Projects Across All Domains

- Project with NTX Research, Paris “Development of e- password solution and implementation of Erindale cryptographic hash algorithm”- 01.01.2001-12.31. 2011
- Grant from Volkswagen Foundation “ Application of Security to Biometrics and Communications”- 07.01.2011-12.31.2013
- Project with Samsung corporation visual Display Division – “Design of a fast runtime integrity solution” 12.01.2011-5.31.2012
- Project with Samsung Research center in Ukraine (SURC)- “Design of data transformation algorithm”- 6.01-2012- 11.30.2012
- Project with SURC- “Components of data protection Engine”-5.01.2013-10.31.2013
- Project with SURC “Cloud search engine “ 01.2014 – 10.31.2014
- Project with Mentor Graphics Corporation “Development and implementation of waveform storage and compression algorithm”-01.01.2014-12.31-2014
- Project with Volo Global limited. “Design and software implementation of secure search over encrypted database”- November 15, 2016 – May 15 2017.
- Participation in the project: “Worldwide outdoor round robin study of organic photovoltaic devices and modules” with a large number of researchers worldwide.
- The team has won twice the Science and Technology Entrepreneurship Program (STEP) “From Idea to Market” award by Civilian Research and Development Foundation (CRDF), for 2012 and 2013 on the Ventilation Heat Recovery Device (VHRD).
- The group has performed experimentation in terms of the FREEZWATER project for water retention through natural freezing, performed on the Mt. Aragats, in cooperation with Swiss Cage holding and Fribourg University. It also has a Facebook page with videos describing it – https://www.facebook.com/Freezwater.
- The group has performed a project in cooperation with industry – Developing an Optimization Model for a Cost Effective Hybrid Solar Water Heating System, 2012.
- Group members have participated in the “Renewable Energy Roadmap of Armenia” in 2011.
- Development of fast laser scanning equipment for characterization of semiconductor wafers and solar cells, in Cooperation with National Renewable Energy Laboratory (NREL), 2011.
- Review of the Renewable Energy Landscape in Armenia.

- Solar Monitoring Station of the American University of Armenia.
- AUA Solar driven heating and cooling project (DESODEC). Participants: DER INETI, Lisbon, Portugal; ISE Freiburg, Fraunhofer, Germany; InterSolarCenter, Russia; Contact-A, AUA, Armenia.
- 2002 Heat recovery ventilation project.
- AUA 5kW PV Turpanjian project.
- 2006-2011. Laser scanning for semiconductor surface characterization: solar cells, IC chips, non-destructive tests (PVSCAN). Participants: National Renewable Energy Laboratory, Golden, Co, USA; AUA.
- Developing an Optimization Model for a Cost Effective Hybrid Solar Water Heating System.

Project	**Partner**
▪ Using the Pro/ENGINEER *Pro/Process for MFG* module to create process plans for the shaft part; Industry partner	*Arqell cjsc*
▪ Design and Analysis of Fast Grip Wrench	*United Testing Laboratory*
▪ Design of a Beam Load Cell for the Given Strain Gauge Sensor Through Sensitivity and Optimization Analysis	*United Testing Laboratory*
▪ Design and Manufacturing of Molds for Polypropylene Fittings	*ARMENOTOR cjsc*

■ Design of the Piping System for a Portable Compressed Natural Gas Station	*AMA Compressor LLC*
■ Mold Design for Borjomi Glass Bottle	*GlassWorld Company*
■ Design of Wind Turbine	*Florida State University – Keuka Wind, Florida*
■ Wind Turbine Desalination System	*Florida State University*
■ Design and Simulation of Stand for Mechanical Vibrations	*NI Armenia*

■ Design of Optical Oscilloscope	*YSU – CANDLE project*