Dr. George G. Adams

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EDUCATIONAL BACKGROUND:

University of California, Berkeley, CA, Mechanical Engineering, Ph.D., June 1975

University of California, Berkeley, CA, Mechanical Engineering, M.S., March 1972

Cooper Union, New York, NY, Mechanical Engineering, B.S., June 1969

PROFESSIONAL BACKGROUND:

Northeastern University, Boston, MA, College of Engineering Distinguished Professor (July 2004 – present); Professor of Mechanical Engineering (July 1986 – present); Associate Professor (July 1982 – June 1986); Assistant Professor (Sept. 1979 – June 1982).

Research in contact mechanics, friction, mechanics and tribology of MEMS, nanomechanics, and vibration.

Teaching graduate courses in solid mechanics (vibrations, elasticity and plasticity, advanced mechanics of materials, and advanced dynamics) and mathematical methods; undergraduate courses in solid mechanics (statics, dynamics, strength of materials, and vibrations), mechanical design, design projects, and computer software applications.

University of California, Berkeley, CA, Visiting Scholar, Mechanical Engineering Department, April 1979 – August 1979. Research in moving loads problems on structures.

IBM Research Center, San Jose, CA, Research Associate in Mechanics and Hydrodynamics, January 1978 – March 1979. Analytical and numerical analysis of high-speed flexible rotating disks, including the effect of fluid coupling. Analysis of inkjet printing components.

Clarkson University, Potsdam, NY, Assistant Professor of Mechanical Engineering, September 1975 – August 1979 (on leave January 1978 – August 1979). Research in moving load problems, contact problems, and stress analysis. Teaching graduate courses in solid mechanics and undergraduate courses in solid mechanics and computer programming.

Curtiss-Wright Co., Woodbridge, NJ, Associate Engineer, September 1969 – August 1970. Vibration analysis of multi-mass structures using analytical and numerical methods.

HONORS AND PROFESSIONAL ORGANIZATIONS (past and present):

- Northeastern University *College of Engineering Distinguished Professor*.
- Fellow of the ASME.
- Fellow of the STLE.
- College of Engineering 2002 *Excellence in Research Award*.

- Chair and Co-Founder of the *Contact Mechanics Technical Committee* of the Tribology Division of ASME.
- Associate Editor of the *International Journal of Surface Science and Engineering.*
- Associate Editor of ASME *Journal of Tribology*.
- Associate Editor of *Microsystems Technologies.*
- Associate Editor of STLE *Tribology Transactions.*
- Associate Editor of *Journal of Information Storage and Processing Systems.*
- Keynote address at the Friction Session entitled "Asperity-Based Models of Micro-Scale Friction," at the World Tribology Congress III, September 2005.
- Invited talk entitled "A Multi-Asperity Contact and Friction Model With Adhesion," Materials Research Society, Fall 2002.
- Invited talk entitled "Contact Modeling – Forces," at *Tribology of Information Storage Devices*, (TISD'99), 1999.
- Member and Proceedings Chair of the Executive Committee of the Information Storage and Processing Systems division of the ASME.
- Director and Founder of the Industrial Relations Group and ASME/IRG Connections of the Boston Section of ASME, 1989-1991.
- Chairman of the Computers in Mechanical Engineering Subchapter of the Boston Section of ASME, 1988-1989.
- Subcommittee on Tribology and Mechanics of Magnetic Storage Systems (a subcommittee of the Research Committee on Tribology of the ASME).
- Elected Member of the Executive Committee of the Boston Section of ASME.
- Membership Development Committee of the Applied Mechanics Division of the ASME.
- Reviewer for numerous technical journals.
- Chaired and organized many technical sessions at a variety of national/international conferences.
- National Science Foundation Fellowship.

