

Mitsubishi Chemical at UCSB: Embedded Corporate Researchers

There is a discussion among universities regarding the benefits and disadvantages to hosting “embedded corporate researchers” from corporations within a campus’ laboratories. UC Santa Barbara hosts a large number of corporate researchers and has for the last decade and a half. Our longest-standing corporate partner is Mitsubishi Chemical, who established the on-going Mitsubishi Chemical Center for Advanced Materials (MC-CAM) in 2001. The depth and breadth of their relationship within UC Santa Barbara highlights the value of cultivating embedded research relationships.

The MC-CAM was established as a vehicle for promoting open innovation within the Mitsubishi Chemical Corporation (MCC) and to extend MCC’s research enterprise outside of Japan. MCC evaluated potential universities world-wide and ultimately chose to establish their center at UC Santa Barbara based on the excellence and breadth of UCSB’s materials programs and its track record in interdisciplinary research. The company has dedicated over \$22 million in research support and more than \$2 million in philanthropy since initiating the center. Initial funding from Mitsubishi Chemical endowed two professorships in the College of Engineering, paid in part for a new wing of the Materials Research Laboratory building in which MC-CAM is housed, and has also funded endowed graduate student fellowships for UCSB’s Chemical Engineering and Materials Departments.

What makes the MC-CAM most unique is the continuity of the relationship and the number of successes in both intellectual property and the ability of the university researchers to make impacts on product development within MCC. The students benefit because they work on real-life problems and gain insight into what it is like to

work in industry. A main vehicle for both the successes on the corporate side and on the student’s is Mitsubishi’s investment in embedded researchers and the fact that the university embraces this approach. What the embedded researchers bring is a very strong understanding of how universities operate, with timelines for success in years, not months, as well as deep insight into the needs of the corporation. By being on campus, these researchers can answer student’s questions and gain insight from them

as well. They can also engage in novel research alongside those faculty and students on campus. By having a dedicated industrial partner on campus, research projects, which always evolve, can be supported with clear understanding by the corporation, changes in corporate directions can be reflected back to the students and faculty with the least impact to long-term research, and students and faculty have an opportunity to participate in the product development process.



MC-CAM has two dedicated embedded corporate researchers, but there are many corporate researchers that come to campus to conduct experiments or to oversee technology transfer when a project is nearing completion at UCSB. In addition, there is an annual corporate review that brings many MCC scientists and executives to campus to meet the faculty and students. Overall, the impacts of UC Santa Barbara’s research on MCC’s product innovation process is notable and the insight for students who intend to go into industry is amazing.

To learn more about how your company can work with UC Santa Barbara, contact Leslie Edwards (805-893-3944/edwards@engineering.ucsb.edu) or Chris Russo (805-893-5544/crusso@engineering.ucsb.edu) in the Corporate Affiliate Programs office.