

**DIRECTOR | Center for Environmentally Beneficial Catalysis**

The University of Kansas seeks a new director for its Center for Environmentally Beneficial Catalysis.



The successful candidate will provide visionary, inclusive leadership that will guide the faculty, staff and students of this designated research center to its next phase of achievement.

The University of Kansas seeks outstanding applicants for the position of director of its Center for Environmentally Beneficial Catalysis. The director sets the strategic direction for the CEBC with regard to research, education and outreach and is eligible for joint appointment as a tenured faculty member in chemical & petroleum engineering. The director has unique opportunities to focus, develop and grow their own research program synergistically within the CEBC and collaboratively with a large and diverse KU research community and industry partners.

**ABOUT THE CEBC**

The Center for Environmentally Beneficial Catalysis strives to invent cleaner, safer, energy-efficient technologies that protect the planet and human health while preparing the next generation of scientists and engineers for a rapidly changing and globally competitive marketplace. It accomplishes this urgent mission by bringing together a diverse team of chemists, engineers, data scientists and economists focused on achieving economically viable and sustainable breakthroughs. Understanding that even the most elegant discoveries in the laboratory will not benefit



**67**

faculty and staff researchers, postdocs, graduate students + staff employed by KU's CEBC



**76 / 23 / 6**

Inventions / patents / licensed technologies produced by CEBC researchers



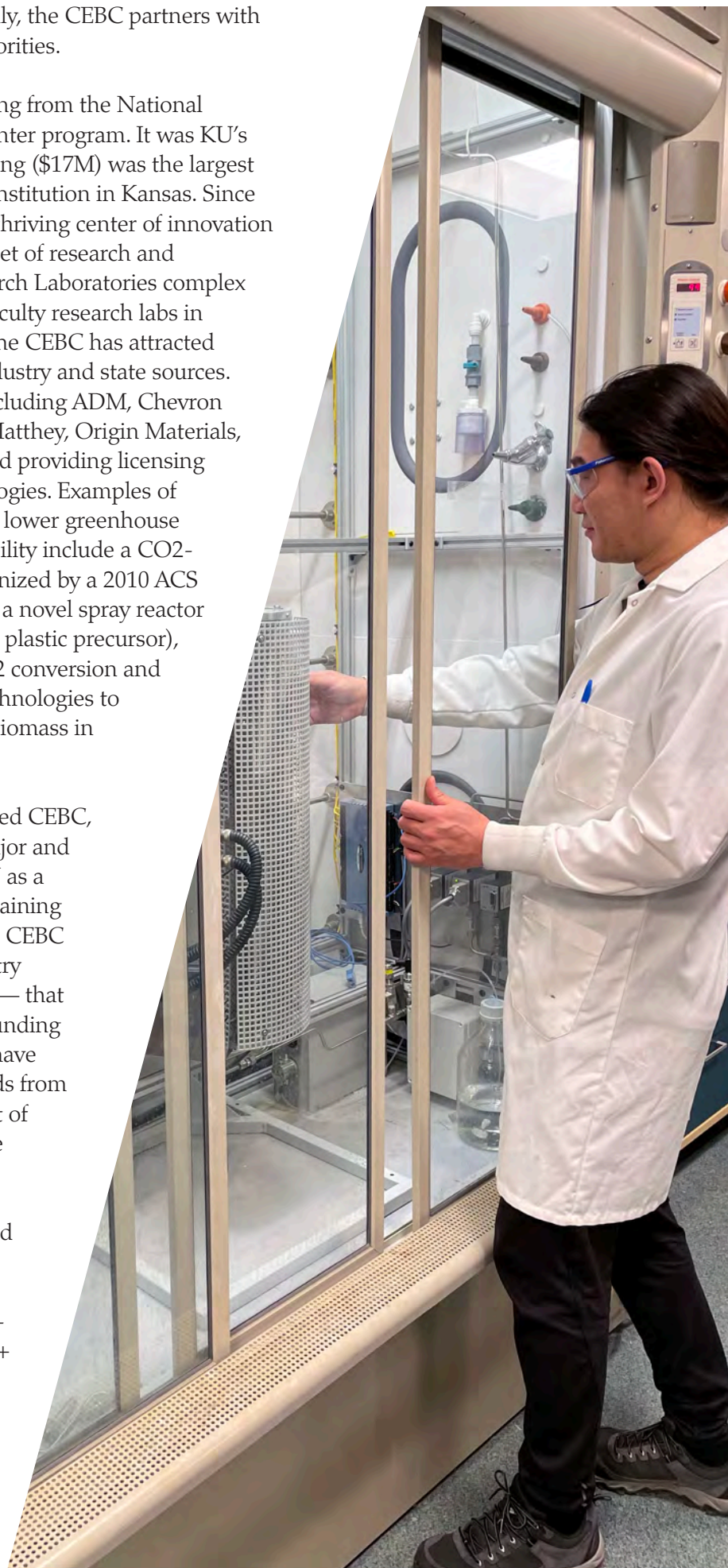
**21,700**

sq. ft. of research + collaboration space in Life Sciences Research Labs complex

society if they cannot be practiced commercially, the CEBC partners with companies and institutions to set research priorities.

