



Keynote Speaker of Session 08

FUEL CELLS



Anil Virkar is a Distinguished Professor of Materials Science & Engineering at the University of Utah. He received B.Tech. (Hons.) in Metallurgical Engineering from Indian Institute of Technology, Mumbai, India (1967); M.S. in Engineering Mechanics from Louisiana State University in (1969); and Ph.D. from Northwestern University in Materials Science in (1973). His current research is in fuel cells, batteries, multi-species transport and the role of non-equilibrium thermodynamics in the stability of electrochemical devices. His early work was on fabrication of ceramics (oxides and non-oxides), phase transformation mechanisms and kinetics, and fracture mechanics. He has to date published over 250 refereed papers and has more

than 40 patents to his credit. He has supervised PhD and MS research of over 50 candidates to date. His current funding is from primarily DOE and NSF.

He served as the MSE Department Chair between 1998 and 2011. In 2011, under his leadership, the Utah team won an NSF-MRSEC grant. He is a cofounder and Vice President of Materials and Systems Research, Inc. (MSRI) (www.msrihome.com), a small company based in Salt Lake City, Utah; a cofounder of Versa Power Systems, (VPS) (www.versa-power.com), a Colorado-based company with operations in Calgary (recently acquired by FuelCell Energy). He was also one of the founding members of Ceramatec, Inc., a small company based in Salt Lake City, Utah, now a subsidiary of CoorsTek.

Awards/Honors:

- 1) Best Teaching Award in the College of Engineering (1991).
- 2) Fellow of The American Ceramic Society (1992).
- 3) Ross Coffin Purdy Award of the American Ceramic Society (1993).
- 4) University Distinguished Research Award, (1994).
- 5) Mountain Man of the Year (1995); University of Utah Alumni Award.
- 6) Listed in www.ISIHighlyCited.com as one of the most highly cited researchers in the Materials Science category (one of about 250 researchers listed worldwide – based on research published between 1980 and 2000).
- 7) One of the winners of the DOE Basic Science Divisions ‘Chunky Bullets Competition’. This resulted in an additional \$50k for the DOE Basic Science Division funded research. (2002).





4th International Symposium on

Energy **C**hallenges & **M**echanics

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- 8) Alkyl Amines Distinguished Speaker Award of the Indian Chemical Engineering Society, December 2003.
- 9) Fellow of The Electrochemical Society (2006).
- 10) Outstanding Award of the High Temperature Division of The Electrochemical Society (2006).
- 11) Utah Governor's Medal of Science & Technology (2006).
- 12) Election to the National Academy of Engineering (2007).
- 13) Fellow of ASM International (2010).
- 14) James I. Mueller Award of the Am. Ceramic Soc. (2013).
- 15) John Jeppson Award of the Am. Ceram. Soc. (2013).

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