

JCDREAM funded \$17K grant to CWU for an Infrared Spectrometer. Dr. Johnson, uses this equipment in our materials courses and undergraduate research.



Since 2015, the Joint Center for Deployment and Research in Earth Abundant Materials (JCDREAM) has provided the organizational framework to stimulate innovation in the use of earth-abundant materials within an established and emerging industrial sector. A state-wide focus on developing earth-abundant materials technologies within the existing innovation and manufacturing competencies will help propel Washington state into a position of national leadership in sustainable manufacturing practices within large-scale (transportation) and growth (clean energy) industries.

2020 JCDREAM Symposium

April 2, 2019 9:00 AM-4:00 PM

WSU Everett

Thank you for the opportunity to participate in JCDREAM. As you know, CWU was awarded a JCDREAM grant last spring. Since then, we received the FTIR on June 26, 2019. The FTIR is an education model produced by Perkin Elmer (Spectrum Two). This model is intended to support education and primarily tests thin films. It is set up in our Materials Laboratory where the relevant classes are taught and research is performed, as pictured below:



The primary investigator for access and interaction with the FTIR is Dr. Craig Johnson, P.E. He is a full professor and has been at CWU since 1996. Currently he consults using his licensure in Materials Engineering (WA36590), and supports the Pacific Northwest foundry industry at CWU as the Foundry Educational Foundation (fefinc.org) 'Key Professor' (as well as advising our CWU AFS student chapter). He is a past ASEE Materials Division Chair and past ASEE PNW Section Chair and still active in engineering education research (asee.org). His next paper and presentation ("Freeform Additive Manufacturing Lab") will be at MS&T19 in Portland on September 30, 2019. He has been the CWU Technical Partner for the NSF MatEdU ATE (materialeducation.org) since 2004, and will be presenting at the M-STEM conference at the CO School of Mines on November 5, 2019.

Citation: <https://jcdream.org/>