

Dennis M. Manos
(dmanos@wm.edu)

Position: Vice-Provost, College of William and Mary, and
Director Applied Research Center at Newport News, and
Interim Director, William and Mary Research Institute

EDUCATION

B.S. Case Institute of Technology, 1968;
Ph.D. Ohio State University, 1976.
U. S. Army Medical Field Service School,
Combat Medic, Medical Technologist, 1969-1971

ACADEMIC POSITIONS

Post-doctoral Fellow, Univ. of Toronto 1976-1978 (with J.C. Polanyi, Nobel Prize 1986),
Staff Physicist Princeton Univ., 1980-1983,
Research Physicist, Princeton Univ. 1983-1986,
Principal Research Physicist, Princeton Univ., 1986-1992, 1987 at MRC (see below)
Group, Branch, and Division Head: Administrative Titles at
DoE Princeton Plasma Physics Laboratory, held concurrently with the above positions at Princeton University.
Visiting Research Scientist, Thomas Jefferson National Accelerator 1992-,
Adjunct Professor of Physics, Hampton University 1993-1997,
International Cooperative Professor, University of Electronic Science and Technology, Chengdu China, 1996-2000
CSX Eminent Professor, College of William and Mary, 1992-present,

INDUSTRY POSITIONS:

Aerochem Research Laboratories, Staff Scientist, 1978-1980

Princeton Scientific Consultants, Inc.

Treasurer, 1981-1986,

Vice-President 1988-1990,

President 1990-1992, PSC

Consultant to ~ 100 technical corporations.

Materials Research Corporation, Vice-President of Technology, 1987

Mentor Technologies Group, Consultant 1998-2002

Rosetta Venture Capital, Consultant 2002-present

SMTS Corporation, Scientific Advisory Board, 2002-present

Business School Entrepreneurial Development Board, 2005-present

Honors

Connaught Foundation Fellowship 1976-1978,

CSX Chair, Applied Science and Physics 1992,
Fellow of the American Vacuum Society 1994,
NASA Goddard Space Flight Center, Group Achievement Award, 1996
Omicron Sigma Kappa Honor Society, Faculty Inductee 1996

Classroom Lecturer

P101 Introduction to General Physics
P107 Physics for Life Sciences
P102H Introduction to General Physics – Honors Section
P451/452 Physics Undergraduate Research, list supervised students below*
P800 Physics Dissertation, Thesis,
APSC150.01W Freshman Science Seminar – The Shape of Things.
APSC 525 Introduction to Solid Surfaces and Interfaces.
APSC 625 Plasma Physics for Device Processing
APSC 726 Solid Surfaces and Interfaces
APSC 784 Measurement Methods
APSC 790 Readings in Applied Science: Term course titles
Statistical Analysis of Time Series,
Business for Technical Entrepreneurs,
Fortran programming for problem solving.
APSC 791 Topics in Applied Science: One term course titles:
Statistical Thermodynamics
Mathematical Methods in Physics and Engineering,
Neural Network Methods for Plasma Probe Diagnostics
Optics
Particle-Surface Interactions
Passage of Ions through Matter
APSC 794 Internship.
APSC 795 Research.
APSC 800 Applied Science Dissertation, Thesis

Undergraduate Research Supervision

Thesis Committee as Director

| | |
|---------------------|------------------|
| Robert Bassett | Winthrop Brown |
| Ryan Bubb | James Buckingham |
| Lisa DeJong | Timothy Finegan |
| Adam Friedman* | Evin Taft Grano |
| Michael Johnson* | Miles Johnston* |
| Bon Woo Lee | Truong Pham |
| Anthony Richardella | Linton Wells III |
| Phillip Williams | Joshua Waterfall |
| Jason Hoffman | Jack Simonsen |

