

## Assistant Professor (Tenure-stream): Packaging Distribution/Dynamics

**Position**: The School of Packaging (www.packaging.msu.edu) in the College of Agriculture and Natural Resources at Michigan State University (MSU) is seeking qualified applicants for an Assistant Professor position. This is a tenure-stream position with a research/teaching/service (45%/45%/10%) assignment and can begin as early as August 2019. The successful candidate will be expected to develop an externally funded research program with a focus on ensuring package integrity, product quality and waste reduction during distribution. Potential topics of interest include: compression, shock, fragility, vibration, environmental factors (altitude, temperature, static electricity) and performance testing of packaging systems.

Packaging is an interdisciplinary field integrating science, engineering, technology and value chain management to protect and identify products for distribution, storage, sale, and use. It encompasses the process of design, evaluation, and production of packages. Packaging is a system integral to the value chain that impacts product quality, user satisfaction, distribution efficiencies, and safety.

As the premier Land Grant University, MSU has strong interrelated programs across the spectrum of food, health, and sustainability and is committed to linking food, environment, and human health. The School of Packaging (SoP), founded in 1952, is the leading institution in packaging education and research. As the only U.S. university offering a Ph.D. program in packaging, the School of Packaging at MSU attracts students from a variety of disciplines around the world. Our community of scholars is poised for significant growth and a commitment to improving practice through the land-grant mission of Michigan State University. We are seeking a colleague who can contribute, through their research, teaching, and service, to the diversity and excellence of the academic community and who will build collaborative ties with other departments across the University.

Responsibilities: The individual will be expected to develop a nationally and internationally recognized research program in packaging distribution and dynamics. The holistic value of a packaging system involves trade-offs between a series of competing values including the cost and efficiency of distribution and information/inventory management. Beyond physical protection during distribution and resource optimization, research could include distribution of packaged goods with drones, distribution in outer space, disaster relief situations, military distribution, and use of big data as related to distribution. Research should employ basic and applied sciences while addressing the issues and opportunities inherent in the changing packaging distribution field. MSU encourages interdisciplinary collaboration. Potential cross-university collaboration represents a unique research opportunity that is not available elsewhere, with other renowned programs such as Supply Chain Management, the Midland Research Institute for Value Chain Creation, and the College of Engineering. Research support facilities available include the Institute for Cyber-Enabled Research (iCER), home to MSU's High Performance Computing Center (HPCC), the Center for Railway Research and Education, the Composite Materials and Structures Center among others, in addition to available facilities within the School of Packaging.

The successful candidate will provide leadership in research on interactions between packaged products and the physical environment by developing an innovative research program, securing competitive external grant funding, publishing in high quality peer-reviewed journals, mentoring graduate and undergraduate students, providing leadership and service in professional and scientific associations, and establishing strong ties with the private sector. The candidate will also be expected to demonstrate interest and promise of excellence in teaching. The initial teaching assignment will be

MSU is an affirmative-equal opportunity employer. MSU is committed to achieving excellence through a diverse workforce and inclusive culture that encourages all the people to reach their full potential. The University actively encourages applicants and/or nominations of women, person of color, veterans and person with disabilities.

two courses per year at the undergraduate and/or graduate level. This position will play a key role in the new Value Chain concentration in the School of Packaging undergraduate curriculum. Students who graduate from this track will be able to direct the packaging function in various types of distribution and supply chain jobs. They will be able to understand the trade-offs involved in distribution systems. This position is a key part of an initiative aimed at improving the efficiency of packaging distribution systems.

**Qualifications**: Candidates must have the following qualifications: a) a doctoral degree in Packaging, Mechanical, Civil or Material Science Engineering, or a closely related field; b) a record that indicates the potential for success in a research intensive environment.

The strongest candidates should preferably have: a) experience with applying principles of engineering to packaging and/or the distribution environment, b) industry experience and/or a demonstrated understanding of the current and emerging needs of industry, c) a record of competitive grant funding, and d) experience with system modeling and novel distribution systems.

The College of Agriculture and Natural Resources (CANR) at Michigan State University is committed to achieving excellence by creating and sustaining an accessible and inclusive culture that values cultural and academic diversity. We are an equal opportunity / affirmative action employer. The CANR is particularly interested in candidates of all backgrounds who are committed to the principle that academic excellence is achieved through open access and proactive inclusion.

MSU enjoys a park-like campus with outlying research facilities and natural areas. The campus is located in the city of East Lansing, adjacent to the capital city of Lansing. The Lansing metropolitan area has a diverse population of approximately 450,000. Local communities have excellent school systems and place a high value on education. The University is proactive about its obligations under the Americans with Disabilities Act (ADA), and provides individual accessibility plans to students and employees with disabilities. Michigan State University is also proactive in exploring opportunities for employment for dual career families, both inside and outside the University, and respects all family forms. Information about MSU's dual career support can be found at <a href="http://miwin.msu.edu/">http://miwin.msu.edu/</a>. Information about WorkLife at MSU can be found at <a href="http://worklife.msu.edu/">http://worklife.msu.edu/</a>.

## **Application Procedure**: Qualified applicants should submit:

- a) A letter of application.
- b) A current curriculum vitae.
- c) A written statement (limited to 2 pages) that outlines your research vision as it relates to the field of packaging distribution/dynamics. Include a discussion of both short (5 years) and long-term (15 years or more) research directions. Include your rationale (why) and strategies (how).
- d) A statement of Teaching Philosophy as it relates to packaging distribution (limited to 1 page).
- e) A summary describing how a commitment to diversity and inclusion informs past and future professional contributions in creating an inclusive classroom and/or research endeavors, any experience in mentoring diverse students, and an explanation of how you will contribute to our goals of inclusive excellence (limited to 1 page).
- f) The names and email addresses of at least three references online at <a href="http://careers.msu.edu/">http://careers.msu.edu/</a> (posting #545276)

Review of applications will begin on February 4, 2019 and will continue until the position is filled. Inquiries about the position should be addressed to Dr. Rafael Auras, Search Committee Chair, School of Packaging, Michigan State University, East Lansing MI 48824-1325. Telephone 517-432-3254, E-mail: <a href="mailto:aurasraf@msu.edu">aurasraf@msu.edu</a>