The CEBC launched at KU in 2003 with funding from the National Science Foundation Engineering Research Center program. It was KU's first NSF-funded research center and its funding (\$17M) was the largest federal research award at that time to a state institution in Kansas. Since that initial grant, the center has grown into a thriving center of innovation that now occupies more than 16,000 square feet of research and collaboration space in the Life Sciences Research Laboratories complex in the west Lawrence, and is augmented by faculty research labs in LEEP2 and Gray-Little halls. Through 2022, the CEBC has attracted nearly \$74 million in funding from federal, industry and state sources. In partnership with member companies — including ADM, Chevron Phillips Chemical Company, Gevo, Johnson Matthey, Origin Materials, and W.R. Grace — the CEBC is developing and providing licensing opportunities for sustainable catalytic technologies. Examples of CEBC's technology concepts that significantly lower greenhouse gas emissions while preserving economic viability include a CO<sub>2</sub>-free ethylene oxide technology that was recognized by a 2010 ACS George W. Hancock Green Chemistry Award, a novel spray reactor to produce polymer-grade terephthalic acid (a plastic precursor), new electrocatalytic reaction concepts for CO<sub>2</sub> conversion and green hydrogen production, and oxidation technologies to produce renewable platform chemicals from biomass in biorefineries.

Following the initial NSF award that established CEBC, the Center has received a steady stream of major and minor grants, as well as core support from KU as a designated research center. In addition to sustaining faculty collaborations, this support has helped CEBC maintain key programs — especially its industry consortium and education/outreach program — that are often difficult to support after NSF-ERC funding ends. Nine CEBC-affiliated faculty members have received early career/young investigator awards from the National Science Foundation, Department of Energy and Department of Defense, and three faculty members are fellows of the National Academy of Inventors. Since its inception, the Center has trained more than 400 students and postdoctoral researchers, and 38 Kansas high school teachers. As of 2022, CEBC researchers have produced more than 76 inventions, 23 issued patents, 6 licensed technologies and 620+ journal publications. CEBC infrastructure and expertise have resulted in the formation of two Lawrence-based startup companies and in attracting ADM to open a research center in Lawrence.





## ABOUT THE UNIVERSITY

Founded in 1865, the University of Kansas is an R1 public research university with more than 40 graduate programs ranked by U.S. News & World Report. KU enrolls 28,500 students and employs nearly 2,900 faculty members across five campuses (Lawrence, Kansas City, Overland Park, Wichita and Salina).

Including the CEBC, the Office of Research oversees 9 university research centers, two state surveys and more than a dozen core laboratories. Faculty and staff on all KU campuses generated \$368.6 million in externally funded research expenditures in FY 2023. Collectively, that activity fuels KU's mission to be an institution "making discoveries that change the world." It's also among the reasons KU retains membership in the prestigious Association of American Universities — one of just 38 U.S. public institutions among 71 that are transforming lives through education, research and innovation.

As a premier international research university, KU is committed to a culture of care focused on inclusion and belonging that nurtures the growth and development of all. KU holds steadfast in the belief that a variety of values, interests, experiences, and intellectual and cultural viewpoints enrich learning and our workplace. The CEBC actively seeks applications from members of groups underrepresented in higher education.



## POSITION RESPONSIBILITIES

### CEBC Director (50%)

1. Provides administrative and scientific leadership as well as oversight of the financial affairs, personnel and business practices of the CEBC.
2. Develops and articulates the research mission and goals of the CEBC by fostering positive working relationships and cooperative research activity among University faculty and researchers affiliated with the Center.
3. Provides effective intellectual leadership necessary to address challenging problems related to the development and deployment of catalysis and engineering solutions for the sustainable production and transformation of chemicals, energy and fuels.
4. Develops and maintains an active program of research and scholarship in an area related to the Center's research mission, is active in professional organization affairs, and is engaged in related regional, national and international activities.
5. Leads a community of multidisciplinary scholars and educators assembled within the CEBC to foster and nurture a vibrant learning, discovery, innovation and engagement program.

6. Fosters the intellectual growth and development of graduate students in the Center through cooperation with degree granting departments and enhanced support of graduate students.
7. Stimulates the expansion and diversification of externally sponsored research funding by fostering and catalyzing the development of ideas, people, and infrastructure necessary for success at the state and national levels.
8. Actively engages in strengthening the financial resources available to the CEBC through all available sources.
9. Effectively interacts with the energy and chemicals industries and with government agencies, as appropriate, to promote and develop support for the Center's mission.
10. Seeks excellence in the recruitment and retention of the highest quality academic and research support staff and students from diverse backgrounds.
11. Fosters and supports a culture of belonging where members feel included, safe, and that there is a high standard for ethical research practices, and compliance among all faculty, staff, affiliates, sponsored visitors, etc.
12. Prepares reports, mission statements, key performance indicators, and other documents as requested by the Vice Chancellor for Research.