Mentor: Research Experience for Undergraduates, or early research project advisor, or thesis committee member

| | | |
|------------------------------|--------------------|----------------------------|
| Thomas Walls | Emily Woodward | Adam Holman |
| Josh Waterfall | Ruth Van de Water | Kelley Sullivan |
| David Leichtman | Gregory Buchholz | James Buckingham |
| Jason Hoffman | Anthony Holincheck | Laurel Averett |
| Patrick Roberts | Amoreena Ranck | Edward Cox |
| Bridgette Finn | Andrew Cady | Wendy Vogan |
| Emily Chapman | | Gregory Benson |
| Brooke Stutzman | | Jason Hoffman |
| Jennifer Weisman (Chemistry) | | Geoffrey David (Chemistry) |

Edith Bowers (Chemistry)
Anthony Czer Lim (Biology)
Nicholas Kain (CWM-ARC)
Timothy van Drew (VCU- VMEC)
Timothy Schaefer (VT-VMEC)
Chandler Amiss

Kristina Hoke (Biology)
Laura Park (Biology)
Michelle Kennedy (VaTech-ARC)
Donald Bitner (ODU-VMEC)
Erin Brinch (TNCC)
Charles Tahan

High School Teacher Summer Research Michelle Herzer Edward Nartowitz Richard Hodge Ahmed Halim

Graduate Research and Thesis Supervision

Ph.D. Completed:

Agus Ananda
Pierre Emeric
James McAdoo
Christopher Nichols
Joseph Ametepe
Walter Silva
Xianmin Tang
Thomas Venhaus
Lingling Wu
Nimel Theodore
Sheng Peng
Mingyao Zhu

Ph.D. in progress

Kun Hou (expected Dec 2007)
Shannon Arnold
Johnny Tang

Ph.D. reader or co-advisor

David Ruzic
John Cuthbertson
David Moore
Douglas Baker
Minzhu Li
Eugene Malyrenko
Dasha Malyrenko
Andy Glen
Dianne Evans
Erik Keilin
Sheeba Ahmed
George Andrews
Randy Wojick
Wendy Vogan
Xin Zhao
Haijian Chen
Peter Miraldo (in progress, expected 2008)
Ronald Quinlan (in progress, expected 2008)

Masters Program Mentor

Jesse Diggs
Chaoyu Liu

David Hays (MBA Field Studies)
 James Hagy (MBA Field Studies)
 Lawrence Mtetwa
 Amy Wilkerson
 Ping Tang
 Brooks Childers
 Lisa August
 Johnny Tang
 Shannon Arnold
 Joy Bryant
 Robert Perez
 Meghan Goldman
 Christine Hopkins
 Rudy Werlink

Post-doctoral trainees:

Douglas Baker
 Dasha Malyarenko
 Hapreet Sanghera
 Benjamin French
 Xin Zhao
 Nimel Theodore
 Benjamin French
 Sigen Wang
 Jianjun Wang