CONSULTING:

- Micro-Optical Engineering Corporation
- Polaroid Corporation
- IBM Office Products Division
- Turning Point Software
- Daymarc Corporation

PATENTS

- Rensing, Noa M., Adams, George G., McGruer, Nicol E., McClelland, Robert W., and Zavracky, Paul M., *Micro-electromechanical optical switch assembly for optical data networks,* United States Patent 6701038, March 2, 2004.

UNIVERSITY SERVICE:

Committee chaired (past and present):
MIE Graduate Committee
MIE Department Chair Search Committee
MIE Merit Review Task Force
Career Development Committees (3)
MIE Coop Liaison Committee
MIME Promotion Committee
MIME Faculty Search Committee
College of Engineering Undergraduate Curriculum Committee
Mechanical Engineering (ME) Research Committee
ME Mechanics Division
Faculty Development Committee of the Faculty Senate
ME Graduate Student Seminar Committee
ME Research Colloquium Series
Task Force on BS/BET Educational Methods in Mechanical Engineering.

Member of:
Presidential Commission on the Freshman Year
Faculty Senate
University Graduate Council
Graduate Program Review Committee of the Graduate Council
University Undergraduate Curriculum Committee
College of Engineering Strategic Planning Committee
College of Engineering Tenure and Promotion Committee
ME Undergraduate Curriculum Committee
Computer Policy Committee of the Department and College
ME Chairperson Review Committee
ME Promotion Committee
ME Merit Review Committee
ME Expectations Committee
ME Accreditation Committee
ME Senior Council
ME Awards Committee

Adviser to:
ASME Student Section.
Freshman, Upperclass, and Graduate Students.
Tau Beta Pi

RESEARCH GRANTS AND CONTRACTS:

- N.E. McGruer and G.G. Adams (co-PI, 33 %), “Center for MEMS Reliability and Design Fundamentals,” sub-contract through UC San Diego, Oct. 2007 – Sept. 2008, $309,902.
- N.E. McGruer and G.G. Adams (co-PI, 33 %), “Center for MEMS Reliability and Design Fundamentals,” sub-contract through UC San Diego, Jan. 2007 – Sept. 2007, $284,018.
- N.E. McGruer and G.G. Adams (co-PI, 40%), “Northeastern/Honeywell High-Performance Switch Design and Test,” Advanced Sensor Technology, Honeywell, Inc., Aug. 2006 – Dec. 2009, $345,203.
- N.E. McGruer and G.G. Adams (co-investigator, 33%), “High Reliability, One Watt, Contact-Type RF Micromechanical Switches,” DARPA, Phase II, Feb. 2005 – Aug. 2006, $1,159,242 ($854,128 is sub-contracted to MicroAssembly Technologies Co., $305,114 stays at NU).
- S. Wadia-Fascetti, M. Sasani, D. Bernal, G.G. Adams (co-PI, 15%), C. Rappaport and B. Shafai, “Interdisciplinary Graduate Program in Sensing, Diagnostics, and Rehabilitation of Structural Systems,” US Department of Education GANN, Sept. 2004 – Aug. 2007, $340,785.
- A. Busnaina, many others, G.G. Adams (co-investigator, 5%), “NSEC Center for High-Rate Nanomanufacturing,” National Science Foundation, Sept. 2004 – Aug. 2009, $12,400,000.
- N.E. McGruer and G.G. Adams (co-PI, 33%), “Electromechanical Modeling and Microrelay Reliability Physics, Extension,” Radant MEMS, Inc., Sept. 2004 – Jan. 2005, $19,777.
- N.E. McGruer and G.G. Adams (co-PI, 33%), “Electromechanical Modeling and Microrelay Reliability Physics,” Radant MEMS, Inc., Aug. 2003 – Aug. 2004, $114,853.
- N.E. McGruer and G.G. Adams (co-investigator, 33%), “High Reliability, One Watt, Contact-Type RF Micromechanical Switches,” DARPA, Phase I, Sept. 2003 – Feb. 2005, $721,704 ($376,226 is sub-contracted to MicroAssembly Technologies Co., $345,478 stays at NU).
- A. Busnanina, G.G. Adams (co-PI), J. Hopwood, N. Israeloff, and S. Müftü, “Establishing an IUCRC Center Site for Microcontamination Control at Northeastern University,” National Science Foundation, July 2002 – June 2007, $250,000.
- A. Busnanina, G.G. Adams (co-PI), J. Hopwood, N. Israeloff, and S. Müftü, “Establishing an IUCRC Center Site for Microcontamination Control at Northeastern University: A Planning Meeting Proposal,” Co-PI, National Science Foundation, Aug. 2001 – July 2007, $10,000.
- G.G. Adams (PI-100%), “Modeling and Simulation of a MEMS Micro-Mirror – Phase II,” Areté Associates, April 2002 – July 2003, $40,266.
- G.G. Adams (PI-100%), “Modeling and Simulation of a MEMS Micro-Mirror – Phase I,” Areté Associates, June 2001 – Dec. 2001, $14,400.
- N.E. McGruer and G.G. Adams (co-PI, 33%), “Micromachined Switches and Relays: Fundamentals and Enhanced Structures II,” Analog Devices, Inc., July 2001 – June 2002, $193,481.

