ILLINOIS INNOVATION PRIZE

Peter Fiflis is a graduate student researcher at the Center for Plasma Material Interactions in the Nuclear, Plasma, and Radiological Engineering Department. Fiflis has received both his Bachelor's and Master's from the University of Illinois, and is currently studying plasma wall interactions in nuclear fusion devices. His doctoral research is on thermo-electric magnetohydrodynamically driven lithium flows for removal of large heat loads without structural damage in the divertor region of a tokamak reactor. This research has led to the development of several innovations including a device for the production of millimetric size spheres of low melting point materials, a test chamber for the examination of corrosion of liquid metals on plastics, ceramics, and other metals, and a method for the low cost production of nanostructured tungsten wires. Fiflis is investigating the extension of the nanostructuring method to materials other than tungsten for the purpose of catalysis. He hopes that the expansion of this technique to a broader range of materials will usher in a generation of more efficient and robust catalysts.

2014 FINALIST

PETER FIFLIS

PhD Candidate, Nuclear, Plasma, and Radiological Engineering

TECHNOLOGY ENTREPRENEUR CENTER
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