CONTRACTS, AND GRANTS as PI, co-PI, or co-Investigator 1992-2001

| <i>Aw. Date</i> | <i>Dept</i> | <i>Acct#</i> | <i>Prop#</i> | <i>S#</i> | <i>Begin</i> | <i>End</i> | <i>Agency</i> | <i>\$</i> |
|-----------------|-------------|--------------|--------------|-----------|--------------|------------|---------------|--------------|
| 8/17/1992 | | 331891 | 1993-021 | 1 | 7/1/1992 | 1/31/1993 | SURA | \$9,000.00 |
| 11/25/1992 | | 304051 | 1993-119 | 1 | 11/25/1992 | 12/31/1993 | NASA | \$17,160.00 |
| 2/16/1993 | | 372091 | 1993-213 | 1 | 2/16/1993 | 12/15/1993 | SURA | \$53,136.00 |
| 2/17/1993 | | 331971 | 1993-246 | 1 | 2/16/1993 | 9/30/1993 | SURA | \$10,000.00 |
| 4/14/1993 | | 372091 | 1993-270 | 1 | 2/16/1993 | 12/15/1993 | SURA | \$20,144.00 |
| 9/27/1993 | | 304141 | 1994-077 | 1 | 1/1/1994 | 12/31/1996 | NASA | \$157,500.00 |
| 12/13/1993 | | 381211 | 1994-159 | 1 | 12/1/1993 | 9/30/1994 | SEMATEC | \$35,500.00 |
| 12/16/1993 | | 301181 | 1994-095 | 1 | 1/1/1994 | 12/31/1994 | NASA | \$68,919.00 |
| 12/17/1993 | | 354391 | 1994-129 | 1 | 1/1/1994 | 12/31/1994 | CIT | \$31,870.00 |
| 12/22/1993 | | 382001 | 1994-215 | 1 | 1/1/1994 | 12/31/1994 | VAPOWER | \$27,970.00 |
| 1/5/1994 | | 301191 | 1994-093 | 1 | 1/5/1994 | 1/4/1995 | NASA | \$224,145.00 |
| 3/22/1994 | | 301201 | 1994-092 | 1 | 1/1/1994 | 12/31/1994 | NASA | \$174,606.00 |
| 5/27/1994 | | 304171 | 1994-396 | 1 | 6/1/1994 | 10/31/1994 | NASA | \$7,115.00 |
| 6/14/1994 | | 304181 | 1994-420 | 1 | 7/1/1994 | 10/31/1995 | NASA | \$100,000.00 |
| 6/30/1994 | | 372341 | 1994-448 | 1 | 6/15/1994 | 10/31/1996 | SURA | \$12,302.00 |
| 8/15/1994 | | 304131 | 1995-041 | 1 | 1/1/1995 | 9/30/1995 | NASA | \$45,000.00 |
| 8/25/1994 | | 304131 | 1995-051 | 1 | 1/1/1995 | 9/30/1995 | NASA | \$2,000.00 |
| 9/20/1994 | | 332361 | 1995-005 | 1 | 9/1/1994 | 9/30/1995 | NIST | \$5,661.00 |
| 10/11/1994 | | 304201 | 1995-098 | 1 | 10/15/1994 | 9/30/1995 | NASA | \$84,535.00 |