- N.E. McGruer and G.G. Adams (co-PI, 33%), "Micromachined Switches and Relays: Fundamentals and Enhanced Structures," Analog Devices, Inc., July 2000 – June 2001, $263,184.
- G.G. Adams (PI-100%), "An Investigation of Certain Dynamic Instabilities in Dry Sliding," National Science Foundation, August 1996 – July 1999, $144,716.
- G.F. Kent and G.G. Adams (co-PI, 44%), "Analytical and Experimental Determination of Failure Mechanisms in the Feeding of Neoprene Compound Into a Molding Machine," joint sponsorship between Barry Controls and the Greater Boston Manufacturing Partnership, February – July 1995, $9,800.
- G.G. Adams (PI-100%), "Impact of a Slider onto a Disk," Seagate Technology, July – October 1992, $17,985.
- Y. Levendis and G.G. Adams (co-PI, 50%), "Mechanical Engineering Research Colloquia Series," Northeastern University Faculty Development Fund, September 1989 – June 1990, $5,000.
- G.G. Adams (PI-100%), "Feeding of Paper Through a Curved Guideway," IBM Office Products Division, August 1983 – September 1984, $35,600.
- G.G. Adams (PI-100%), "A Computer Model of the Flexible Disk/Head Interface," Magnetic Peripherals, Inc., January 1982 – December 1982, $25,600.
- G.G. Adams (PI-100%), "Two-Dimensional Steady Contact Problems in Elasticity," Northeastern University Research and Scholarship Development Fund, July 1980 – June 1981, $2,500.
- G.G. Adams (PI-100%), "An Elastic Layer Resting on an Elastic Foundation and Subjected to a Moving Load," National Science Foundation, July 1978 – August 1979, $30,000.
- G.G. Adams (PI-100%), **"**Moving Load on an Elastic Layer Resting on an Elastic Foundation," National Science Foundation Research Initiation, April 1976 – March 1978, $20,000.

JOURNAL PUBLICATIONS:

1. J.C. Aceros, N.E. McGruer, and G.G. Adams, "MEMS Microhotplates for Reliability Testing of Thin Films and Nanowires," *Journal of Vacuum Science and Technology B*, Vol. 26, No. 3, pp. 918-926.
2. Ryan, P.J., Adams, G.G., and McGruer, N.E., "Modeling of a One-Sided Bonded and Rigid Constraint Using Beam Theory," *Journal of Applied Mechanics,* Vol. 75, No. 3, 2008, pp. 031008-1–031008-6.
3. Du, Y., Adams, G.G., McGruer, N.E., and Etsion, I., "A Parameter Study of Separation Modes in Adhering Microcontacts," *Journal of Applied Physics*, Vol. 103, 2008, 044902, pp. 1-7.
4. H. Eid and G.G. Adams, "An Elastic–Plastic Finite Element Analysis of Interacting Asperities in Contact With a Rigid Flat," *Journal of Physics D: Applied Physics*, Vol. 40, 2007, pp. 7432–7439.

