

2018 Southeastern Conference Professor of the Year Dr. Marcetta Darensbourg, Texas A&M University



Dr. Marcetta Darensbourg, Distinguished Professor of Chemistry at Texas A&M University, is a leader in synthetic organometallic chemistry that reproduces active sites in metalloenzymes in the form of small molecules, sans protein. Her research focuses on biology-inspired chemistry and the simplest of all molecules – hydrogen – in her laboratory's search for inexpensive, eco-friendly alternative energy options. Her research group introduces Earth-abundant elements (i.e., iron, nickel and sulfur) into molecular catalysts intended to replace platinum as the kick-starter in hydrogen fuel cells.

A Kentucky native, Dr. Darensbourg earned her Ph.D. from the University of Illinois at Urbana-Champaign in Organometallic Chemistry, and she held faculty appointments at Vassar College, State University of New York, Buffalo and Tulane University before coming to Texas A&M in 1982. While at Texas A&M, she expanded her research program in transition metals to begin exploring how metal hydrides might exist in nature for use in clean-energy initiatives.

Dr. Darensbourg has received numerous recognitions from her peers. In 1995, she became the first woman to receive the American Chemical Society (ACS) Distinguished Service in the Advancement of Inorganic Chemistry Award, the society's top annual honor in this realm. She is an inaugural Fellow of the ACS as well as a Fellow of the Royal Society of Chemistry and the American Academy of Arts and Sciences. In 2017, she was elected to the National Academy of Sciences.

In addition to excelling as a researcher, Dr. Darensbourg is an outstanding teacher and mentor of students at all levels. She teaches undergraduate and graduate courses in organometallic and inorganic chemistry, and she has directed the dissertations of more than 50 Ph.D. students in chemistry. She also co-authored the freshman chemistry textbook *Chemical Principles*. Dr. Darensbourg has received nearly every teaching and student mentoring award offered at Texas A&M University, including several Distinguished Achievement Awards from the Association of Former Students.

Along with teaching honors, Dr. Darensbourg received the 2013 Fred Basolo Medal for Outstanding Research in Inorganic Chemistry, the 2013 John C. Bailar, Jr. Medal & Lectureship, and the 2017 ACS Award in Organometallic Chemistry. The ACS award, established by the Dow Chemical Company Foundation, recognizes a recent advancement that is having a major impact on research in the field.

Dr. Darensbourg has authored 260 refereed papers, co-edited two specialty chemistry books, and given plenary lectures at numerous conferences. An in-demand presenter and international symposium organizer, Dr. Darensbourg is active in professional bodies beyond the ACS, including a reviewer for the National Science Foundation, the National Institutes of Health, and advisory panels for the Petroleum Research Fund and National Academy of Sciences. She currently serves on the editorial boards of *Inorganic Chemistry*, *Inorganic Syntheses*, and *Chemical Communications*. [Read more about Dr. Darensbourg.](#)