

Lunedì 30 Maggio 2022

alle ore 11.00

presso AULA 2 Fermi dell'Edificio F
Area della Ricerca CNR di Firenze
Via Madonna del Piano 10, Sesto Fiorentino

il Professor Yun Wang

Renewable Energy Resources Laboratory, Mechanical and Aerospace
Engineering, UC Irvine, CA
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terrà il seguente seminario:

" Electrode Design for Polymer Electrolyte Membrane Fuel Cells "

Si invitano tutti gli interessati a partecipare.

Short Abstract:

Polymer electrolyte membrane (PEM) fuel cells are electrochemical energy converters that directly convert the chemical energy stored in fuel into electrical energy. Using hydrogen gas, PEM fuel cells can reach a practical efficiency as high as 65% with water as the only byproduct. Electrodes are the sites where the electrochemical reactions take place and play an important role in the energy conversion of PEM fuel cells. In this talk, I will present several design aspects of electrode development for PEM fuel cells that the UC Irvine made original contributions, including electrode materials for cold start, through-plane variation of the reaction rate, multilayer design, impacts of material heterogeneity, and rapid element quantification.

Biographic sketch:

Yun Wang received his B.S. and M.S. degrees in Mechanics and Engineering Science from Peking University in 1998 and 2001, respectively. He went to the Pennsylvania State University where he earned his Ph.D degree in Mechanical Engineering in 2006. Dr. Wang has published over 80 journal articles on PEM fuel cell, Li-air battery, and other energy systems. He has received a number of awards, including the prestigious President's Award and Outstanding Educator Award from Orange County Engineering Council and the 2011-2012 Applied Energy Certificate of Excellence: Most Downloaded Authors. Several of his seminal works are highly cited in major energy/power journals. Dr. Wang served as Track chair/co-chair, session chair/co-chair, conference chair and committee member for many international conferences on power and energy. Dr. Wang received 2018 Reviewer of The Year from the Journal of Electrochemical Energy Conversion and Storage. Dr. Wang is currently Professor at the UC Irvine and RSC and ASME fellows.

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