5. Z.J. Guo, N.E. McGruer, and G.G. Adams, "Modeling, Simulation, and Measurement of the Dynamic Performance of an Ohmic Contact, Electrostatically Actuated RF MEMS Switch," *Journal of Micromechanics and Microengineering,* Vol. 17, 2007, pp. 1899-1909.
6. L. Chen, H. Lee, Z. J. Guo, N. E. McGruer, K. W. Gilbert, S. Mall, K. D. Leedy, and G. G. Adams, "Contact Resistance Study of Noble Metals and Alloy Films Using a Scanning Probe Microscope Test Station," *Journal of Applied Physics,* Vol. 102, 2007, 074910, pp. 1-7.
7. A. Pamp, and G.G. Adams, "Deformation of Bowed Silicon Chips Due to Adhesion and Applied Pressure," *Journal of Adhesion Science and Technology,* Vol. 21, 2007, pp. 1021-1043.
8. Y. Du, L. Chen, N.E. McGruer, G.G. Adams, and I. Etsion, "A Finite Element Model of Loading and Unloading of an Asperity Contact with Adhesion and Plasticity, *Journal of Colloid and Interface Science,* Vol. 312, 2007, pp. 522-528.
9. P.M. Nieva, N.E. McGruer, and G.G. Adams, "Design and Characterization of a Micromachined Fabry-Perot Vibration Sensor for High-Temperature Applications," *Journal of Micromechanics and Microengineering,* Vol. 16, 2006, pp. 2618-2631.
10. K. Joudrey, G.G. Adams, and N.E. McGruer, "Design, Modeling, Fabrication and Testing of a High Aspect Ratio Electrostatic Torsional MEMS Micromirror," *Journal of Micromechanics and Microengineering,* Vol. 16, No. 10, 2006, pp. 2147-2156.
11. A.O. Sergici, G.G. Adams, and S. Müftü, "Adhesion in the Contact of a Spherical Indenter With a Layered Elastic Half-Space," *Journal of the Mechanics and Physics of Solids,* Vol. 54, No. 9, 2006, pp. 1843-1861.
12. P.J. Ryan, G.G. Adams, N.E. McGruer, N.E., and S. Müftü, "Contact Scanning Mode AFM for Nanomechanical Testing of Free Standing Structures," *Journal of Micromechanics and Microengineering,* Vol. 16, No. 5, 2006, pp. 1040-1046.
13. H. Eid and G.G. Adams, "Critical Speeds and the Response of a Spinning Disk to a Stationary Load Using Mindlin Plate Theory," *Journal of Sound and Vibration*, Vol. 290, No. 1-2, 2006, pp. 209-222.
14. J. Johnson, G.G. Adams, and N.E. McGruer, "Determination of Intermodulation Distortion in a Contact-Type MEMS Microswitch," *IEEE Transactions on Microwave Theory and Technique,* Vol. 53, No. 11, 2005, pp. 3615-3620.
15. O.T. Sari, G.G. Adams, and S. Müftü, "Nano-Scale Effects in the Sliding and Rolling of a Cylinder on a Substrate," *ASME Journal of Applied Mechanics,* Vol. 72, No. 5, 2005, pp. 633-640.
16. G.G. Adams, J.R. Barber, M. Ciavarella, and J.R. Rice, "A Paradox in Sliding Contact With Friction," *ASME Journal of Applied Mechanics,* Vol. 72, No. 3, 2005, pp. 450-452.
17. G.G. Adams, and S. Müftü, "Improvements to a Scale-Dependent Model for Contact and Friction," *Journal of Physics D: Applied Physics,* Vol. 38, No. 9, 2005, pp. 1402-1409.
18. G.G. Adams, "Adhesion at the Interface Between Two Elastic Bodies With a Wavy Contact Interface," *ASME Journal of Applied Mechanics,* Vol. 71, No. 5, 2004, pp. 851-856.
19. M. Nosonovsky and G.G. Adams, "Vibration and Stability of Frictional Sliding of Two Elastic Bodies With a Wavy Contact Interface," *ASME Journal of Applied Mechanics,* Vol. 71, No. 2, 2004, pp. 154-161.

