University of CINCINNATI | RESEARCH

Office of Research
Funding Opportunity Announcement (FOA)

Michelman Green, Clean and Sustainable Technology Research Innovation Program

$35,000 single investigator awards
$80,000 multi-investigator awards

Courtesy of the generous contributions of the Dr. John S. Michelman Fund for the Advancement of Sustainable Technology, the Office of Research is pleased to share the AY23-24 FOA for the *Michelman Green, Clean and Sustainable Technology Research Innovation* Program. This program supports applied R&D and use-inspired research with the potential to meaningfully contribute to improvements in **environmental health, environmental stewardship, and sustainability** by demonstrating **new and marketable scientific and technical (S&T) innovations** intended to address real-world problems in the Green-tech and Clean-tech fields.

This program will follow a one-stage, full proposal/application process. This program is open to UC faculty. Research teams may include additional researchers from beyond UC but funds cannot support personnel at any outside organizations or partners. Multi-disciplinary teams with expertise in chemistry, chemical engineering or materials science are strongly encouraged to consider this funding opportunity.

Grants: Single Investigator applicants may receive up to $35,000, and multi-investigator* teams may receive up to $80,000 for these projects. The project period will be for 24 months. Budgets will only be required from grantees and will be created in collaboration with the Office of Research. Final budget award amounts will be consistent with the scope of the proposed activities. These funds are intended to accelerate applied research and development activities that can be externally sponsored. The Office of Research is dedicating up to $200,000 for this offering.

KEY DATES
FOA released August 23, 2023
Proposal Deadline: January 25, 2024, 5:00 pm EST
Grantees Announced: Week of March 18, 2024 (anticipated)
Project Period: May 2024– April 2026

** Multi-investigator teams as defined here must consist of no fewer than two UC faculty with a preference for faculty from across different departments/colleges.*

Program Information
Dr. John Michelman's 57-year career at Michelman, Inc. was focused on developing products that improve the performance of many common materials; for example, making paper more water resistant but still biodegradable and recyclable. This particular example used chemistry as the enabler but there are hundreds of different and unexplored pathways to create sustainable technology. The purpose of the Dr. John S. Michelman Fund for the Advancement of Sustainable Technology is to uncover and exploit these pathways.

Consistent with UC's investments in research focused on solving problems that matter, this funding opportunity is aligned with UC's **Research2030** strategic plan for research and our **Next Lives Here** Urban Futures Pathway Biosciences & Bioeconomy Initiative. The goals of the *Michelman Green, Clean and Sustainable Technology Research Innovation* program are to 1) Support applied research with the potential to meaningfully contribute to improvements in environmental health, environmental stewardship and sustainability; 2) Demonstrate new and marketable scientific and technical innovations intended to address real-world problems; and 3) Create new entrepreneurial and partnership opportunities for students and faculty.

The expected outcomes for this program are to: 1) Advance high-potential applied research and creative innovations in areas relevant to green tech, clean tech and sustainability innovations; 2) Increase sponsored and partnered funding in use-inspired and applied research in these fields; and 3) Establish the University of Cincinnati as a recognized leader in the development of applied technologies addressing sustainability through S&T fields.

Grantees will be selected based on the quality, novelty, and creativity of their proposed applied research topic which demonstrates a clear potential to make tangible contributions that improve societal outcomes.

Eligibility

- Prior Michelman awardees – either single or multi-PIs – are ineligible for this program.
- For single-investigator submissions, the principal investigator ("the applicant") must be a tenured/tenure-track UC faculty member with at least an 80% FTE appointment, with UC being the primary appointment. For multi-investigator (multi-PI) teams, all principal investigators must be UC faculty members with at least an 80% FTE appointment, with UC being the primary appointment. For multi-PI teams, the contact project leader/principal investigator ("the applicant") must be a tenured/tenure-track faculty member. Research-track and other faculty titles are eligible to serve on multi-PI teams.
- Tenured/tenure-track UC faculty can only participate in one application/submission.
- The research team may include additional collaborators (including those from outside of UC such as from local industry), postdoctoral scholars, graduate or other students, staff members or other personnel appropriate and necessary for the proposed research project. All collaborators from outside UC must be identified in the application.
- Otherwise eligible faculty with external funding may apply but the proposed activities must not duplicate those already funded, and the applicant/multi-PI team should clearly delineate the relationship between on-going, funded work and that being proposed here. **Note: Given the Applied Research focus of this program, the applicant may be supported by external funding for basic (fundamental) research relevant to the proposed project. Such funding is typically the domain of NSF or other select federal agencies.**
- Otherwise eligible faculty who received past URC or Office of Research funding may apply. Such previously funded applicants must have met all requirements of former awards within budget and timeframe AND the proposed area of research, scholarship or creative activities may not duplicate that previously supported by a former award. Note: such previous awardees will be required to provide data/evidence that the previously funded project was successful and impactful as required by the Office of Research.

