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- working on small scales

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Speaker of Session 07

NANOTECHNOLOGY FOR GENERATORS



Basma El Zein, PhD. The director of Research and Curriculum development unit at College of Engineering and Information technology (CEIT) at the University of Business and Technology (UBT) – Jeddah Saudi Arabia. She was a Research Scientist at King Abdullah University of Science and Technology (KAUST), and previously a faculty member at Dar AL Hekma University, KSA and an associate researcher at the Institut D'Electronique, Microelectronique et Nanotechnologie (IEMN), Lille, France. Dr.El Zein is a senior member of IEEE, member of ACS, MRS, ECS, SPIE and Lebanese Engineering syndicate. She has been selected as Solar Pioneer by Middle East Solar industry Association (MESIA) during the World future energy Summit (WFES) 2015 in Abu Dhabi. Dr. El Zein attended the faculty of engineering in

1994 at the Lebanese University, Tripoli Lebanon and graduated with a master degree in engineering (Electrical & Electronics Engineering) with distinction in 1999. She got her PhD in 2012 from the University of Lille 1 –France in Micro and Nanotechnology with high distinction. Her recent research interests include working on nanostructures for third generation solar cells, energy harvesting and energy storage. She recently gained 2 grants from King AbdulAziz City for science and technology (KACST) with a fund of 3 million SAR, to support her research on Nanostructures for Photovoltaic applications, where she is mentoring a PhD student and collaboration with many international research centres (England, France, and Switzerland). The main objective of her research is to develop an eco-green with high efficiency and long durability Solar cells. In addition to this, she is exploring new materials such as kesterite, perovskite and protein to be used as light absorber for Solid state sensitized solar cells. Some of her previous researches include: Telecommunication, artificial Intelligence, auto-control and auto-command by programmable logic controllers and Computer Vision. She is a reviewer in many international, peer-reviewed journals, the chair or co-chair and on the committee of different international conferences; she published in many international journals and had one filed patent.

