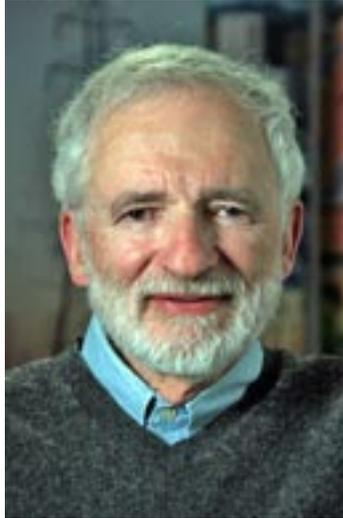


2011 Esselen Award Winner



Arthur J. Nozik

- a brief biography

Senior Research Fellow, National Renewable Energy Laboratory and Professor Adjunct, Department of Chemistry and Biochemistry, University of Colorado, Boulder.

Dr. Arthur J. Nozik is a Senior Research Fellow at the U.S. DOE National Renewable Energy Laboratory (NREL), Professor Adjunct in the Department of Chemistry and Biochemistry at the University of Colorado, Boulder, and a founding Fellow of the NREL/University of Colorado Renewable and Sustainable Energy Institute. In 2009 Nozik was selected as Associate Director of a joint Los Alamos National Lab/NREL Energy Frontier Research Center for DOE, called Center for Advanced Solar Photophysics.

Between 2006-2009 he served as the Scientific Director of the Center for Revolutionary Solar Photoconversion under the Colorado Renewable Energy Collaboratory. Nozik received his BChE from Cornell University in 1959 and his PhD in Physical Chemistry from Yale University in 1967. Before joining NREL in 1978, then known as the Solar Energy Research Institute (SERI), he conducted research at the Materials Research Center of the Allied Chemical Corporation (now Honeywell, Inc).

Dr. Nozik's research interests include size quantization effects in semiconductor quantum dots and quantum wells, including multiple exciton generation from a single photon; the applications of unique effects in nanostructures to advanced approaches for solar photon

conversion to electricity and solar fuels; photogenerated carrier relaxation dynamics in various semiconductor structures; photoelectrochemistry of semiconductor-molecule interfaces; photoelectrochemical energy conversion; photocatalysis; optical, magnetic and electrical properties of solids; and Mössbauer spectroscopy. He has published over 260 papers and book chapters in these fields, written or edited 5 books, holds 11 U.S. patents, and has delivered over 280 invited talks at universities, conferences, and symposia. He has served on numerous scientific review and advisory panels, chaired and organized many international and national conferences, workshops, and symposia, and received several awards in solar energy research, including the 2009 Science and Technology Award from the Intergovernmental Renewable Energy Organization associated with the U.N., the 2008 Eni Award from Italy, and the 2002 Research Award of the Electrochemical Society.

Dr. Nozik has been a Senior Editor of The Journal of Physical Chemistry from 1993 to 2005 and is on the editorial advisory board of the Journal of Energy and Environmental Sciences and the Journal of Solar Energy Materials and Solar Cells. A Special Festschrift Issue of The Journal of Physical Chemistry honoring Dr. Nozik's scientific career appeared in the December 21, 2006 issue. Dr. Nozik is a Fellow of the American Physical Society and a Fellow of the American Association for the Advancement of Science; he is also a member of the American Chemical Society, the Electrochemical Society, and the Materials Research Society.