20. G.G. Adams, S. Müftü, and N. Mohd Azhar, "A Scale Dependent Model for Contact and Friction," *ASME Journal of Tribology*, Vol. 125, No. 4, 2003, pp. 700-708.
21. K.K. Safak and G.G. Adams, "Dynamic Modeling and Hydrodynamic Performance of Biomimetic Underwater Robot Locomotion," *Autonomous Robots*, Vol. 13, No. 3, 2002, pp. 223-240.
22. K.K. Safak and G.G. Adams, "Modeling and Simulation of an Artificial Muscle and its Application to Biomimetic Robot Posture Control," *Robotics and Autonomous Systems*, Vol. 41, 2002, pp. 225-243.
23. B. McCarthy, G.G. Adams, N.E. McGruer, and D. Potter, "A Dynamic Model, Including Contact Bounce, of an Electrostatically Actuated Microswitch," *Journal of Microelectromechanical Systems*, Vol. 11, No. 3, 2002, pp. 276-283.
24. M. Nosonovsky and G.G. Adams, "Interaction of Elastic Dilatational and Shear Waves With a Frictional Sliding Interface," *ASME Journal of Vibration and Acoustics*, Vol. 124, No. 1, 2002, pp. 33-39.
25. T.G. Barnes, T.Q. Truong, G.G. Adams, and N.E. McGruer, "Large Deflection Analysis of a Biomimetic Lobster Robot Antenna Due to Contact and Flow," *ASME Journal of Applied Mechanics*, Vol. 68, No. 6, 2001, pp. 948-951.
26. S. Majumder, N.E. McGruer, G.G. Adams, P.M. Zavracky, R.H. Morrison, and J. Krim, "Study of Contacts in an Electrostatically Actuated Microswitch," *Sensors and Actuators*, Vol. A93, 2001, pp. 19-26.
27. M. Nosonovsky and G.G. Adams, "Dilatational and Shear Waves Induced by the Frictional Sliding of Two Elastic Half-Spaces," *International Journal of Engineering Sciences*, Vol. 39, No. 11, 2001, pp. 1257-1269.
28. G.G. Adams, "An Intersonic Slip Pulse at a Frictional Interface Between Dissimilar Materials," *ASME Journal of Applied Mechanics*, Vol. 68, No. 1, 2001, pp. 81-86.
29. M. Nosonovsky and G.G. Adams, "Steady State Frictional Sliding of Two Elastic Bodies With a Wavy Contact Interface," *ASME Journal of Tribology*, Vol. 122, No. 3, 2000, pp. 490-495.
30. G.G. Adams and M. Nosonovsky, "Contact Modeling – Forces," *Tribology International*, Vol. 33, No. 5-6, 2000, pp. 431-442.
31. G.G. Adams, "Friction Reduction in the Sliding of an Elastic Half-Space Against a Rigid Surface Due to Incident Rectangular Dilatational Waves," *ASME Journal of Tribology*, Vol. 122, No. 1, 2000, pp. 10-15.
32. G.G. Adams, "Radiation of Body Waves Induced by the Sliding of an Elastic Half-Space Against a Rigid Surface," *ASME Journal of Applied Mechanics*, Vol. 67, No. 1, 2000, pp. 1-5.
33. A. Phylactopoulos and G.G. Adams, "Transverse Vibration of a Rectangularly Orthotropic Spinning Disk – Part II: Forced Vibration and Critical Speeds," *ASME Journal of Vibration and Acoustics*, Vol. 121, No. 3, 1999, pp. 280-285.
34. A. Phylactopoulos and G.G. Adams, "Transverse Vibration of a Rectangularly Orthotropic Spinning Disk – Part I: Formulation and Free Vibration," *ASME Journal of Vibration and Acoustics*, Vol. 121, No. 3, 1999, pp. 273-279.

