AAEOY 2018

Asian American Engineer of the Year

Dr. Mei Cai

Technical Fellow and Manager General Motors



Citation of Accomplishments

Original and sustained contributions to the development, understanding, and application of advanced energy storage materials while promoting industry-national lab-university collaborative research.

Dr. Mei Cai is a General Motors Technical Fellow and Manager of the Energy Storage Materials Group at General Motors Global Research and Development (GM R&D). Among her major responsibilities is technology innovation in advanced energy storage materials for automotive applications. She also served as Vice Chair (2016) and Chair (2017) of GM R&D's Senior Leadership Technical Council, which assists the R&D leadership team to identify future disruptive technology trends and promote cross-lab collaborations.

Mei is recognized for her contributions in both fundamental research and technology development. She is the author or co-author of over 100 issued/pending U.S. patents and has over 90 peer-reviewed scientific publications. Her research has received over 5,400 citations and has an h-index of 41 (google scholar) over the years. Some of her patents have been licensed and commercialized by industry. Due to her contribution to the development of a cost -effective, long-range, high-energy-density, and structurally integrated rechargeable energy storage system (RESS) for electrified vehicles, she was awarded the 2016 Boss Kettering Award, GM's highest award for recognizing technical invention. The RESS for the new Chevrolet Bolt EV is an industry-leading battery pack manufactured by General Motors.

Mei holds a Ph.D. in Chemical Engineering from Wayne State University and has been with GM for 22 years. She is a regular proposal and panel reviewer for National Science Foundation and Department of Energy programs. She serves as an industrial adviser for the Chemical & Materials Sciences Department at Wayne State University and is a mentor for its Chemical Industry program focused on training the next generation of engineers.

Mei is an active member of many civil and professional societies, such as the Detroit Chinese Engineer Association and International Academy of Electrochemical Energy Science, organizing seminars and other activities to promote cultural diversity and partnership.

