Nuclear Energy Without Nuclear Waste

Gerald Kulcinski
Director, Fusion Technology InstituteGrainger Professor of Nuclear Engineering Engineering Physics

CURRENT RESEARCH

Creating powerful, clean, and safe energy sources for our future

By 2050, scientists estimate that fossil fuels, our current energy source, will be significantly depleted. Therefore, scientists have been searching for an energy source to solve the imminent energy crisis. Perhaps one of the most promising solutions is nuclear fusion that can produce large amounts of energy with little to no radioactivity. Dr. Gerald Kulcinski, of the University of Wisconsin, hopes to use nuclear fusion to provide nuclear energy without nuclear waste and thereby provide a stable and more efficient source of electrical energy for the 21st century. Dr. Kulcinski's research will support long-lasting sources of clean energy that emit no greenhouse gases and little or no release of radioactive isotopes in the event of an accident. In addition, because he has targeted fusion from helium-3 fuels, Dr. Kulcinski's energy source promises to have no proliferation risk, meaning that unlike other nuclear energy sources being developed, bomb grade materials will not be able to be produced. In addition to his work with reliable energy sources, Dr. Kulcinski uses his expertise in nuclear fission and fusion to design near term technologies for various types of detection ranging from explosives to cancers.

Dr. Kulcinski's lab is the only known lab in the US, and possibly the world, that studies fusion energy from helium-3 fuels that releases little or no by-product neutrons. By studying low neutron and neutron-less fusion fuels, Dr. Kulcinski is able to produce nuclear energy with no proliferation risk. In addition, he and his team have a well equipped laboratory with a 300kV, 200mA power supply that allows them to study fusion plasmas in the aneutronic fusion regimes. In addition to the robust research...

Read More at benefunder.com/

AFFILIATION

University of Wisconsin-Madison

EDUCATION

- Ph.D. in Nuclear Engineering 1965, University of Wisconsin
- M.S. in Nuclear Engineering 1962, University of Wisconsin
- B.S. in Chemical Engineering 1961, University of Wisconsin

AWARDS

- NASA Exceptional Public Service Medal, 2010
- University of Wisconsin Hilldale Award-Physical Sciences, 2009
- Big 10 Centennial Award-Wisconsin, 1995
- NASA Public Service Award, 1993
- Elected to the National Academy of Engineering, 1993

RESEARCH AREAS

Technology, Space, Materials Science / Physics, Clean Energy

FUNDING REQUEST

Your contributions will support the continued research of Dr. Kulcinski, of the University of Wisconsin, as he works to create nuclear energy without nuclear waste. Your donations will support the necessary $250K required for personnel, equipment, and supplies. In choosing to support his research, you will play a role in developing a sustainable and clean energy source for future generations in addition to advances in cancer research and protecting the military and civilians from explosive devices.

Copyright © 2017 / Benefunder 4790 Eastgate Mall, Ste 125, San Diego, CA 92121 / info@benefunder.com / (858) 215-1136