



FOR IMMEDIATE RELEASE  
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**AIChE Signs ExxonMobil as Title Sponsor for ChemE Cube Competition**  
*Modular process design challenge for undergraduate students  
to tackle society's grand challenges*

NEW YORK, NY — The Rapid Advancement in Process Intensification Deployment (RAPID) Manufacturing Institute — an entity of the American Institute of Chemical Engineers (AIChE) — has signed ExxonMobil as the exclusive Title Sponsor of RAPID's ChemE Cube Competition. In the competition, teams of undergraduate students design and build a functioning modular process in the space of one cubic foot and pitch their product to a panel of mock investors — a challenge that encourages students to envision and design commercializable solutions to the types of engineering problems that they will encounter in their future work in the process industries. In 2023, the competition's theme is Direct Air Capture. Student teams will design, build and operate their ChemE Cubes to capture carbon dioxide (CO<sub>2</sub>) directly from the atmosphere during the AIChE Annual Meeting and Annual Student Conference, to be held November 5–10 in Orlando, FL.

One of the U.S. Department of Energy's Manufacturing USA Institutes, RAPID is a public-private consortium that fosters breakthrough technologies in process intensification and modular manufacturing to bolster energy- and resource-efficient manufacturing processes for industries such as advanced materials, oil and gas, pulp and paper, and various chemical manufacturers in the U.S.. The RAPID Manufacturing Institute launched the ChemE Cube Competition in 2021 as a means of introducing students to concepts and techniques associated with these more-efficient and sustainable approaches to engineering. In addition to creating their ChemE Cubes, students showcase and pitch their products to a panel of judges.

As Title Sponsor, ExxonMobil employees will participate onsite at the annual competition — judging competition entries and mentoring participating student engineers. In keeping with the company's new and prominent role as Title Sponsor, the event is being rebranded as the ChemE Cube Competition, Powered by RAPID® | ExxonMobil.

In announcing the partnership with ExxonMobil, Ignasi Palou-Rivera, RAPID's Executive Director and Chief Technology Officer, said, "RAPID is pleased to expand its collaboration with ExxonMobil, which has been a Premier Member since the Institute's founding in 2017, and has served as a leader among our member organizations, all of whom are dedicated to improving the

efficiency and sustainability of the process industries.” He added that the ChemE Cube Competition “allows our future workforce to experiment with their own imaginative and efficient manufacturing processes that have the potential to scale in number to address real-world engineering challenges — and the support of ExxonMobil will catalyze this opportunity.”

Prasanna Joshi, ExxonMobil’s Vice President of Low Carbon Solutions Technology, said, “The United Nations and leading third-party energy leaders agree that Direct Air Capture is essential to supporting society’s goals of a net zero future. Our company has decades of experience in carbon capture and storage technology, and we are excited to take part in a program that promotes innovation and critical thinking around carbon capture. We hope to inspire the next generation of engineers who will help develop scalable solutions that move us to a lower-emissions future.”

Information and videos related to the competition — as well as participant instructions for the Fall 2023 ChemE Cube Competition, Powered by RAPID® | ExxonMobil — are available at [www.AIChE.org/ChemECube](http://www.AIChE.org/ChemECube).

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### **About RAPID**

In 2016, the U.S. Department of Energy and the American Institute of Chemical Engineers (AIChE) announced the establishment of RAPID, the 10th Manufacturing USA Institute, representing a critical step in the federal government’s effort to double U.S. energy productivity by 2030. RAPID fosters breakthrough technologies to boost energy productivity and energy efficiency through manufacturing processes in industries such as advanced materials, oil and gas, pulp and paper, and various domestic chemical manufacturers. RAPID’s expertise uses modular chemical process intensification (MCPI) — such as combining multiple process steps — with the goal of improving productivity and efficiency, cutting operating costs, and reducing waste. MCPI enables RAPID to help companies quickly scale from batch to continuous production. Learn about RAPID and its projects at [www.aiche.org/RAPID](http://www.aiche.org/RAPID).

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### **About AIChE: The Global Home of Chemical Engineers**

Founded in 1908, AIChE is a professional society of more than 60,000 chemical engineers in 110 countries. Its members work in corporations, universities and government, using their knowledge of chemical processes to develop safe and useful products for the benefit of society. Through its varied programs, AIChE continues to be a focal point for information exchange on the frontiers of chemical engineering research in such areas as energy, sustainability, biological and environmental engineering, nanotechnology, and chemical plant safety and security. Learn more at [www.aiche.org](http://www.aiche.org).

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