shenandoah National Park.

Virginia Tech is dedicated to InclusiveVT— serving in the spirit of community, diversity, and excellence. We seek candidates who adopt and practice the Principles of Community, which are fundamental to our ongoing efforts to increase access and inclusion, and to create a community that nurtures learning and growth for all of its members. Virginia Tech actively seeks a broad spectrum of candidates to join our community in preparing leaders for the world.

About the College of Natural Resources and Environment

The College of Natural Resources and Environment, one of nine college units at Virginia Tech, was established in 1992. The college is composed of four academic departments (Fish and Wildlife Conservation, Forest Resources and Environmental Conservation, Geography, and Sustainable Biomaterials), serving more than 1,000 undergraduate students. The college has about 180 faculty and staff, including 75 tenure track faculty. More than 300 graduate students are enrolled in our programs, which include both an online master of natural resources degree and a cohort-based executive degree in the National Capital Region. The college's Advising Center, with dedicated professional academic advisors assigned to each department, works in partnership with faculty mentors focused on student success and the college's director of employer relations.

Faculty research awards total $15-20 million annually in the college's research-intensive, student-centered environment. Two of our departments are among the top 10 academic departments at Virginia Tech in average research dollars awarded annually, and the college ranks second among colleges at Virginia Tech in research expenditures per FTE. The college hosts several NSF centers as well as numerous other research and outreach centers engaged with state and federal agencies and the private sector. The college manages a nearly 1,300-acre forest located close to campus that is utilized on a weekly basis for student learning and research, as well as a forestry research site in Critz, Virginia. College Factual has ranked the college as No. 1 for the study of natural resources and conservation for four consecutive years. The forestry degree program is ranked No. 1 by College Factual for the second consecutive year, and the packaging systems and design degree program is ranked No. 7 among the top 20 programs nationally by Value Colleges.

About the Department of Sustainable Biomaterials

The Department of Sustainable Biomaterials was established in 1979 and is one of the largest programs in North America. It currently has nearly 200 undergraduate students, and its 18 faculty average nearly

$2 million research dollars annually. In 2012, the department adopted its current name to better reflect the faculty's expertise, and, in 2014, established two separate degree programs. The sustainable biomaterials degree (which reflects our past wood science program) continues to focus on teaching the fundamentals of the processing, manufacturing, drying, and marketing of wood and other biomaterials. The packaging systems and design degree emphasizes the importance of the sustainable use of packaging materials (packaging and pallets remain the largest use of wood fiber in the country), how packaging can enhance product performance and markets, and how new uses of wood fiber can be used to replace petroleum based plastics. The department houses two major industrial-affiliated research centers, the Wood Based Composite Center and the Center for Packaging and Unit Load Design. The department has one of the largest wood products extension programs in the country, and extension specialists cover all aspects of wood manufacturing, drying, secondary processing, business management, and marketing.