Faculty and Students Will Work to Develop Product Solutions

ExxonMobil Chemical Company and the University of Houston have signed a multi-year research agreement that will focus on helping the industry develop energy-efficient solutions for manufacturing petrochemical products while minimizing their environmental impact.

The agreement, which is valued at $1 million over a five-year period, will involve faculty and students from the disciplines of chemistry, chemical engineering and material science. Researchers from ExxonMobil will have the opportunity to collaborate with UH faculty and students on various projects and the resulting publications.

Ramanan Krishnamoorti, chief energy officer at UH, said the projects will range from studying the fundamentals of catalysis to exploring processes for producing specialty chemicals and polymers. Work has already begun on the first project, which involves studying the production of advanced elastomers.

“One of the most important issues facing society and our company today is the dual challenge of safely and responsibly delivering products needed for economic and social progress, while at the same time reducing impacts on the environment,” said Dominic Clausi, vice president of chemical technology for ExxonMobil Chemical Company. “By partnering with institutions such as the University of Houston to research potential breakthroughs, we feel confident that this challenge can be overcome – leading to innovative solutions that contribute to our understanding of the scientific underpinnings of the petrochemical industry.”

Amr Elnashai, vice president for research and technology transfer at UH, said the agreement and the resulting collaboration between industry and university-based research organizations offer an outstanding opportunity to advance the region’s economic development.

“This agreement could have a lasting impact on both ExxonMobil and UH students and faculty,” he said. “Innovative solutions to challenges that ExxonMobil faces in deploying their cutting-edge technologies may grow
from UH research, and the students working on these challenges will be innovation-ready when they join the workforce.

UH has had previous research agreements with industry, but Krishnamoorti said this one with ExxonMobil Chemical Company is the broadest in scope.

"The collaboration is mutually beneficial," he said. "For us, it's understanding real-world engineering challenges and bringing our curiosity to bear on challenges with real-world impact. Companies want students that understand real-world challenges with real-world constraints."

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