35. G.G. Adams, "Dynamic Motion of Two Elastic Half-Spaces in Relative Sliding Without Slipping," *ASME Journal of Tribology,* Vol. 121, No. 3, 1999, pp. 455-461.
36. G.G. Adams, "Steady Sliding of Two Elastic Half-Spaces With Friction Reduction Due to Interface Stick-Slip," *ASME Journal of Applied Mechanics,* Vol. 65, No. 2, 1998, pp. 470-475.
37. G.G. Adams, "Dynamic Instabilities in the Sliding of Two Layered Elastic Half-Spaces," *ASME Journal of Tribology,* Vol. 120, No. 2, 1998, pp. 289-295.
38. G.G. Adams, "Imperfectly Constrained Planar Impacts – A Coefficient-of-Restitution Model," *International Journal of Impact Engineering,* Vol. 19, No. 8, 1997, pp. 693-701.
39. R.Y. Wu and G.G. Adams, "The Effect of Disk Warpage/Skew on the Deflection and Vibration of a Flexible Disk Spinning Above a Baseplate and in Contact With a Point-Head," *ASME Journal of Tribology,* Vol. 119, No. 1, 1997, pp. 64-70.
40. G.G. Adams, "Self-Excited Oscillations in Sliding With a Constant Friction Coefficient – A Simple Model," *ASME Journal of Tribology,* Vol. 118, No. 4, 1996, pp. 819-823.
41. G.G. Adams, "Self-Excited Oscillations of Two Elastic Half-Spaces Sliding With a Constant Coefficient of Friction," *ASME Journal of Applied Mechanics,* Vol. 62, No. 4, 1995, pp. 867-872.
42. G.G. Adams, "Critical Speeds and the Response of a Tensioned Beam on an Elastic Foundation to Repetitive Moving Loads," *International Journal of Mechanical Sciences,* Vol. 37, No. 7, 1995, pp. 773-781.
43. P.M. Zavracky, G.G. Adams, and P.D. Aquilino, "Strain Analysis of Silicon-on-Insulator Films Produced by Zone Melting Recrystallization," *IEEE/ASME Journal of Microelectromechanical Systems,* Vol. 4, No. 1, 1995, pp. 42-48.
44. A. Phylactopoulos and G.G. Adams, "The Response of a Nonuniformly Tensioned Circular String to a Moving Load," *Journal of Sound and Vibration,* Vol. 182, No. 3, 1995, pp. 415-426.
45. R.Y. Wu and G.G. Adams, "The Effects of Baseplate Warping and Skew on the Configuration of a Spinning Flexible Disk," *ASME Journal of Tribology,* Vol. 116, No. 3, 1994, pp. 514-520.
46. G.G. Adams, "Impact Dynamics and the Coefficient of Restitution for the Eccentric Collision of a Slider onto a Disk," *Advances in Information Storage Systems (ASME Press),* Vol. 5, 1993, pp. 297-310.
47. G.G. Adams and D.N. Tran, "The Coefficient of Restitution for a Planar Two-Body Eccentric Impact," *ASME Journal of Applied Mechanics,* Vol. 60, No. 4, 1993, pp. 1058-1060.
48. G.G. Adams, "Elastic Wrinkling of a Tensioned Circular Plate Using Von Kármán Plate Theory," *ASME Journal of Applied Mechanics,* Vol. 60, No. 2, 1993, pp. 520-525.
49. G.G. Adams, "The Point-Load Solution and Simulation of a Flexible Spinning Disk Using Various Disk-to-Baseplate Air-Flow Models," *Tribology Transactions,* Vol. 36, No. 3, 1993, pp. 470-476.

