

## Position Title:

Assistant Professor of Electrical and Computer Engineering (Micro and Nanoelectronic Circuits) (id:73107) Campus: Orono Department: Electrical & Computer Engineering " OECE  
Bargaining Unit: AFUM Salary Band/Wage Band: N/A Location: Orono ME Statement of the Job:

Applications are invited for a tenure-track Assistant Professor position at the University of Maine in the Department of Electrical and Computer Engineering (ECE, [ece.umaine.edu](http://ece.umaine.edu)) with a joint appointment in the Frontier Institute for Research in Sensor Technologies (FIRST, [umaine.edu/first](http://umaine.edu/first)). Applicants should have expertise in the design, fabrication, and testing of microelectronic and nanoelectronic devices and circuits. Candidates are expected to engage in collaborative research that complements ongoing funded R&D on high-temperature harsh-environment sensor technology. Successful candidate will be able to collaborate with other Advanced Materials for Smart Solutions cluster faculty hires. Application materials from candidates should demonstrate potential for excellence in research and scholarship, teaching, and technical communication. Candidates are expected to build creative research that leads to extramural funding, scholarly publications, and training of MS and PhD students. Candidates must be committed to teaching excellence at undergraduate and graduate levels and be able to teach courses such as circuits and electronics at the undergraduate level, and advanced circuit design courses such as low power integrated circuits and RF/microwave ICs at the graduate level. The responsibilities of this position are 50% teaching and 50% research. This faculty position requires active engagement in service to the profession, UMaine, and to the State.

About ECE Department and FIRST: With its excellent faculty complement, ECE offers ABET accredited BS degrees in Electrical Engineering and Computer Engineering. ECE also offers 4+1, 4+2, MS, and PhD programs. FIRST conducts interdisciplinary research in advanced materials, thin films, and sensor-related engineering and science to provide solutions for societal advancement and economic wellbeing. Faculty affiliates of FIRST benefit from the synergy brought about by its diverse areas of academic expertise including physics, chemistry, microbiology, electrical and computer engineering, mechanical engineering, chemical engineering, and bioengineering. FIRST, along with CORE (<https://umaine.edu/core/>) has an impressive array of state-of-the-art instrumentation to synthesize and investigate material properties at the atomic scale, as well as to fabricate and test micro and nanoelectronic devices and circuits. Recently, FIRST researchers received \$2,340,000 DOE EPSCoR grant award for R&D on harsh environment materials and wireless sensor techniques. This new faculty cluster hire will play an active role in this DOE project and will be able to participate in much larger grant proposals enabled by this project.

As a former NSF ADVANCE institution, UMaine is committed to diversity in our workforce and to dual-career couples. It is our intention to create an environment that is inclusive of all individuals. Therefore, UMaine aspires to become a more diverse community in order to extend its enriching benefits to all participants. An essential feature of our community is an environment that supports exploration, learning, and work free from bias and harassment, thereby improving the growth and development of each member of the community.

## 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 (<http://www.maine.edu/about-the-system/system-office/human-resources/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 (<https://www.visitbangormaine.com/about-the-region/the-region-at-a-glance/>) .

Employees in the University of Maine System are required to comply with UMS COVID protocols which currently include, but are not limited to, being vaccinated, obtaining a qualified vaccination exemption, and/or participating in regular COVID testing. Further information can be found here (<https://www.maine.edu/together/>) .

#### Qualifications:

##### Required:

- + PhD in Electrical Engineering and/or Computer Engineering or in a closely related area
- + Excellent educational background including research/scholarship

##### Preferred:

- + Expertise in microelectronic and nanoelectronic circuit design, fabrication, and testing
- + Expertise in RF/microwave electronics, circuits, and systems
- + A record of collaborative research in interdisciplinary settings
- + Knowledge/understanding of cleanroom processes, materials, and fabrication of integrated circuits
- + Demonstrated experience or willingness to mentor minority and women students

#### Other Information:

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

- 1) Cover letter describing your experience, interests, and suitability for the position
- 2) Up to date Curriculum Vitae
- 3) Statement of research interests applied to both ECE and FIRST and teaching interests applied to ECE (maximum of 5 pages)
- 4) PDF copies of candidate’s three most significant scholarly publications
- 5) Contact information for five 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: Initial review of applications to begin: March 2, 2022 Screening

interviews to begin no earlier than: March 21, 2022 On-site interviews to begin no earlier than:  
April 4, 2022 Tentative start date: August 29, 2022

For questions about the search, please contact Search Committee Chair Dr. Mauricio Pereira da Cunha; mdacunha@maine.edu; (207) 581-2384.

Appropriate background checks are required.

The University of Maine is an EEO/AA employer, and does not discriminate on the grounds of race, color, religion, sex, sexual orientation, transgender status, gender expression, national origin, citizenship status, age, disability, genetic information or veteran's status in employment, education, and all other programs and activities. The following person has been designated to handle inquiries regarding non-discrimination policies: Amie Parker, Director of Equal Opportunity, 101 North Stevens Hall, University of Maine, Orono, ME 04469-5754, 207.581.1226, TTY 71