

Research Grants and Contracts

(Give title of project, other senior investigators, starting and completion dates, and amount of funding, sponsoring agency.)

A. Proposals Approved and Funded

Total Award Amount (14 Grants): \$4.27 Million
Served or Serving as Principal Investigator on 13 of 14 Awards

- (1) Sponsor: National Science Foundation
Title: CAREER: Advanced Nanostructured Damping Materials
Funds: \$400,000
Period: 07/01/2004 - 06/31/2009
Effort: Principal Investigator
Associates: None

- (2) Sponsor: National Science Foundation
Title: NIRT: Miniaturized Chemical Sensors Featuring Electrical Breakdown near Carbon Nanotube Tips
Funds: \$1300,000
Period: 09/01/2004 - 09/31/2008
Effort: Principal Investigator
Associates: Pulickel Ajayan, Theo Borca-Tasciuc, Saroj Nayak and Steve Cramer

- (3) Sponsor: National Science Foundation
Title: NIRT: Fundamental Study of Electro- and Magneto-Mechanical Nano-Assemblies.
Funds: \$1150,000
Period: 09/01/2005 - 09/31/2009
Effort: Co-Investigator
Associates: Toh-Ming Lu, Theo Borca-Tasciuc, Mutsuhiro Shima and Gwo-Ching Wang

- (4) Sponsor: US Army- Penn State Vertical Lift Research Center of Excellence (VLRCOE)
Title: Next Generation Carbon-Nanotube/Carbon-Fiber Composites for Mechanical Properties Enhancement and Structural Monitoring
Funds: \$259,000
Period: 06/01/2006 - 06/01/2011
Effort: Principal Investigator
Associates: Linda Schadler

- (5) Sponsor: National Science Foundation
Title: Fundamental Study of Photo-Thermo-Mechanical Actuation in Carbon Nanotubes and their Composites
Funds: \$200,000
Period: 08/01/2007 - 07/31/2010
Effort: Principal Investigator
Associates: Assad Oberai

- (6) Sponsor: Motorola
Title: Carbon Nanotube Devices for RFID Application
Funds: \$195,000
Period: 01/1/2008 - 12/31/2010
Effort: Principal Investigator
Associates: None
- (7) Sponsor: US Army Aviation & Missile Research, Development & Engineering Center
Title: Carbon Nanotube Composites for Structural Health Monitoring
Funds: \$42,000
Period: 12/01/2007 - 8/30/2008
Effort: Principal Investigator
Associates: None
- (8) Sponsor: Department of Defense
Title: DURIP: Nano-Composites Characterization Facilities in Support of
US Army Funded Research at the Rensselaer Polytechnic Institute
Funds: \$150,000
Period: 08/01/2007 - 08/31/2008
Effort: Principal Investigator
Associates: None
- (9) Sponsor: US Army Benet Labs
Title: Fatigue Crack Growth Suppression in Carbon Nanotube Composites
Funds: \$15,000
Period: 01/1/2008 - 12/31/2008
Effort: Principal Investigator
Associates: None
- (10) Sponsor: National Science Foundation
Title: NER: Water Electrolysis Activated by Nanostructured Electrodes:
An Efficient Approach for Hydrogen Production
Funds: \$100,000
Period: 09/01/2006 - 09/01/2007
Effort: Principal Investigator
Associates: Toh-Ming Lu, Glenn A. Eisman
- (11) Sponsor: Army Research Office
Title: Multifunctional Carbon Nanotube Damping Films
Funds: \$238,552
Period: 04/13/2003 - 04/12/2006
Effort: Principal Investigator
Associates: Pulickel Ajayan, Prabhat Hajela
- (12) Sponsor: National Science Foundation
Title: NUE: Thermal and Electrical Transport in Carbon Nanotube Films
Funds: \$100,000
Period: 8/1/2003 - 04/01/2005
Effort: Principal Investigator
Associates: Pulickel Ajayan, Don Millard

- (13) Sponsor: National Science Foundation
Title: NER: Minimally Intrusive Damping Films Featuring Carbon Nanotubes
Funds: \$100,000
Period: 9/1/2002 - 8/30/2003
Effort: Principal Investigator
Associates: Pulickel Ajayan
- (14) Sponsor: Mainstream Engineering Corporation
Title: Carbon Nanotube Based Ultracapacitors for High Pulse-Power Applications
Funds: \$21,000
Period: 7/1/2004 - 2/30/2005
Effort: Principal Investigator
Associates: None

B. Revenue Sources Internal to Rensselaer

- (1) Sponsor: Office of Research, RPI
Title: Exploratory Seed Research Grant
Funds: \$50,000
Contract: 01/01/2002 – 06/30/2003
Effort: Principal Investigator
Associates: Pulickel Ajayan, Saroj Nayak, Prabhat Hajela
- (2) Sponsor: Office of Undergraduate Education, RPI
Title: Curriculum Innovation Grant
Funds: \$10,000
Contract: 07/01/2001 – 07/01/2002
Effort: Principal Investigator
Associates: None