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|------------|--------|----------|---|------------|------------|---------|---------------|
| 10/19/1994 | 301191 | 1995-125 | 1 | 1/5/1994 | 12/31/1995 | NASA | \$42,695.00 |
| 10/27/1994 | 332361 | 1995-133 | 1 | 10/1/1994 | 10/31/1995 | NIST | \$65,100.00 |
| 12/16/1994 | 301201 | 1995-193 | 1 | 3/15/1994 | 12/31/1994 | NASA | \$33,258.00 |
| 12/20/1994 | 304211 | 1995-189 | 1 | 1/1/1995 | 3/31/1995 | NASA | \$24,124.00 |
| 12/27/1994 | 382001 | 1995-187 | 1 | 1/1/1995 | 12/31/1995 | VAP/CIT | \$45,620.00 |
| 12/28/1994 | 301251 | 1995-081 | 1 | 1/1/1995 | 12/31/1996 | NASA | \$89,337.00 |
| 12/28/1994 | 301241 | 1995-080 | 1 | 1/1/1995 | 12/31/1996 | NASA | \$164,228.00 |
| 1/9/1995 | 304221 | 1995-214 | 1 | 1/1/1995 | 10/31/1997 | NASA | \$89,596.00 |
| 1/12/1995 | 304171 | 1995-213 | 1 | 11/1/1994 | 10/31/1995 | NASA | \$26,342.00 |
| 1/18/1995 | 304131 | 1995-227 | 1 | 5/1/1995 | 8/23/1995 | NASA | \$40,000.00 |
| 1/20/1995 | 301261 | 1995-079 | 1 | 1/20/1995 | 1/19/1997 | NASA | \$155,243.00 |
| 1/27/1995 | 355091 | 1995-238 | 1 | 1/1/1995 | 12/31/1995 | CIT | \$25,000.00 |
| 2/8/1995 | 301201 | 1995-085 | 1 | 1/1/1995 | 12/31/1996 | NASA | \$204,602.00 |
| 3/6/1995 | 301181 | 1995-279 | 1 | 1/1/1994 | 6/30/1995 | NASA | \$13,128.00 |
| 3/20/1995 | 304201 | 1995-287 | 1 | 10/15/1994 | 9/30/1995 | NASA | \$11,519.00 |
| 3/29/1995 | 304131 | 1995-300 | 1 | 8/24/1994 | 12/31/1995 | NASA | \$44,924.00 |
| 3/29/1995 | 304211 | 1995-299 | 1 | 1/1/1995 | 3/31/1995 | NASA | \$3,003.00 |
| 3/30/1995 | 382121 | 1995-294 | 1 | 3/30/1995 | 11/30/1995 | SEMATEC | \$24,000.00 |
| 6/9/1995 | 304131 | 1995-397 | 1 | 4/16/1995 | 4/15/1996 | NASA | \$40,000.00 |
| 6/22/1995 | 304131 | 1996-025 | 1 | 4/16/1995 | 4/15/1996 | NASA | (\$40,000.00) |
| 8/7/1995 | 382171 | 1996-045 | 1 | 8/7/1995 | 8/6/1996 | DUPONT | \$50,000.00 |
| 8/22/1995 | 304131 | 1996-054 | 1 | 1/1/1995 | 4/15/1996 | NASA | \$40,000.00 |
| 8/29/1995 | 304201 | 1996-065 | 1 | 10/1/1995 | 9/30/1996 | NASA | \$90,893.00 |
| 9/14/1995 | 332361 | 1996-050 | 1 | 9/25/1995 | 10/31/1996 | NIST | \$75,110.00 |
| 9/15/1995 | 311111 | 1994-356 | 1 | 10/1/1995 | 9/30/1999 | NSF | \$239,928.00 |
| 9/25/1995 | 304211 | 1996-092 | 1 | 1/1/1995 | 3/31/1995 | NASA | (\$2,645.00) |
| 10/1/1995 | 332781 | 1996-129 | 1 | 10/1/1995 | 9/30/1996 | SURA | \$20,016.00 |
| 10/4/1995 | 332721 | 1995-284 | 1 | 9/2/1995 | 8/31/1996 | STRESS | \$50,000.00 |
| 12/12/1995 | 304221 | 1996-168 | 1 | 1/18/1996 | 1/17/1997 | NASA | \$82,504.00 |
| 1/15/1996 | 332781 | 1996-208 | 1 | 2/1/1996 | 9/30/1996 | SURA | \$13,344.00 |
| 2/27/1996 | 301261 | 1996-217 | 1 | 1/20/1996 | 1/19/1998 | NASA | \$87,654.00 |
| 3/6/1996 | 304131 | 1996-268 | 1 | 4/16/1996 | 9/15/1996 | NASA | \$62,000.00 |
| 3/15/1996 | 301301 | 1996-111 | 1 | 3/15/1996 | 3/14/1998 | NASA | \$165,334.00 |
| 7/24/1996 | 301331 | 1996-329 | 1 | 7/24/1996 | 6/30/1998 | NASA | \$44,124.00 |
| 7/31/1996 | 382171 | 1997-025 | 1 | 8/7/1996 | 8/1/1997 | DUPONT | \$50,000.00 |
| 8/1/1996 | 304131 | 1997-040 | 1 | 8/1/1996 | 2/28/1997 | NASA | \$64,000.00 |
| 8/6/1996 | 304201 | 1997-045 | 1 | 10/1/1996 | 12/31/1996 | NASA | \$19,843.00 |
| 8/20/1996 | 333092 | 1997-373 | 1 | 8/1/1996 | 7/31/1997 | VCES | \$26,615.00 |
| 9/5/1996 | 304271 | 1997-058 | 1 | 9/16/1996 | 8/5/1998 | NASA | \$41,829.00 |

