Project Totals

Total grants: \$2,879,575 \$1,006,329 (EDW credit)

Project Descriptions

- With Azad Siahmakoun, NSF proposal *Integrated Silicon Photonic Data Converters* submitted November 2018 (2018-2020, \$331,147, PI)
- With Mario Simoni on grant from Skyworks to include fabrication and measurement in our IC courses (2015, \$30K, PI).
- With Azad Siahmakoun on internal RHIT grants supplying seed money for HiSHiP (2013, \$20K), (2014, \$20K), (2016, \$40K), (2017, \$25K), (2018, \$25K)
- Collaborative research with Missouri University of Science & Technology on NSF CCLI Phase II grant to integrate electromagnetic compatibility, signal integrity, and high-speed design into engineering education (2006-2011, \$494,627, co-PI)
- Low-energy intentional electromagnetic interference, a RAPCEval/NEWSTARS project administered by the *Air Force Research Laboratory* (2008-2011, \$139,560, PI)
- With Azad Siahmakoun, Scott Kirkpatrick, Tom Adams, Elaine Kirkpatrick, and Dan Morris on DOE project to establish a center at Rose-Hulman for MEMS and nanotechnology (\$855,000 Azad Siahmakoun PI)
- With Jianjian Song and Dave Voltmer on the *NSF CCLI A&I project DUE-0410845* to introduce electromagnetic compatibility and signal integrity into undergraduate education (2004 2006, \$101,994, PI)
- With Cliff Grigg of the Rose-Hulman and Don Millard of Rensselaer Institute of Technology on an *NSF CCLI EMD project DUE-0088904* to bring effective practices to the engineering service course. (2000-2004, \$218,194, PI)
- With several colleagues on a project funded by the Keck Foundation for an undergraduate course on micro-electromechanical system (MEMS) at Rose-Hulman. (2002, \$400,000, Azad Siahmakoun PI)
- With Cliff Grigg on grant from Caterpillar to include data acquisition, measurement, and control systems in ECE 207. (2002, \$100,000, PI)
- With Cliff Grigg and Zac Chambers on a supplemental grant from NSF's *Foundation Coalition*. (Summer 2001, \$42,000, PI)
- Served as research consultant on NSF research project DMR-9633107 investigating compensation mechanisms in wide bandgap semiconductors. (1996-2000, \$340,000, Jack Boone PI)
- With colleagues in chemistry and electrical engineering in an investigation of applications for transparent, conductive films. This project involved the

deposition of ZnO and ITO layers on a glass petri dish to allow adherent cells to be electrostatically removed in order to minimize cell damage. (1998-2000, \$9,850, Co-Pl)

• With colleagues in psychology at VMI investigating the treatment of ADHD via neuro-feedback. Extended previous work performed at the University of Tennessee-Knoxville. (1999-2001, \$15,350,PI)