

Aerospace Research Center Director, Associate for Full Tenure Track Professor
College of Engineering

The College of Engineering (<https://engineering.osu.edu>) and the Department of Mechanical and Aerospace Engineering (<https://mae.osu.edu>) at The Ohio State University invites applications for the position of Director to provide leadership and vision for the Aerospace Research Center (ARC).

University Overview: [The Ohio State University](https://www.osu.edu) prides itself on being model 21st-century public, land grant, research, urban, community engaged institution. Ohio State is a top-20 public university, enrolling over 60,000 students, and its Ohio State Wexner Medical Center is one of America's leading academic health centers and recently ranked No. 4 on Forbes' list of best U.S. employers for diversity. The Ohio State University is in Columbus, Ohio. As the nation's 14th largest city, Columbus invites and embraces cultural and economic diversity. Read more at (experiencecolumbus.com).

College Overview: The [College of Engineering](https://www.collegeofengineering.osu.edu) offers 14 undergraduate and 13 graduate programs in 12 departments or centers, as well as, three undergraduate and four graduate degrees in the Knowlton School of Architecture, to approximately 10,000 students. The college has recently expanded its degree offerings with a BS in Engineering Technology available on the regional campuses of the university. The college is one of the largest in the field with 405 faculty. The college has 14 National Academy of Engineering members and numerous members of societies and award recipients. In fiscal year 2020, the college had nearly \$138.5 million in externally sponsored research expenditures. Industry R&D expenditures for the College of Engineering in fiscal year 2020 totaled nearly \$44 million.

Columbus Overview: As the nation's 14th largest city, Columbus invites and embraces cultural and economic diversity. We are home to Fortune 500 companies, world-class research institutes, top-ranked hospitals, and the state's capitol. The city was named the 2015 "Intelligent Community of the Year" by the Intelligent Community Forum, called a "Midwestern style capital" by the New York Times and one of the top ten "Best Places to Live" by Money Magazine. Columbus is home to multiple dynamic arts districts. Read more at ([Experience Columbus](http://experiencecolumbus.com)).

Department Overview: The Department of Mechanical and Aerospace Engineering is one of the largest departments in the College of Engineering at The Ohio State University. We are the home to nearly 80 faculty and over 35 dedicated staff members. Approximately 1900 undergraduates are pursuing a degree in either Mechanical or Aerospace Engineering through rigorous programs that feature hands-on, project-based learning. Nearly 300 graduate students are seeking a degree in either Mechanical, Aerospace, or Nuclear Engineering. Our innovative and creative faculty adhere to the philosophy that true innovation depends upon the cooperation of academia, industry, and government working together to advance the goals of science and technology. Our students and faculty regularly collaborate with colleagues in other departments in the College of Engineering and with multiple other colleges across campus. Strong research relationships exist with the Air Force Research Laboratory, NASA Glenn Research Center, GE Aviation, Honda of America, and numerous other industrial partners. Department faculty have over \$26 million in sponsored research expenditures in areas such as advanced transportation systems (automotive and aerospace), energy and environmental quality, materials and manufacturing, micro- and nanotechnology, nuclear energy, and bioengineering while providing leadership for the Center for Automotive Research, The NSF IUCRC Smart Vehicle Concepts Center, the Aerospace Research Center, the Simulation Innovation and Modeling Center, and the Nuclear Reactor Laboratory.

The Aerospace Research Center (<https://arc.osu.edu>), located strategically adjacent to The Ohio State University Airport, the fifth busiest airport in the state of Ohio, leads interdisciplinary research and fosters outstanding graduate and undergraduate student education. It connects core strengths across the College of Engineering and the University, advancing knowledge and technology to address current and future air transportation challenges. ARC possesses some of the largest experimental facilities in an academic institution in the country, including several subsonic, transonic, supersonic, and hypersonic tunnels, large-scale turbine aerodynamic and heat transfer facilities as well as compressor and fan aeromechanics laboratories. In addition, ARC is located within a 120 mile radius of three major national and international aerospace entities: NASA Glenn Research Center in Cleveland, Air Force Research Laboratory in Dayton, and GE Aviation in Cincinnati. Therefore, ARC serves as a unique resource for industry, academia, government labs and

other organizations to collaborate on complex fundamental and applied research challenges. Over 20 core and associated faculty perform advanced experimental, computational and theoretical research in power and propulsion, aerodynamics, materials science, controls, manufacturing, law and medicine covering the areas of unmanned aircraft systems, aerodynamic flow control and gas turbine engines, among others. Faculty are supported by a robust team of researchers and technical support staff, with over 45 graduate students and 10 undergraduates engaged in research. Funding sources are evenly spread across the federal government, industry and the state of Ohio, with annual expenditures of \$7.7M in fiscal year 2020. Our research findings also directly inform policymaking at the federal level, helping ensure safe and sustainable technology growth for the betterment of society.

Position Overview:

As a faculty member, this position will report to the Chair of the Department of Mechanical and Aerospace Engineering and, as the ARC Director, will report to the Associate Dean for Research in the College of Engineering. The ARC Director provides leadership to the research activities of the center. In addition to maintaining a robust and highly visible research program, the successful candidate will develop and implement a compelling vision for the Center in embracing and emerging challenges and opportunities in multidisciplinary fields. Responsibilities include anticipating and influencing future trends in aerospace research and advocating for the Center at the College of Engineering and OSU as well as to external stakeholders. Duties also include leveraging expertise areas within and outside the Center and the College to lead and advise composite multi-disciplinary teams, overseeing compliance with research and human resource policies and ensuring quality control. As an individual faculty member, the individual is also expected to advise graduate students, publish, and occasionally teach classes in their area of expertise.

Required Qualifications

Applicants are required to hold doctoral degree with a major in Aerospace Engineering or Mechanical Engineering, or in a closely related field.

Desired Qualifications

- Strong commitment to cultivating an equitable, diverse, and inclusive environment in all areas of scholarship, instruction, and outreach
- Demonstrated ability to develop and grow programs with competitive peer-reviewed research funding in aerodynamics or propulsion related fields
- Mentoring experience
- Commitment to cultivating an equitable, diverse, and inclusive environment in all aspects, including in faculty and staff development, hiring, and student recruitment
- Commitment to interdisciplinary education and collaborative research including multi-PI and multi-organization activities
- Commitment to working with the college, other departments and campus administrators and leaders to foster a thriving education and research culture

How to Apply:

Interested applicants should submit an application in Academic Jobs Online:

<https://academicjobsonline.org/ajo/jobs/19908>. Please include a cover letter, curriculum vita, diversity statement (*describe experiences, current interests or activities, and/or future goals that promote a climate that values diversity and inclusion in one or more of the areas of scholarship, instruction and outreach*), statements of teaching and research interests, and names and contact information of five references.

The Ohio State University is committed to establishing a culturally and intellectually diverse environment, encouraging all members of our learning community to reach their full potential. We are responsive to dual-career families and strongly promote work-life balance to support our community members through a suite of institutionalized policies. We are an NSF Advance Institution, a member of the Ohio/Western Pennsylvania/West Virginia Higher Education Recruitment Consortium (HERC) and have an excellent partner in The Ohio State University Wexner Medical Center.

The Ohio State University is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to age, ancestry, color, disability, ethnicity, gender identity or expression, genetic



THE OHIO STATE UNIVERSITY

COLLEGE OF ENGINEERING

Posting Profile

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information, HIV/AIDS status, military status, national origin, race, religion, sex, gender, sexual orientation, pregnancy, protected veteran status, or any other bases under the law.

Application deadline:

Review of applications will begin on October 18, 2021 and continue until the position is filled