50. J.F. Maher and G.G. Adams, "The Point-Load Solution, Using Linearized von Kármán Plate Theory, for a Spinning Flexible Disk Near a Baseplate," *Tribology Transactions,* Vol. 35, No. 3, 1992, pp. 473-481.
51. J.F. Maher and G.G. Adams, "Effect of Displacement-Dependent Membrane Stresses on the Axisymmetric Configuration of a Spinning Flexible Disk," *Tribology Transactions,* Vol. 34, No. 4, 1991, pp. 597-603.
52. G.G. Adams, "A Novel Approach to the Foil Bearing Problem Interface," *Tribology and Mechanics of Magnetic Storage Systems,* Vol. 6, STLE SP-26, 1989, pp. 1-7.
53. G.G. Adams and J.P. Averell, "Simulation of the Floppy-Disk/Head Interface," *Tribology and Mechanics of Magnetic Storage Systems,* Vol. 5, STLE SP-25, 1988, pp. 135-141.
54. G.G. Adams, "Critical Speeds for a Flexible Spinning Disk," *International Journal of Mechanical Sciences,* Vol. 29, No. 8, 1987, pp. 525-531.
55. Li Lin and G.G. Adams, "Beam on a Tensionless Elastic Foundation," *ASCE Journal of Engineering Mechanics,* Vol. 113, No. 4, 1987, pp. 542-553.
56. G.G. Adams and R.C. Benson, "Postbuckling Analysis of an Elastic Plate in a Rigid Channel," *International Journal of Mechanical Sciences,* Vol. 28, No. 3, 1986, pp. 622-629.
57. G.G. Adams and I. Zeid, "An Elastic Punch Moving Across the Surface of a Semi-Infinite Solid," *ASME Journal of Applied Mechanics,* Vol. 51, No. 3, 1984, pp. 622-629.
58. D.P. Vaillette and G.G. Adams, "An Elastic Beam Contained in a Frictionless Channel," *ASME Journal of Applied Mechanics,* Vol. 50, No. 3, 1983, pp. 693-694.
59. H. Manor and G.G. Adams, "An Elastic Beam Moving with Constant Speed Across a Drop-Out," *International Journal of Mechanical Sciences,* Vol. 25, No. 2, 1983, pp. 137-148.
60. G.G. Adams, "An Elastic Strip Moving Across a Rigid Step," *International Journal of Solids and Structures,* Vol. 18, No. 9,1982, pp. 763-774.
61. G.G. Adams and H. Manor, "Steady Motion of an Elastic Beam Across a Rigid Step," *ASME Journal of Applied Mechanics,* Vol. 48, No. 3, 1981, pp. 606-612.
62. G.G. Adams, "A Semi-Infinite Elastic Strip Bonded to an Infinite Strip," *ASME Journal of Applied Mechanics,* Vol. 47, No. 4, 1980, pp. 789-794.
63. G.G. Adams, "Procedures for the Study of the Flexible-Disk to Head Interface," *IBM Journal of Research and Development,* Vol. 24, No. 4, 1980, pp. 512-517.
64. G.G. Adams, "Crack Interaction in an Infinite Elastic Strip," *International Journal of Engineering Science,* Vol. 18, No. 5, 1980, pp. 455-462.
65. G.G. Adams, "Analysis of the Flexible Disk Head/Interface," *ASME Journal of Lubrication Technology,* Vol. 102, No. 1, 1980, pp. 86-90.
66. G.G. Adams, "A Rigid Punch Bonded to a Half Plane," *ASME Journal of Applied Mechanics,* Vol. 46, No. 4, 1979, pp. 844-848.
67. J. Choros and G.G. Adams, "A Steadily Moving Load on an Elastic Beam Resting on a Tensionless Winkler Foundation," *ASME Journal of Applied Mechanics,* Vol. 46, No. 1, 1979, pp. 175-180.

