



## **Professor Romesh Chandra Batra**

See:

<http://www2.esm.vt.edu/~rbatra/>

<http://scholar.google.com/citations?user=QpAXXoEAAAAJ&hl=en>

<http://www.barnesandnoble.com/c/r.-c.-batra>

<http://journalogy.net/Author/4254660/romesh-batra>

Clifton C. Garvin Professor  
Department of Engineering Science and Mechanics  
Virginia Polytechnic Institute and State University, Blacksburg, Virginia

### **Education:**

B.S., Mech'l Eng'g, (Gold Medalist, 1st rank in 3 states), Punjabi Univ., India, 1968.

M.A.Sc., Mech'l Eng'g, Univ. of Waterloo, Waterloo, Canada, 1969.

Ph.D., The Johns Hopkins University, Baltimore, USA, 1972.

### **Research Interests:**

Multiscale Analysis of Multiphysics Problems involving material and Geometric Nonlinearities, Nanomechanics, Dynamic Failure under Shock Loads, Smart Structures, Functionally Graded Materials.

### **Awards:**

2011 Virginia Outstanding Scientist Award

2010 Virginia State Council of Higher Education Outstanding Faculty Award

2010 Lee Hsun Research Award, Institute of Metals Research, Chinese Academy of Sciences

2009 Engineering Science Medal of the Society of Engineering Science  
2006 Honorary D.Sc. degree from Thapar University, India

**Journal Editor:**

Mathematics & Mechanics of Solids  
International Journal of Computational Methods

**Book:**

Elements of Continuum Mechanics, published by AIAA, ISBN: 1563476991, August 2005, 308 pages

**Publications:**

Adiabatic Shear Banding (80 publications)  
Constitutive Relations (5 recent publications)  
Contact/Indentation (11 publications)  
Dynamic Buckling (7 publications)  
Dynamic Fracture Mechanics (5 recent publications)  
Functionally Gradient Materials (34 publications)  
Meshless Method (31 publications)  
Microelectromechanical systems (MEMS) (11 publications)  
Nanoscience/Nanotechnology (9 publication)  
Penetration & Impact Problems (5 recent publications)  
Plates, Shells, Beams and Rods (83 publications)  
Smart Structures/piezoelectricity (48 publications)