



Post-Secondary Nanotechnology Education and Workforce Development in the US

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Nanotechnology Applications and Career Knowledge (NACK) Center Penn State University

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Time: 10:30 am-11:30 am Location: University of South Florida, Tampa Campus. Center for Urban Transportation Research Building (CUTR 102)

The activities of the National Science Foundation's National Nanotechnology Applications and Career Knowledge (NACK) Center, a nanotechnology educational partnership (www.nano4me.org) involving Penn State and a number of other institutions across the country, will be reviewed. NACK's mandate is to focus on post-secondary education with the goal of enhancing US nanotechnology workforce development. NACK works to enable nanotechnology education at 2-year degree institutions as well as to strengthening nanotechnology education at 4-year colleges and small universities. NACK and its partners also work to aid in developing efficient and effective pathways within post-secondary education from two-year degree programs to four year degree programs and beyond.

Dr. Stephen J. Fonash

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Director, NSF National Nanotechnology Applications and Career Knowledge Center
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Dr. Stephen Fonash holds the Bayard D. Kunkle Chair in Engineering Sciences at the Pennsylvania State University. His activities at Penn State include serving as the director of Penn State's Center for Nanotechnology Education and Utilization (CNEU), director of the *NSF National Nanotechnology Applications and Career Knowledge (NACK) Center*, and director of the Pennsylvania Nanofabrication Manufacturing Technology Partnership.

Dr. Fonash's research activities encompass the device physics and processing of solar cells, sensors, and transistors. He has published over 300 refereed papers in these areas. He is the author of the book "Solar Cell Device Physics" (2nd edition, Elsevier, 2010) and, with his students, author of the solar cell computer modeling code AMPS, which is used by more than 2000 researchers around the world. Dr. Fonash holds 29 patents, many of which are licensed to industry. He is on journal boards, has consulted for a variety of firms, and has co-founded two companies. Prof. Fonash received his Ph.D. from the University of Pennsylvania. He is a Fellow of the Institute of Electrical and Electronics Engineers and a Fellow of the Electrochemical Society.

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