### **Full Professor of Chemical & Petroleum Engineering (50%)**

The director also serves as a tenured, full professor in the Department of Chemical & Petroleum Engineering with a 50% appointment. As a tenured faculty member, the director will be expected to meet satisfactory standards of performance in all three areas of responsibility: teaching/advising (40%), research (40%), and service (20%).

**Teaching (40%):** Develops/teaches undergraduate and graduate courses. Participates in undergraduate and graduate student advising as appropriate, mentors graduate students in research, and serves as an advisor or participates on graduate student committees.

**Research (40%):** Establishes and directs a strong, independent research program in areas of expertise that overlap, support or expand the current research in the Center or department leading to external grant support and publication in recognized refereed journals and conference proceedings. Collaborates with internal and external faculty and professional staff across campuses.





**Service (20%):** Performs department, school, university and professional service normally expected of faculty commensurate with rank. Participates in local, national and international professional conferences and other activities appropriate to the discipline. Fosters a positive relationship with industry and the community. Performs other duties as assigned by the department chair.

A joint or courtesy faculty appointment in collaborating units may be available based upon the individual's education, research and credentials. Such appointments strengthen opportunities for collaboration and learning between organizations and research initiatives, providing a highly engaging and competitive learning environment for students, postdoctoral researchers, and other research staff and scientists.



### **REQUIRED QUALIFICATIONS**

Evaluation of the following requirements will be made through (1) description of work experience and educational experiences in CV and (2) record of accomplishments and productivity addressed in CV:

1. Earned doctorate degree in a related field, such as Chemical Engineering, Chemistry, or closely related discipline.
2. Eligibility for faculty appointment as a full professor with tenure.
3. National recognition and scientific leadership in sustainability issues in the chemical processing industry as demonstrated by a record of refereed

publications, professional service, and success in securing external sponsored project funding.

4. Demonstrated administrative experience, including financial management and development of personnel and programs.
5. Evidence of teaching experience and effectiveness.
6. Excellent communication skills as demonstrated through application materials and interview.
7. Experience working with multidisciplinary constituencies.
8. Record of inclusive leadership, commitment to the values of diversity, equity, accessibility and belonging, and demonstrated ability to bring different constituencies together.



### **PREFERRED QUALIFICATIONS**

1. A broad background in working with multiple agencies (government, academic, and/or industrial) in the areas of environmentally sustainable fuels, methods and related fields.
2. Demonstrated success in facilitating industry, university and government partnerships.
3. Demonstrated record of innovation and entrepreneurial engagement.
4. Demonstrated experience in industry consortium advancing interactions between industry and the Center.
5. Demonstrated engagement and dedication to undergraduate and graduate teaching.



## HOW TO APPLY

A complete online application will include the following PDF files:

1. Letter of interest detailing your vision for the Center
2. Curriculum vitae
3. Statement of research interests and plans (about 2 pages)
4. Statement of teaching interests (about 2 pages)
5. Contact information (including email addresses) for 3 individuals who can provide letters of recommendation.

**Review of application materials begins May 17, 2024 and continues as long as needed to identify a qualified pool of candidates.**

For complete information and to apply online, visit the link below.

[rockcha.lk/cebc-director](https://rockcha.lk/cebc-director) →





## LIVING IN LAWRENCE

Founded by abolitionists in 1854, Lawrence, Kansas, has carried that tradition of freedom and individuality through the generations. Today, Lawrence remains a crossroads of culture, celebrating the artists and innovators that populate its history and create an unmistakable identity.

The stunning University of Kansas campus is perched atop Mount Oread, overlooking the Kansas River and a vibrant, historic downtown. Lawrence boasts art galleries, museums, boutiques, performance halls, global cuisine, lakes, trails, Division I athletics and proximity to both Topeka (the seat of state government) and Kansas City (home to major corporations, industry partners and an international airport).

In recent years, Lawrence has been included on lists for:

- America's 50 best cities to live in
- Best Libraries in Kansas (Lawrence Public Library)
- Best College Towns in America
- Best Must-See Stadiums in America (Allen Fieldhouse)
- 10 of the 20 favorite Kansas-based restaurants

The cost of living in Lawrence is slightly lower than the national average, and Forbes ranks the city among the Best Small Places for Business and Careers.

[unmistakablylawrence.com](http://unmistakablylawrence.com) →



**100K+**

Lawrence population



**30+**

music venues



**54**

city parks



**500+**

miles of trails + paths



**Office of the Vice Chancellor**

785-864-7298

[ovcr@ku.edu](mailto:ovcr@ku.edu)

University of Kansas  
Office of Research  
Youngberg Hall  
2385 Irving Hill Road  
Lawrence, KS 66045

[research.ku.edu](https://research.ku.edu) →

[cebc.ku.edu](https://cebc.ku.edu) →

**KU** RESEARCH  
The University of Kansas