68. G.G. Adams, "Steady Solutions for a Moving Load on an Elastic Strip Resting on an Elastic Half Plane," *International Journal of Solids and Structures,* Vol. 15, No. 11, 1978, pp. 885-897.
69. G.G. Adams, "A Steadily Moving Load on an Elastic Strip Resting on a Rigid Foundation," *International Journal of Engineering Science,* Vol. 16, No. 9, 1978, pp. 659-667.
70. G.G. Adams, "An Elastic Strip Pressed Against an Elastic Half Plane by a Steadily Moving Force," *ASME Journal of Applied Mechanics,* Vol. 45, No. 1, 1978, pp. 89-94.
71. G.G. Adams and D.B. Bogy, "The Plane Symmetric Contact Problem for Dissimilar Elastic Semi-Infinite Strips of Different Widths," *ASME Journal of Applied Mechanics,* Vol. 44, No. 4, 1977, pp. 604-610.
72. G.G. Adams and D.B. Bogy, "The Plane Solution for the Elastic Contact Problem of a Semi-Infinite Strip and Half-Plane," *ASME Journal of Applied Mechanics,* Vol. 43, No. 4, 1976, pp. 603-607.
73. G.G. Adams, "Moving Loads on Elastic Strips with One-Sided Constraints," *International Journal of Engineering Science,* Vol. 14, No. 12, 1976, pp. 1071-1083.
74. G.G. Adams and D.B. Bogy, "The Plane Solution for Bending of Joined Dissimilar Semi-Infinite Elastic Strips," *International Journal of Solids and Structures,* Vol. 12, No. 4, 1975, pp. 239-249.
75. G.G. Adams and D.B. Bogy, "Steady Solutions for Moving Loads on Elastic Beams with One-Sided Constraints," *ASME Journal of Applied Mechanics,* Vol. 42, No. 4, 1975, pp. 800-804.
76. G.G. Adams and D.B. Bogy, "A Note on a Paper by G.D. Gupta," *ASME Journal of Applied Mechanics,* Vol. 42, No. 1, 1975, pp. 224-225.

BOOK CHAPTERS AND EDITED PUBLICATIONS

- G.G. Adams and N.E. McGruer, "Nanocontacts and Switch Reliability," in *Nanomanufacturing Handbook*, ed. B A. Busnaina, CRC Press, 2007.
- Editor of the *Ninth Annual Symposium on Information Storage and Processing Systems,* ASME Publication, 1998, ISPS – Vol. 4.
- Editor of *Proceedings of the Eighth Annual Symposium on Information Storage and Processing Systems,* ASME Publication, 1997, ISPS – Vol. 3.
- Editor of *Proceedings of the Seventh Annual Symposium on Information Storage and Processing Systems,* ASME Publication, 1996, ISPS – Vol. 2.
- Editor of Proceedings of the Sixth Annual Symposium on Advances in Information Storage and Processing Systems, ASME Publication, 1995, ISPS –Vol. 1.
- Editor of Concepts in Contact Recording, ASME Special Publication, 1992, Trib – Vol. 2.

RECENT CONFERENCE PUBLICATIONS/PRESENTATIONS:

- Andy Pamp, George G. Adams, "Effect of Adhesion on Wafer Separation Due to Trapped Particles," *Proceedings of the 2007 STLE/ASME International Joint Tribology Conference*, October 22-24, 2007, San Diego, California, USA, CD-ROM IJTC2007-44157.
- George G. Adams, Nicol E. McGruer, Lei Chen, Yan Du, and Z.J. (Jim) Guo, "Contact Failure Mechanisms in Ohmic-Type MEMS Switches," *Proceedings of the 2007 STLE/ASME International Joint Tribology Conference*, October 22-24, 2007, San Diego, California, USA, CD-ROM IJTC2007-44265.
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