

## Proposals Approved and Funded

- (1) Sponsor: National Science Foundation  
Title: Brittle Epoxies Rendered Ductile- Crazing in Thermosetting Epoxy Nanocomposites  
Funds: \$365,740  
Period: 09/01/2009 - 09/01/2012  
Effort: Principal Investigator  
Associates: Catalin Picu and Rajesh Khare
  
- (2) Sponsor: Office of Naval Research (ONR)  
Title: Hierarchical Nano-Composites: Dramatic Enhancements in Fatigue Resistance and Toughening  
Funds: \$350,000  
Period: 09/01/2009 - 09/01/2012  
Effort: Principal Investigator  
Associates: Catalin Picu
  
- (3) Sponsor: National Science Foundation  
Title: Fundamental study of nucleate boiling on nanostructured interfaces  
Funds: \$325,000  
Period: 09/01/2009 - 09/01/2012  
Effort: Co-Investigator  
Associates: Yoav Peles (Principal Investigator)
  
- (4) Sponsor: National Science Foundation  
Title: CAREER: Advanced Nanostructured Damping Materials  
Funds: \$400,000  
Period: 07/01/2004 - 06/31/2010  
Effort: Principal Investigator  
Associates: None
  
- (5) Sponsor: National Science Foundation  
Title: NIRT: Miniaturized Chemical Sensors Featuring Electrical Breakdown near Carbon Nanotube Tips  
Funds: \$1300,000  
Period: 09/01/2004 - 09/31/2009  
Effort: Principal Investigator  
Associates: Pulickel Ajayan, Theo Borca-Tasciuc, Saroj Nayak and Steve Cramer
  
- (6) 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

- (7) 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
- (8) 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 - 07/31/2011  
Effort: Principal Investigator  
Associates: Assad Oberai
- (9) Sponsor: Motorola  
Title: Carbon Nanotube Devices for RFID Application  
Funds: \$65,000  
Period: 01/1/2008 - 04/01/2009  
Effort: Principal Investigator  
Associates: None
- (10) 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
- (11) 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
- (12) 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

- (13) 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
- (14) 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
- (15) 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
- (16) 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
- (17) 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

#### **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