

## AIM REU Summer 2021 Highlights

The Advanced Infrastructure Materials Research Experience for Undergraduates (AIM-REU) site at the University of Louisiana at Lafayette (UL Lafayette) was established with the support from National Science Foundation (NSF) in 2018. The goal of the AIM-REU site is to offer hands-on research and training opportunities in advanced infrastructure materials to promote the workforce development in infrastructures and infrastructural materials.

AIM-REU welcomed its third batch of twelve undergraduate researchers from eleven states this past summer. During the ten-week program, the participating students worked with faculty members on a wide array of research topics related to advanced infrastructure materials. These highly merited work have already resulted in five conference presentations. One of the REU students, Marco Manfra, worked on the use of recycled crumb rubber as a sustainable pavement material and presented his work at the Transportation Research Board Meeting held in Washington, D.C., in January, 2022. Michael Gee worked on enhanced adsorption of perfluorooctanoic acid from aqueous solution by oak sawdust derived activated carbon and presented his work at the Gulf Coast Undergraduate Research Symposium held at Rice University in October, '21. Another student, Sophia Kassabian, evaluated different microbial seeds on the carbon dioxide production and weight loss of sugarcane bagasse composting and presented her results at the AIChE Student Conference held in Boston in November, '21. Kayla Fericy worked on the development of PVA fiber reinforced hot mix asphalt for highway pavement and presented the results of her research work at the 2022 Transportation Research Board Meeting.

Aside from the scholarly goals, the program took two trips over the summer to two research centers. At the beginning of the summer, the students visited the Louisiana Transportation Research Center (LTRC) in Baton Rouge, LA. There the students were able to see how advanced infrastructure materials were tested and used to meet Louisiana's transportation needs. The LTRC trip allowed the students to see how their own research was of importance to Louisiana and addressed the nation's transportation needs. The next trip was taken later in the program to the UL-Lafayette Cleco Alternate Energy Center located in Crowley, LA. The center is dedicated to investigating ways to provide clean and affordable energy to America's homes and businesses. Both of these activities provided the students valuable insights into the significance of the work being carried at these two research centers.

All the students who participated in the 2021 summer REU program were extremely pleased with the overall program and the experienced they had gained worked on research projects under the guidance of faculty mentors. The comments provided by the students demonstrated the success of the summer program and we are looking forward to continuing this success in the summer of 2022.



Dr. VJ Gopu (director of the AIM-REU) and AIM-REU students of summer 2021





AIM-REU Students touring the LTRC Asphalt Laboratory



AIM-REU Students at Louisiana State Capitol Building



AIM-REU Students touring the Laboratories at the University Of Louisiana at Lafayette Alternate Energy Center



AIM-REU Students participating in Career Workshop



AIM-REU Students participating in the Graduate School Seminar

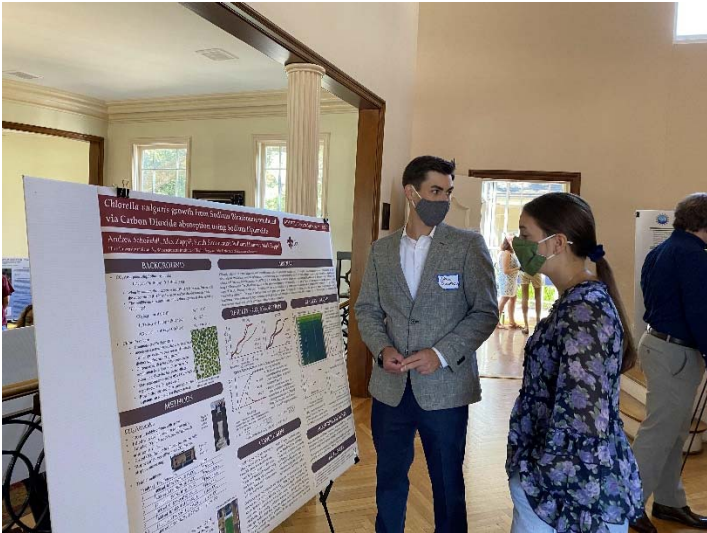




AIM-REU Students participating in the Graduate Studies Seminar



AIM-REU Students participating in the Resume Building Seminar



AIM-REU Student Presentation at the Research Symposium



AIM-REU Cohort participating in the Research Symposium