

The University of Cincinnati Office of Research

Michelman Green, Clean, and Sustainable Technology Research Innovation Program

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 AY24-25 funding opportunity announcement 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- and Clean-tech fields.

This program will follow a two-stage application/evaluation process. The first stage involves submission of a Letter of Intent (LOI). Up to five finalists will then be invited to submit a full proposal and share a 15-minute presentation/Q&A to discuss their proposed activities.

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 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.

KEY DATES

LOI Due: Wednesday, November 20, 2024 by 5:00 pm EST Finalist Notification: Week of December 9, 2024 (anticipated)

Final Proposal Deadline: January 22, 2025 by 5:00 pm EST (finalists only)

Finalist Presentations: Week of February 3, 2025 (anticipated) Grantees Announced: Week of March 10, 2025 (anticipated)

Grant Project Period: May 2025 – April 2027

Program Information

^{*} 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.

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 applicants (principal investigators Pl's) for either single or multi-investigator awards are ineligible to submit as a PI for this program. Prior Pl's may serve as co-investigators (co-l's) on multi-investigator applications.
- Prior Michelman co-I's are eligible to submit as a PI for this program or serve as co-I's on multi-investigator applications.
- For single-investigator and multi-investigator submissions, the applicant (PI) 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 teams, other co-I's must be UC faculty members with at least an 80% FTE appointment, with UC being the primary appointment. Research-track and other faculty titles are eligible to serve as co-I's 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 ongoing, funded work and that being proposed here. Note: Given the Applied Research focus of this program, the applicant(s) 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.

Letter of Intent submission requirements

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.

Letter of Intent Materials

All applicants will be required to provide their name, UC email, UC ID-number, college, department/unit, date of hire/appointment at UC, and proposal title within the *Wizehive* portal prior to uploading the required pdf file.

The LOI 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 limits. 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 (2 pages maximum).
 - PROPOSAL TITLE AND APPLICANT NAME (multi-investigator teams must include all co-l's)
 - 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. Investigators proposing to investigate a new field/area of research without significant fundamental research accomplishments will not be competitive in this program.

- o APPROACH & INNOVATION: At a high level, describe 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. Also 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/IMPACT: 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 <u>TEMPLATE</u> (3 page maximum per team member)

KEYWORDS: In addition to the LOI 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*.)

LOI Review Criteria

- Project Merit
 - o Clarity, significance, and relevance of problem being addressed;
 - Creativity/achievability of the proposed approach;
 - Applied research/late-stage development phase of the work is clearly supported;
 - 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 industrial sponsorship or technology spin-offs;
- Compliance with Application Guidelines in the FOA and the Submission Portal.

Finalist Selection & Review Process: Each LOI to this program will be reviewed by a team assembled by and including the VP for Research. No more than 5 finalists will be invited to submit a full proposal.

Neither comments nor feedback on LOIs will be provided to applicants, however comments and feedback on full proposals will be made available to finalists.

Details on the full proposal process and required materials will be distributed to all finalists directly.

Note: Michelman Green, Clean, and Sustainable Technology Research Innovation Awardees will be required to serve as reviewers for future Michelman Program competitions.

QUESTIONS? Email research@uc.edu