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|------------|--------|----------|---|------------|------------|---------|---------------|
| 10/1/1996 | 332781 | 1997-119 | 1 | 10/1/1996 | 9/30/1997 | SURA | \$40,032.00 |
| 11/5/1996 | 372931 | 1997-071 | 1 | 10/15/1996 | 8/15/1997 | VSGC | \$15,000.00 |
| 12/6/1996 | 372961 | 1997-172 | 1 | 12/15/1996 | 1/31/1997 | EWI | \$7,500.00 |
| 1/28/1997 | 304221 | 1997-252 | 1 | 1/18/1997 | 7/31/1997 | NASA | \$67,433.00 |
| 1/28/1997 | 304201 | 1997-254 | 1 | | 1/28/1997 | NASA | (\$31,563.00) |
| 3/4/1997 | 333281 | 1997-296 | 1 | 1/31/1997 | 1/31/1999 | STRESS | \$150,389.00 |
| 4/30/1997 | 301332 | 1997-320 | 1 | 1/24/1997 | 12/31/1997 | NASA | \$30,567.00 |
| 5/1/1997 | 373031 | 1997-261 | 1 | 5/1/1997 | 4/30/1999 | VSGC | \$10,000.00 |
| 5/2/1997 | 373061 | 1997-367 | 1 | 5/1/1997 | 8/9/1998 | VSGC | \$8,500.00 |
| 5/19/1997 | 373511 | 1999-037 | 1 | 8/25/1998 | 8/24/2000 | LUCE | \$50,000.00 |
| 5/24/1997 | 301301 | 1997-201 | 1 | 3/15/1997 | 3/14/1998 | NASA | \$6,525.00 |
| 7/11/1997 | 333421 | 1996-382 | 1 | 7/1/1997 | 10/31/1997 | ASM | \$23,000.00 |
| 7/28/1997 | 382171 | 1998-037 | 1 | 8/1/1997 | 12/31/1998 | DUPONT | \$50,000.00 |
| 10/1/1997 | 332781 | 1998-151 | 1 | 10/1/1997 | 9/30/1998 | SURA | \$41,712.00 |
| 1/7/1998 | 373331 | 1997-161 | 1 | 10/1/1997 | 12/30/1998 | VSGC | \$6,500.00 |
| 3/31/1998 | 333092 | 1998-167 | 1 | 8/1/1996 | 7/31/1998 | VCES | \$27,615.00 |
| 3/31/1998 | 333092 | 1998-333 | 1 | 8/1/1996 | 7/31/1997 | VCES | (\$4,820.00) |
| 8/15/1998 | 350892 | 1999-324 | 1 | 9/15/1998 | 9/14/1999 | CIT | \$90,000.00 |
| 8/18/1998 | 350891 | 1998-285 | 1 | 9/15/1998 | 9/14/1999 | CIT | \$115,000.00 |
| 8/18/1998 | 350894 | 1999-326 | 1 | 9/15/1998 | 9/14/1999 | CIT | \$22,500.00 |
| 8/18/1998 | 350893 | 1999-325 | 1 | 9/15/1998 | 9/14/1999 | CIT | \$22,500.00 |
| 9/9/1998 | 350901 | 1999-044 | 1 | 9/1/1998 | 3/31/1999 | CIT | \$20,000.00 |
| 10/1/1998 | 332781 | 1999-145 | 1 | 10/1/1998 | 9/30/1999 | SURA | \$20,856.00 |
| 10/15/1998 | 382471 | 1998-359 | 1 | 9/1/1998 | 12/31/1999 | SOLAREX | \$13,060.00 |
| 10/30/1998 | 332781 | 1999-216 | 1 | 10/1/1998 | 9/30/1999 | SURA | (\$5,214.00) |
| 2/1/1999 | 333891 | 1998-015 | 1 | 1/1/1999 | 10/31/1999 | ODU | \$76,362.00 |
| 2/9/1999 | 333901 | 1999-285 | 1 | 2/9/1999 | 12/31/1999 | VSGC | \$8,000.00 |
| 5/25/1999 | 382531 | 1999-299 | 1 | 5/1/1999 | 6/30/2000 | CORNING | \$62,310.00 |
| 5/25/1999 | 334041 | 1999-403 | 1 | 12/1/1998 | 11/30/1999 | ODU | \$14,580.00 |
| 6/30/1999 | 350894 | 1999-326 | 2 | 9/15/1998 | 6/30/2000 | CIT | \$45,000.00 |
| 6/30/1999 | 350891 | 1998-285 | 2 | 9/15/1998 | 6/30/2000 | CIT | \$226,000.00 |
| 6/30/1999 | 350892 | 1999-324 | 2 | 9/15/1998 | 6/30/2000 | CIT | \$184,000.00 |
| 6/30/1999 | 350893 | 1999-325 | 2 | 9/15/1998 | 6/30/2000 | CIT | \$45,000.00 |
| 9/28/1999 | 301501 | 2000-045 | 1 | 10/1/1999 | 9/30/2002 | NASA | \$25,000.00 |
| 12/8/1999 | 334041 | 1999-403 | 2 | 12/1/1999 | 11/30/2000 | ODU | \$14,580.00 |
| 12/20/1999 | 333891 | 1998-015 | 2 | 1/1/1999 | 12/31/1999 | ODU | \$15,273.00 |
| 2/1/2000 | 334261 | 2000-115 | 1 | 2/1/2000 | 1/31/2001 | AFOSR | \$149,940.00 |
| 3/3/2000 | 301501 | 2000-045 | 2 | 3/3/2000 | 9/30/2002 | NASA | \$149,059.00 |
| 6/12/2000 | 350891 | 1998-285 | 3 | 7/1/2000 | 6/30/2001 | CIT | \$219,000.00 |

