# Asian American Most Promising Engineer of the Year Award

## Dr. Patrick L. Feng

### Principal Scientist & Engineer
### *Sandia National Laboratories*

Dr. Patrick Feng is a materials scientist at Sandia National Laboratories, serving as principal investigator for several projects associated with homeland security. His background in synthetic chemistry and solid-state physics has enabled Patrick to deliver innovative, interdisciplinary solutions to long-standing technical issues related to radiation and chemical detection. Patrick graduated with a B.S. in Chemistry from Colorado State University in 2004 and a Ph.D. also in Chemistry from the University of California, San Diego in 2009.

Dr. Feng's research as an early career scientist has focused on luminescent sensing materials, as relevant to high-consequence applications based on scintillating radiation detectors, fluorogenic tamper-evident seals, and nanoporous chemical detection media. His work on radiation detectors has resulted in the first material capable of wavelength-resolved discrimination of fissionable threat materials from background radiation sources.

Dr. Feng is the recipient of several awards and fellowships, including a 2014 R&D100 award, American Society of Chemists Award, CRC Press Chemistry Award, National Science Foundation Graduate Research Fellowship, and Hughes Research Scholars Fellowship.

In addition to his professional pursuits, Patrick is committed to educational mentorship. At Sandia, he is actively involved in the training of undergraduate researchers via internships and as part of the Department of Homeland Security's HS-STEM program. He has also volunteered as a mentor for gifted and talented high school students and as a science/math tutor for homeless middle- and high-school students.

Patrick also finds great value in the beauty of natural resources, and volunteers to provide trail maintenance/clean up and technical safety training for those new to rock climbing.

Dr. Feng is married to Sophia Feng and they have one child.

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