Application Materials

Applications will be submitted online via Wizehive, a user-friendly, internal funding software. When the application is available on the Wizehive platform, the live link to apply will be posted at https://research.uc.edu/funding/overview.

All applicants will be required to provide their name, UC email, UC ID-number, college, department/unit, and proposal title within the Wizehive application portal prior to proceeding to upload the necessary proposal materials.

The proposal should contain the following information in the order listed below and will be submitted as a single PDF file. Figures may be included but cannot be used to exceed the page limit. No hyperlinks or redirects to external information may be included. Your submission must adhere to general requirements of 12 point font, 1 inch margins, and single column layout.

1. Research Interest and Impact (4 pages maximum).
    - PROPOSAL TITLE AND APPLICANT (CONTACT PI) NAME
    - PROBLEM STATEMENT: What is the research topic, technical/scientific problem or use case you will be addressing, why is it worth addressing, and how does it align with the goals of this FOA? Note – the proposed research must be applied R&D or use-inspired applied research. Addressing questions of fundamental interest to a broad range of areas is not appropriate.
    - PI/TEAM COMPOSITION: Why is the PI or assembled team the appropriate individual/group to tackle this problem/research topic?
    - BACKGROUND AND APPROACH: Describe the current state-of-the-art plus any gaps that are relevant to this application. Explain the approach you will take to address your problem statement. For multi-PI submissions, clearly delineate how the team will coordinate research activities and, as necessary, which laboratories will be conducting particular R&D activities.
    - INNOVATION: Describe the innovative nature of this work, the potential application spaces, and any relevant use cases/prototypes to be investigated. If external partners will be conducting feasibility testing, please describe those activities here. Examples of intellectual property development and/or startup opportunities can be included here. Note – successful applicants will be able to clearly articulate how this research will transition into real-world use cases, applications, or process improvements.
    - OUTCOMES/CONTINUANCE: Describe why this research will be important as evidenced by the potential outcomes it will have on the field. Provide a plan for how this work will be continued upon completion of the award.
2. Bibliography/References Cited. Full reference details for all citations. (1 page maximum)
3. Biographical Sketch/CV for all faculty and external collaborators (as appropriate) using the TEMPLATE (3 page maximum per team member)
4. Current & Pending Funding for all faculty and external collaborators (as appropriate). Identify any externally funded research that may overlap with aspects of this project. Given the Applied Research focus of this program, the applicant(s) may be supported by external funding for basic research relevant to the proposed project. Such funding could include corporations, foundations, or government sources. (No page limit – any format acceptable)

KEYWORDS: In addition to the proposal materials above, you are required to provide between five (5) and eight (8) keywords that best describe your proposed research activities. (This Information will be entered directly into Wizehive.)

TIMELINE/MILESTONES: In addition to the proposal materials above, you are required to describe the research milestones in 6-month increments using May 1, 2024 as the project start date. NOTE: Funding during the course of the award period will be dependent on the successful achievement of the MILESTONES listed in the application. The milestones must include clear endpoints that align with the goals of this FOA. (This Information will be entered directly into Wizehive and will be evaluated as part of the entire application package.)

Review Criteria

- Project Merit
    - Clarity, significance, and relevance of problem being addressed
    - Creativity/achievability of the proposed approach;
    - Innovation/application space (e.g., commercialization potential; feasibility testing; process improvement);
    - Project outcomes aligned with applied nature of research and enhancement of potential for follow-on external sponsorship or technology spin-offs;
    - Milestones/Timeline are realistic and appropriate; and
    - Team composition to achieve the goals of the proposed project.
- Compliance with Application Guidelines in the FOA and the Submission Portal.

Grantee Selection & Review Process: The Office of Research will assemble an expert panel to evaluate proposals and conduct regular evaluations of funded projects to assess progress against milestones as defined in the awarded projects. As part of the evaluation process, a member of the research staff of the Alpaugh Family Economics Center or the Department of Economics may be invited to participate in such panels to aid in the evaluation of the innovation, commercialization potential, and economic viability of proposals and funded projects.

QUESTIONS? Email research@uc.edu