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|------------|--------|----------|---|------------|------------|-------|---------------|
| 6/23/2000 | 350893 | 1999-325 | 3 | 7/1/2000 | 6/30/2001 | CIT | \$40,000.00 |
| 6/23/2000 | 350892 | 1999-324 | 3 | 7/1/2000 | 6/30/2001 | CIT | \$166,000.00 |
| 6/23/2000 | 350894 | 1999-326 | 3 | 7/1/2000 | 6/30/2001 | CIT | \$40,000.00 |
| 11/21/2000 | 334261 | 2000-115 | 2 | 12/1/2000 | 12/31/2002 | AFOSR | \$149,940.00 |
| 12/5/2000 | 301501 | 2000-045 | 3 | 12/4/2000 | 9/30/2002 | NASA | \$150,000.00 |
| 12/20/2000 | 334041 | 1999-403 | 3 | 12/1/2000 | 11/30/2001 | ODU | \$14,580.00 |
| 4/20/2001 | 353471 | 2002-093 | 1 | 5/21/2001 | 8/24/2001 | VMEC | \$6,500.00 |
| 5/4/2001 | 334861 | 2001-249 | 1 | 3/7/2001 | 6/30/2002 | SURA | \$44,487.50 |
| 6/1/2001 | 374381 | 2001-238 | 1 | 7/1/2001 | 6/30/2002 | VSGC | \$5,000.00 |
| 6/14/2001 | 350893 | 1999-325 | 4 | 7/1/2001 | 6/30/2003 | CIT | \$28,468.00 |
| 6/14/2001 | 350894 | 1999-326 | 4 | 7/1/2001 | 6/30/2003 | CIT | \$28,468.00 |
| 6/14/2001 | 350892 | 1999-324 | 4 | 7/1/2001 | 6/30/2003 | CIT | \$125,464.00 |
| 6/14/2001 | 350891 | 1998-285 | 4 | 7/1/2001 | 6/30/2003 | CIT | \$152,600.00 |
| 8/25/2001 | 335021 | 2002-086 | 1 | 8/25/2001 | 10/31/2001 | SURA | \$4,124.99 |
| 10/25/2001 | 335021 | 2002-086 | 2 | 11/1/2001 | 11/30/2001 | SURA | \$1,833.33 |
| 11/6/2001 | 353691 | 2002-270 | 1 | 11/1/2001 | 12/31/2002 | CTRF | \$1,080,790.0 |
| 11/13/2001 | 301501 | 2000-045 | 4 | 11/13/2001 | 9/30/2002 | NASA | \$2,500.00 |
| 11/30/2001 | 335021 | 2002-086 | 3 | 12/1/2001 | 10/31/2002 | SURA | \$20,166.63 |

