

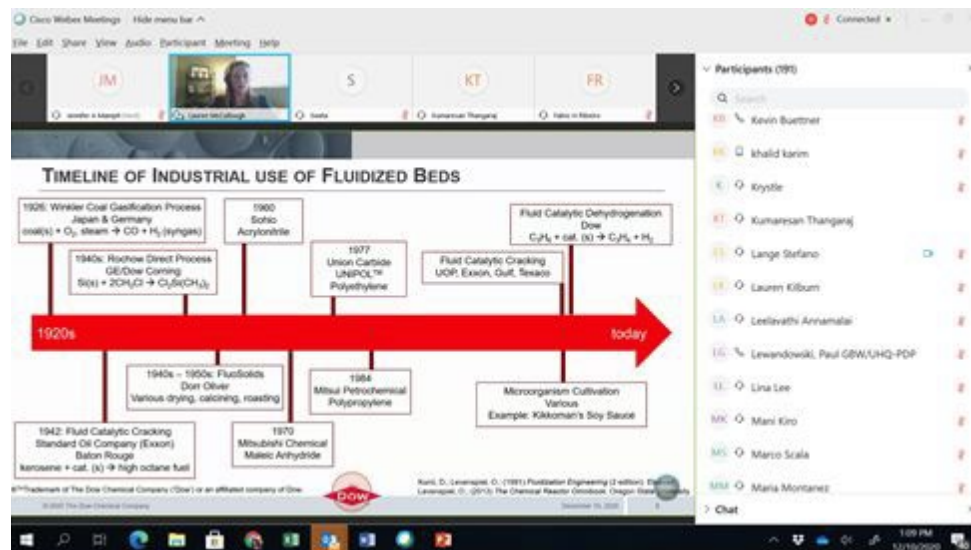
Technical Course with Dow Enables CISTAR to Reach Professionals and Students Worldwide

Outcome/accomplishment: A new technical course for students and faculty, industrial partners, and the larger community was created with the cooperation of an industrial partner at the Center for Innovative and Strategic Transformation of Alkane Resources (CISTAR), an NSF-funded Engineering Research Center (ERC) based at Purdue University.

Impact/benefits: The course includes 20 lectures offered over 15 months through an online learning system, enabling CISTAR to connect to industry professionals and students around the world. The course shares highly specialized expertise with the larger chemical engineering community, which submitted more than 600 requests for the course.

Explanation/ background: Industrial partner Dow Chemical Company worked with CISTAR educators in designing the course, which is offered via Brightspace, a learning management system. The course leads to two certificates for participants who attend live or verify that they have studied the material asynchronously.

Assets are curated and organized to create a sustainable method for sharing the content in future years. In the course, reaction engineers from Dow provide an overview of conventional and non-conventional reactors used in industry to manufacture chemical intermediates and products, with a focus on the design and scale-up of these reactors.



An engineer from the Reaction Engineering Group in the Engineering and Process Science Department at Dow Chemical presents Lecture 5 on Fluidized Bed Reactors. (CISTAR)