



Research Advisory Committee (RAC)

Minutes of Meeting: 2/22/24

Circulated: 3/6/24

Approved: 3/12/24

Present: Yulia Sevryugina (Chair), Jesse Capecelatro, Nathan Qi, Quentin Stout, Orsolya Lautner-Csorba, Heather O'Malley, Vaibhav Khanna, Jessica Durkin (OVPR), Mohamad Tiba

Absent: Marilia Cascalho, David Cooper, Suresh Madathilparambil, Derek Peterson, Claudia Figueroa-Romero, Tyler Nix, Rebecca Cunningham (VP for Research), Mrinal Sarkar.

Guests:

[Margaret Wooldridge](#), Director, Institute for Energy Solutions, Walter J Weber Jr Professor of Sustainable Energy, UMOR Office of VP for Research

[Todd Allen](#), Professor of Nuclear Engineering and Radiological Sciences, MI Hydrogen Initiative

[Gregory Keoleian](#), Peter M Wege Endowed Professor of Sustainable Systems, MI Hydrogen Initiative

[Yugo Ashida](#), MI Hydrogen Initiative

Faculty Senate Office: Ann Marshall

Call to Order, Approval of Agenda and Minutes, Announcements

The agenda was approved. The minutes for the January RAC meeting were approved.

Institute for Energy Solutions Presentation & Discussion

Summary: Margaret Wooldridge provided an overview of the new [Institute for Energy Solutions](#) that was founded in late 2022. They have a broad mission to pursue energy science and technologies that support the transition to a sustainable energy future. As part of their mission, they convene U-M experts, connect U-M faculty internally and externally, and amplify U-M energy projects. Institute activities include creating a list of U-M faculty experts on their website, offering a summer faculty fellows program, and working on social justice issues.

Discussion: The institute is focused on research in alignment with the goals of the university and will work closely with the Vice Provost for Sustainability. A goal is to connect leaders of the university with policy makers. They are currently jointly funded by OVPR and the Dept. of Engineering. Their mission is to lead efforts on grants without focusing on any specific issue (the previous institute was focused more narrowly on battery development). From a curriculum perspective, they have compiled course information on their website and are interested in faculty input about whether additional energy curriculum is of interest.

MI Hydrogen Initiative Presentation & Discussion

Summary: Greg Keoleian provided an overview of the new [MI Hydrogen Initiative](#). The



initiative focuses on energy applications of hydrogen, especially in relation to carbon reduction. Projects include a Bold Challenges workshop, developing a MI hydrogen roadmap, hosting a DOE Hydrogen Hub Competition, supporting faculty luncheons to launch research projects, and an OVPR proposal. They're particularly interested in the hydrogen ecosystem, such as processes related to storage and transportation. They have supported research in relation to fuel cells, decarbonizing the industrial sector, and the "truck stop of the future" project. They work with over thirty [faculty experts](#) and are a part of the [Midwest Hydrogen Hub](#), funded by DOE. This work has also included developing relationships with over twenty industry partners.

Discussion: There was a discussion about safety issues related to hydrogen. Some key points included that hydrogen is already used safely in many contexts and that one risk is that hydrogen has the potential to amplify greenhouse gas emissions if it leaks into the atmosphere. More research on the hydrogen ecosystem is needed in relation to these questions, including research in partnership with social scientists.

The Bold Challenges planning sessions on sustainable energy will be held on March 22 at 10 am.

Action: Presentation and discussion

Adjournment

Respectfully submitted,

Ann Marshall
Faculty Governance Coordinator
Faculty Senate Office