Grants and Contracts Total Yrs 1992-2001 \$7,500,949.

Contracts and Grants as PI, co-PI, or co-Investigator 2002-2006

| | | | | | | | |
|------------|--------|--|--|-----------|------------|---------|----------------|
| 2/21/2002 | 335151 | | | 2/1/2002 | 7/31/2004 | UNC-C | \$217,939.00 |
| 10/4/2002 | 335441 | | | 10/8/2002 | 10/7/2003 | ONR | \$113,214.00 |
| 10/20/2002 | 335021 | | | 11/1/2002 | 10/31/2003 | SURA | \$21,996.00 |
| 5/22/2002 | 354031 | | | 5/28/2002 | 8/3/2002 | VMEC | \$7,000.00 |
| 7/19/2002 | 335361 | | | 7/8/2002 | 10/7/2002 | ONR | \$35,000.00 |
| 11/21/2002 | 353691 | | | 11/1/2001 | 4/30/2003 | CTRF | \$541,958.00 |
| 5/7/2002 | 374381 | | | 7/1/2002 | 6/30/2003 | VSGC | \$5,000.00 |
| 7/13/2002 | 334861 | | | 5/25/2002 | 6/30/2003 | SURA | \$20,000.00 |
| 4/1/2003 | 335561 | | | 6/1/2003 | 11/30/2004 | ONR | \$1,974,000.00 |
| 1/8/2003 | 334861 | | | 3/7/2001 | 6/30/2002 | SURA | \$20,000.00 |
| 6/3/2003 | 354361 | | | 5/25/2003 | 8/24/2003 | VMEC | \$7,500.00 |
| 5/14/2003 | 335721 | | | 4/1/2003 | 9/30/2003 | INCOGEN | \$49,975.00 |
| 6/18/2003 | 334861 | | | 3/7/2001 | 9/30/2003 | SURA | \$6,000.00 |
| 11/17/2003 | 334861 | | | 3/7/2001 | 9/30/2003 | SURA | (\$694.76) |
| 1/23/2003 | 353691 | | | 11/1/2001 | 10/31/2003 | CTRF | \$541,958.00 |
| 10/2/2003 | 335021 | | | 11/1/2002 | 10/31/2003 | SURA | (\$4,124.25) |
| 5/15/2003 | 374381 | | | 6/1/2003 | 6/30/2004 | VSGC | \$5,000.00 |
| 12/2/2003 | 334861 | | | 4/14/2004 | 9/30/2004 | SURA | \$39,367.00 |

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|----------------------|--------|-----------|---------------|---------|----------------|
| 10/2/2003 | 335441 | 10/8/2003 | 10/7/2004 | ONR | \$116,044.00 |
| 4/7/2004 | 354641 | 5/25/2004 | 8/24/2004 | UVA | \$10,450.00 |
| 4/14/2004 | 336161 | 1/3/2005 | 1/3/2005 | SURA | \$39,367.00 |
| 6/10/2004 | 336301 | 4/1/2004 | 8/31/2005 | Incogen | \$160,272.00 |
| 8/15/2005 | 336301 | 4/1/2004 | 8/31/2005 | Incogen | \$198,187.00 |
| 4/1/2005 | 336161 | 4/14/2004 | 6/30/2006 | SURA | \$48,383.00 |
| 4/27/2006 | 336162 | 5/01/2006 | 8/31/2006 | SURA | \$27,299.00 |
| 8/28/2006 | 336162 | 5/1/2006 | 12/24/2006 | JEFSCI | \$36,087.00 |
| 9/1/2005 | 336881 | 6/1/2005 | 12/31/2006 | ONR | \$1,299,830.00 |
| Grants and Contracts | | Total | Yrs 2002-2006 | | \$5,537,007. |
| Grants and Contracts | | Total | Yrs 1992-2006 | | \$13,037,956 |

