

Kevin Proctor
Reed College
1993 Winner



Kevin attended Reed College from 1990 to 1994 as a Chemistry major. During the school year, he helped younger Chemistry students as a tutor in the Science Center and, during the summer between his Junior and Senior years, worked as a lab technician in the wastewater treatment plant in his hometown of Spokane, WA. He completed a year-long senior thesis project with Dr. Margret Geselbracht titled "Synthesis of Reduced Oxoniobates from Molten Salt Fluxes" in which he grew crystals of novel sodium niobium oxides and characterized them with powder X-ray diffraction. He was awarded the Harold Zey Scholarship from the Portland chapter of the ACS, the Dow Scholarship for class of 1994, was inducted into Phi Beta Kappa.

After graduating from Reed, he returned to his home town of Spokane, WA and worked a variety of jobs. His work at Johnson-Matthey (now Honeywell) in the photonics division as a crystal fabrication technician polishing wafers of CdZnTe that were used in various detectors exposed him to an industrial R&D lab and spurred him to get an advanced degree.

In June of 1995, he married his high school girlfriend, Kristi Sprute, and they moved to Ithaca, NY to start graduate school at Cornell University in the Department of Chemistry and Chemical Biology. He joined Dr. Francis DiSalvo's group searching for advanced thermoelectric materials. He synthesized novel Cerium (and other Lanthanides) intermetallics by arc welding and high temperature and measured their relevant thermoelectric properties (electrical resistivity, thermal conductivity, and thermopower) from 4K to room temperature. For certain promising materials, he grew single crystals with the Czochralski method in order to measure the anisotropic thermoelectric properties. While at Cornell, he was blessed with the births of his sons, Connor and Keegan. In 2000, he earned his PhD in Inorganic Chemistry with a minor in Materials Science and Engineering. His thesis was titled "Thermoelectric Materials: Cerium Intermetallics and Compound Semiconductors".

He moved back to the west coast to join Intel as a process engineer in the lithography group of PTD - Portland Technology Development. His job is to install, maintain, and develop equipment called a track for coating and developing photoresist inside Intel's state-of-the-art manufacturing plant, or fab, in Hillsboro, OR. These tracks support I-line and KrF steppers and more recently ArF and immersion scanner exposure systems. With over 15 years of experience within the same group, he has become an expert on the equipment and enjoys teaching a class titled "Track University" for recent hires working on tracks.

Outside of work, Kevin enjoys spending time with his family, riding/racing motorcycles, playing ping pong, and volunteering with local organizations focused on immigration and homelessness.

