Dr. Erin Ratcliff

By: Anna Rich & Ailyn Brizo

Dr. Erin Ratcliff is an Assistant Professor of Material Science and Engineering at the University of Arizona. She fosters a diverse and collaborative environment that is focused on the interdisciplinary training of graduate students while researching organic electronics. At the Laboratory for Interface Science of Printable Electronic Materials, her group researches printable organic materials including semiconductors and photovoltaics. Organic photovoltaics have the potential to be a low cost, flexible, and accessible alternative to traditional materials.

When the Indige-FEWSS program was being developed, Dr. Ratcliff was brought in because of her knowledge of the fundamental principles of photovoltaics. She was excited to join the program because of her belief in the importance of diversity in STEM, saying “Diversity only adds to your creativity, whether that is diversity in the field, diversity in the training, but I think as well diversity in the background experiences, the cultural experiences. All of that contributes to how you approach problems, how you find solutions, and how you interact with people.” Additionally, teaching and outreach are an important part of her involvement in Indige-FEWSS, both in terms of showing graduate students the potential for printable organic materials in indigenous communities as well as inspiring younger students. Her favorite moments of the program so far have been “getting to see how the students blossom.”

Dr. Ratcliff hopes that her innovative low-cost experiments will inspire young students to get excited about science. With the Indige-FEWSS program, she is excited about encouraging scientific excitement while interfacing with the tribal colleges. As Dr. Ratcliff moves forward in her research, she is excited to get multidisciplinary people together researching defined problems. She anticipates that the interdisciplinary Indige-FEWSS traineeship will promote a new model for graduate education and enrich the students who go through the program.