PROFESSIONAL SERVICE

Governor's Joint Commission on Science and Technology,
 Subcommittees on Nanotechnology and Computational Science 2004-
 Governor's Virginia Research and Technology Advisory Committee, 2004-
 Chair, Intellectual Property Sub-Committee, Governor's VRTAC, 2004-2005
 Chair, Ad Hoc Committee on Graduate Students 2006-
 Faculty Committee on University Priorities, 2004-
 Advisory Council on Space Management, 2004-
 Faculty Research, 2004-
 Task Force on Digital Imaging 2006-
 Institutional Animal Use and Care, 2004-
 Institutional Biosafety Committee, 2004-
 Protection of Human Subjects Committee, 2004-
 Radiation Safety Committee, 2004-
 Representative, Virginia Microelectronics Consortium, Operations Committee, 1997-present
 Representative, Virginia Microelectronics Consortium, Executive Committee, 2005-present
 Swem Library Committee 1996-2002
 Faculty Compensation Board 2001-2004
 Director, Technology Innovation Center, Center for Innovative Technology, 1998-2003
 Representative, INanoVA, Consortium for Nanotechnology in Virginia, 2001-2005
 Honors and Interdisciplinary Studies 1993-2004
 Charles Center - Rhodes Scholarship Review Committee, 1994- 2004
 Dean's Advisory Committee, 1992-2000
 College Representative, Virginia Space Grant Consortium, 1992-present, Chair, 1996- 2006
 Representative, Peninsula Area Technology Development Committee, 1992-1993
 Director William and Mary Applied Science Program, 1992-1995
 Chair, Applied Science Department, William and Mary, 1995-2000
 Center Director, Applied Research Center at Newport News, 1998-
 Chair, Applied Science Admission Committee 1992-1995
 Applied Science Academic Progress Committee, 1992-present
 Applied Science Space Committee, 1992-1995
 Applied Science Faculty Search committees, ad hoc, 1993-2000
 Physics Dept. Appointments Committee, 1994-1998
 Physics Dept. Ad hoc Evaluation Committee on Shops, Chair, 1994-1995

Princeton Univ. Plasma Laboratory (PPPL) Public Spokesperson 1985-1992
PPPL Emergency Response Spokesperson 1990-1992
US DoE DT Materials Physics Task Group 1986-1992, Chairman 1990-1992
US DoE High Heat Flux Materials Task Group 1984-1990
US DoE Evaluation Committee on CO₂ and Global Warming 1990
US DoE Representative to International Thermonuclear Experimental Reactor, 1990-1992
Arbitrator, Princeton University Grievance Committee, 1990-1992
Chair, Science on Saturday, PPPL Community Education Program 1990-1992
CEBAF-CETAC Steering Committee, 1992-1995
CEBAF Laser Processing Consortium Steering Committee 1994-present
Senior Editor AIP Books Series, 1992-1998
Senior Editor, AIP Conference Proceeding Series, 1992-1994
AVS Program Committee 1985-1993, Vice Chair, 1989, Chair, 1993
AIP Liason Committee 1989-1990
AVS Publications Committee, Vice-Chair 1992-1995
AVS Plasma Diagnostic Committee, Chair, 1990
AVS Associate Editor J. Vac. Sci. Technol B, 1998-2000

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