Shirley Meng

Professor at UC San Diego
La Jolla, CA, US

Shirley Meng researches better batteries through nano-engineering

Biography

Meng received her Ph.D. in advance materials for micro and nano systems from the Singapore-MIT Alliance in 2005, after which she worked as a postdoc research fellow and became a research scientist at MIT. Meng currently holds the Zable Endowed Chair Professor in Energy Technologies and is professor of nano engineering and materials science at UC San Diego. She is the founding director of Sustainable Power and Energy Center. Meng received the National Science Foundation (NSF) CAREER award in 2011, UC San Diego's Chancellor's Interdisciplinary Collaboratories Award in 2013, Science Award in Electrochemistry by BASF and Volkswagen in 2014, C.W. Tobias Young Investigator Award of the Electrochemical Society (2016), IUMRS-Singapore Young Scientist Research Award (2017), International Coalition for Energy Storage and Innovation (ICESI) Inaugural Young Career Award (2018), American Chemical Society ACS Applied Materials & Interfaces Young Investigator Award (2018) and Finalist for the Blavatnik National Award (2018). Her research group – Laboratory for Energy Storage and Conversion (LESC) – focuses on functional nano and micro-scale materials for energy storage and conversion. The more recent programs include the design, synthesis, processing, and operando characterization of energy storage materials in advanced rechargeable batteries; new intercalation materials for sodium ion batteries; and advanced flow batteries for grids large scale storage. Meng is the author and co-author of more than 160 peer-reviewed journal articles, 1 book chapter and 6 patents. She serves on the executive committee for battery division at the Electrochemical Society and she is the technical editor for Journal of Power Sources.

Areas of Expertise

Batteries for electric vehicles, Energy Storage and Conservation, Batteries, Nano Engineering, Nano and Micro Scale Materials, Rechargeable batteries

Affiliations

Associate Editor –NPG Asia Materials (IF 9.0), Member – Ionics (IF 1.7) Journal of Power Sources (IF 5.2)

Education

Singapore-MIT Alliance, National University of Singapore
Ph.D.

Nanyang Technological University, Singapore
B.S. Materials Science & Engineering

Accomplishments

UCSD Chancellor's Interdisciplinary Collaboratories Award
2013

NSF CAREER Award
2011

Early Career Faculty Travel Award (The Electrochemical Society)
2008

UC San Diego Zable Endowed Chair in Energy Technologies
2018

Faraday Medal from Royal Society of Chemistry
UC San Diego nanoengineering professor Shirley Meng has earned the 2020 Faraday Medal from the Royal Society of Chemistry. Meng is a leader in materials characterization and synthesis, including development of novel battery technologies that are driving a low-carbon, more sustainable future.

Inaugural director of the UC San Diego Institute for Materials Discovery and Design
Shirley Meng is the inaugural director of the UC San Diego Institute for Materials Discovery and Design

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