

## University of Maine Job Description

**TITLE:** Associate Professor of Sustainable Materials and Technology  
**DEPARTMENT:** Advanced Structures & Composites Center & School of Forest Resources  
**DATE:** March 21, 2024  
**LOCATION:** Orono, Maine

**Apply here: Link to job posting:** <https://umaine.hiretouch.com/job-details?jobid=83942>

### Statement of the Job:

The School of Forest Resources, in collaboration with the Advanced Structures and Composites Center (ASCC), at the University of Maine (UMaine) invites applications for a tenure track faculty position in Sustainable Materials and Technology. This position is a joint appointment split 20% in the School of Forest Resources and 80% in the prestigious ASCC (<https://composites.umaine.edu/>) to support the Green Engineering and Materials research initiative. This position is 20% teaching and 80% research.

This position will provide research, teaching, and service in sustainable materials and technology with a focus on wood- and cellulose-based composite materials, thermoplastic composite processing, or adhesion and wood-based materials characterization.

**Teaching:** A 20% teaching appointment involves teaching 3 to 4 credits per academic year, which may include: (1) undergraduate courses (Biocomposite materials, coordinate SMT internship and capstone experiences, Mill Tour), (2) develop a graduate course in the general area of Wood-based Composites and Adhesion, (3) as appropriate, participate in cooperative efforts with other faculty in support of undergraduate practical field, (4) serve as an advisor to both undergraduate and graduate students, and (5) other teaching responsibilities as assigned consistent with the teaching appointment.

**Research:** The successful candidate will be expected to develop a nationally and internationally recognized, externally funded research program in one or more of the following topic areas: wood- and cellulose-based composite materials, thermoplastic composite processing, adhesion, and wood-based materials characterization. Results from this research are expected to be published in leading peer-reviewed journals and other outlets as well as transferred to industry/field applications as appropriate. It is expected that the candidate will building a strong graduate program around their area(s) of expertise.

**Service:** The successful candidate will be expected to pursue public service activities, such as providing assistance to representatives from the forest products industry and government agency personnel and serving on campus committees and professional organizations.

## Introduction to the Advanced Structures and Composites Center

The Advanced Structures and Composites Center (ASCC) is a world-leading, interdisciplinary center for research, education, and economic development encompassing material sciences, advanced manufacturing and engineering of composites and structures. Housed in a 100,000ft<sup>2</sup> ISO-17025 accredited facility, the ASCC has been recognized nationally and internationally for cutting edge research programs leading and impacting new industries including offshore wind and marine energy, civil infrastructure, bio-based large-scale 3D printing, soldier protection systems and innovative defense-related applications. The ASCC is the largest university-based research Center in Maine, and one of the fastest growing research laboratories in the world, with research revenue growth of 5X in the past 5 years. Facility has expanded to include 13 integrated laboratories with more than 260 full and part time personnel, including faculty, staff, and students.

Since its founding in 1996 with support from the National Science Foundation, the Center has financially sponsored more than 2,700 students, received 411 patents, received over 26,000 visitors, created 14 spinoff companies through licensing of patents or trade secrets, and received more than 50 national and global awards for research excellence.



## About the University:

The University of Maine is a community of more than 11,900 undergraduate and graduate students, and 2,500 employees located on the Orono campus, the regional campus in Machias, and throughout the state. UMaine is a land, sea, and space grant university, and maintains a leadership role as the University of Maine System's flagship institution. UMaine is the state's public research university and a Carnegie R1 top-tier research institution, dedicated to providing excellent teaching, research and service for Maine, the nation, and the world. More information about UMaine is at [umaine.edu](http://umaine.edu).

The University of Maine offers a [wide range of benefits](#) for employees including, but not limited to, tuition benefits (employee and dependent), comprehensive insurance coverage including medical, dental, vision, life insurance, and short and long term disability as well as retirement plan options. As a former NSF ADVANCE institution, the University of Maine is committed to diversity in our workforce and to dual-career couples.

UMaine is located in beautiful Central Maine. Many employees report that a primary reason for choosing to come to UMaine is quality of life. Numerous cultural activities, excellent public schools, safe neighborhoods, high quality medical care, little traffic, and a reasonable cost of living make the greater Bangor area a wonderful place to live. Learn more about what the Bangor region has to offer [here](#).

## Qualifications:

### Required:

- A Ph.D. with at least one degree in Wood Science and Technology, Forest Biomaterials, Materials Science, or closely allied field by the time of appointment.
- Expertise and experience should include teaching and research that emphasize wood-based composite materials, thermoplastic composite processing, adhesion, and wood- and cellulose-based materials characterization.

- A demonstrated commitment to excellence in undergraduate and graduate education, mentoring graduate students and postdocs and advising undergraduate students.
- A proven ability to obtain competitive extramural research funding from a range of funding sources.
- An excellent record of publications in leading peer-reviewed journals commensurate with the associate professor ranking.
- A proven record of interacting with sustainable materials and composites industry.

**Preferred:**

- Knowledge of extrusion-based additive manufacturing.
- Additional experience in wood-based composite materials, engineering, or a closely related field.

**Other Information:**

Materials must be submitted via "Apply For Position" below. You will need to create a profile and application, upload:

- 1.) a cover letter which describes your experience, interests, and suitability for the position
- 2.) a resume/curriculum vitae
- 3.) contact information for three professional references

You will also need to submit the affirmative action survey, the self-identification of disability form, and the self-identification of veteran status forms. Incomplete application materials cannot be considered. Materials received after the initial review date will be reviewed at the discretion of the University.

**Search Timeline is as follows:**

To receive full consideration, applications must be received by: April 19, 2024  
Tentative start date: September 3, 2024

For questions about the search, please contact: Mehdi Tajvidi, PhD, Associate Professor of Renewable Nanomaterials, Phone: (207) 581-2852, Email: [mehdi.tajvidi@maine.edu](mailto:mehdi.tajvidi@maine.edu)  
Web: <http://forest.umaine.edu/faculty-staff/directory/mehdi-tajvidi/>

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The successful applicant is subject to appropriate background screening.

**In complying with the letter and spirit of applicable laws and pursuing its own goals of diversity, the University of Maine System does not discriminate on the grounds of race, color, religion, sex, sexual orientation, transgender status, gender, gender identity or expression, ethnicity, national origin, citizenship status, familial status, ancestry, age, disability physical or mental, genetic information, or veterans or military status in employment, education, and all other programs and activities. The University provides reasonable accommodations to qualified individuals with disabilities upon request.**

**The following person has been designated to handle inquiries regarding non-discrimination policies:**

**Director of Equal Opportunity, 5713 Chadbourne Hall, Room 412, University of Maine, Orono, ME 04469-5713, 207.581.1226, TTY 711 (Maine Relay System).**

**Length:**

Academic Year (Sept-May)

**Required Documents:**

Cover Letter, References, Resume/CV