



STUDENT SUSTAINABILITY COMMITTEE

Funding Award and Acceptance Letter

December 13, 2019

Project: Membrane-based Removal of Water from Oil

Dear Mx. Brajendra K Sharma:

On behalf of the University of Illinois at Urbana-Champaign Student Sustainability Committee (SSC), I would like to thank you for considering the funds raised by the Sustainable Campus Environment Fee to implement a project that improves the sustainability of our campus. SSC is pleased to inform you that we are recommending to the Institute for Sustainability, Energy, and Environment (ISEE) that your project receives **\$9,870.40** in grant funding.

In order to remain eligible for this award, you must agree to the following conditions:

1. A final report of all work completed should be provided to the SSC Program Coordinator by **December of 2021**.
2. Project status updates and detailed account statements must be provided at the end of each semester, in the method requested, until the project is completed.
3. The Contact Person will be individually responsible for all official communication and the execution of this agreement.
4. The CFOP provided for this award shall strictly be used for the money awarded in this proposal.
5. Any substantial modifications to project scope, budget, or timeline must first be approved by SSC. These requests must be submitted in a formal letter to the Chair and Coordinator.
6. All projects will be expected to follow campus policies and procedures as well as any applicable State and Federal laws.
7. SSC reserves the right to revoke funding if the project does not comply with the terms and conditions outlined in this letter.
8. Any press releases or educational/promotional materials involving the project should acknowledge SSC funding.
9. Any signage involving the project or events surrounding this project should include SSC's logo and/or a statement of which fee funded the project. Projects must coordinate with SSC to ensure promotion appropriately highlights the SSC's contributions to the project.

If you agree to the terms and conditions for the funding, please sign on the designated line at the bottom of this letter. If you have any questions regarding these requirements please contact the SSC, at sustainability-committee@illinois.edu. You will be notified when the Institute for Sustainability, Energy, and Environment and Vice Chancellor for Student Affairs officially approves this project. Again, thank you for your interest in improving the sustainability of the University of Illinois at Urbana-Champaign. We look forward to working with you in the future.



STUDENT SUSTAINABILITY COMMITTEE

SSC Signatories

Joseph Edwards, Chair
Student Sustainability Committee

Jonah Messinger, Treasurer
Student Sustainability Committee

Awardee Signatory

Brajendra K Sharma
Applicant

iSEE Signatory

Dr. Evan DeLucia, Director
Institute for Sustainability, Energy & Environment

Student Affairs Signatory

Dr. Danita Brown Young
Division of Student Affairs



STUDENT SUSTAINABILITY COMMITTEE

Project Information

Project: Membrane-based Removal of Water from Oil

Funding Source: Sustainable Campus Environment Fee

Funding Amount: \$9,870.40

Receiving Campus Unit: Prairie Research Institute-Illinois Sustainable Technology Center

Unit Financial Contact: Laura A. Kohlmann

E-mail: lkohlman@illinois.edu

Project Description:

Biodiesel often has emulsified water as a result of water washing. Our project involves vacuum filtration through a hydrophilic membrane to demulsify water-in-oil emulsions. In this process, tiny water droplets coalesce near the pore surface, while the aqueous phase penetrates through the membrane with oil. This leads to spontaneous formation of two separate phases, oil and water. Through this process, the water content in kerosene sharply decreases, increasing the electric resistance by almost 40 times. The purpose is to do the same with biodiesel.

This proposal directly funds:

1. Student Wages
2. Pumps and tubing
3. Membrane Modules, probes and meters