GEORGE K. HARITOS
VITA – 2019

EDUCATION

Ph.D. in Engineering - Structural Mechanics, Northwestern University, 1978
M.S. in Engineering - Mechanics and Materials, University of Illinois at Chicago, 1970
B.S. in Engineering - Applied Mechanics, University of Illinois at Chicago, 1969

EXPERIENCE

The University of Akron, Akron, OH **Jan 2003-Present**
Dean, College of Engineering, 2003-15
On Sabbatical Leave, 2015-16
Professor, Mechanical Engineering, 2003-
Professor, Civil Engineering, 2014-

Air Force Institute of Technology, Wright-Patterson Air Force Base, OH **1995-2003**
Adjunct Professor, Dept. of Aeronautics & Astronautics, 2001-2003
Professor of Engineering Mechanics, 2001
Commandant (President), 1999-2001
Vice Commandant (Senior Vice President), 1998-1999
Tenured Associate Professor, 1998
Associate Dean for Research, Graduate School of Engineering, 1997-1998
Associate Dean, Graduate School of Engineering, 1995-1998

Air Force Office of Scientific Research, Bolling Air Force Base, Washington, DC **1993-1995**
Deputy Director and Commander

Headquarters Air Force Materiel Command, Wright-Patterson AFB, OH **1992-1993**
Chief, Air Vehicles Branch, Directorate of Science and Technology

Headquarters Air Force Systems Command, Andrews AFB, Washington, DC **1991-1992**
Chief, Flight Vehicles Division, Deputy Chief of Staff/Science & Technology

Air Force Office of Scientific Research, Bolling Air Force Base, Washington, DC **1986-1991**
Associate Director, AFOSR, 1990-1991
Director, Aerospace Sciences Directorate, 1989-1990
Program Manager, Structural Mechanics, Aerospace Sciences Directorate, 1989-1991
Program Manager, Structural Durability, Aerospace Sciences Directorate, 1986-1991

Air Command and Staff College, Maxwell Air Force Base, AL **1985-1986**
Student

Air Force Institute of Technology, Wright-Patterson AFB, OH **1982-1985**
Director of Undergraduate Studies, Dept of Aeronautics and Astronautics, 1983-1985
Associate Professor, Dept of Aeronautics and Astronautics, January 1983
Assistant Professor, Dept of Aeronautics and Astronautics, June 1982

United States Air Force Academy, Colorado Springs, CO **1978-1982**
Director of Research, Dept of Engineering Mechanics and Materials, 1981-1982
Associate Professor, Dept of Engineering Mechanics and Materials, June 1981
Assistant Professor, Dept of Engineering Mechanics and Materials, June 1979
Instructor, Dept of Civil Engineering, Engng Mechanics, and Materials, June 1978

Northwestern University, Evanston, IL **1975-1978**
Ph.D. Student (Walter P. Murphy Fellow)

EXPERIENCE (cont)

Aeronautical Systems Division, Wright-Patterson AFB, OH **1971-1975**
- Chief Structures Engineer, Helicopter Modification Program Office, 1974-1975
- Lead Structures Engineer, Special Projects Office, 1973-1974
- Project Engineer, AC-130 Gunship Office, 1972-1973
- Aeronautical Structures Engineer, Deputy for Engineering, 1971-1972

MILITARY SERVICE

Officer – Active Duty, United States Air Force, March 1971 - June 2001. I was released from active duty in the grade of Colonel, effective June 30, 2001. Major Awards and Decorations: The Legion of Merit, Meritorious Service Medal with five oak leaf clusters, Air Force Commendation Medal with one oak leaf cluster, National Defense Service Medal with service star.

AFFILIATIONS

American Society of Mechanical Engineers (ASME), Fellow
American Institute of Aeronautics and Astronautics (AIAA), Associate Fellow
American Academy of Mechanics (AAM), Member
American Society for Engineering Education (ASEE), Member
Air Force Association (AFA), Life Member

BOARDS

Board of Trustees, Manufacturing Advocacy & Growth Network (MAGNET)	2006-Present
Board of Trustees, Ohio Aerospace Institute (Dean of Engineering, UA)	2005-2015
Board of Trustees, Dayton Area Graduate Studies Institute	1999-2001
Board of Trustees, Ohio Aerospace Institute (Commandant, AFIT)	2001-2003
Board of Trustees, The Miami Valley Research Foundation	1999-2001
Executive Board, Wright-Patterson Air Force Base Educational Outreach	1998-2001
Installation Corporate Board, Wright-Patterson Air Force Base	1999-2001

SERVICE

Ohio Engineering Deans Council	Chair, 2007-2014 Member, 2004-2015
NASA HQS Council of Engineering Deans	Member, 2004-2006
AIAA/ICAS International Symposium in Celebration of 100 years of Powered Flight Committee	Member, 2000-2003
Air Force Materiel Command (AFMC) - Defense Department of France (DRET) Technology Working Group	US Chair, 1994-1995
AFMC Integrated Product Development Steering Committee	Member, 1992-1993
Air Force Office of Scientific Research (AFOSR) – Air Force Laboratories Improved Collaboration Initiative	Chair, 1990-1991
AFOSR Baldrige Quality Implementation Team	Chair, 1993-1994
AFOSR Basic Research Metrics Committee	Chair, 1990-1992
Air Force Institute of Technology (AFIT) - Graduate School of Engineering Committee for Metrics	Chair, 1995-1996
AFIT/AF Wright Laboratory Joint Materials Curriculum Committee	Chair, 1996-1997
AFIT Faculty Development Committee	Member, 1985
Air University (AU) Education Strategic Planning Task Force	Member, 1997
ASME Aerospace Division	
Materials and Structures Committee	Member, 1986-2003
ASME Winter Annual Meeting Technical Program	Chair, 1991
ASME Applied Mechanics Division	
Fracture and Failure Mechanics Committee	Member, 1996-2003
Mechanics Education Committee	Member, 1995-2000

SERVICE (cont)

ASME Joint Applied Mechanics Division/Materials Division	
- Committee on Constitutive Equations	Member, 1987-2001
Dayton Area Graduate Studies Institute (DAGSI)	
Research Committee	Member, 1997-1998
OSD Defense Committee on Research (DCOR)	Member, 1993-1995
DoD Basic Research Joint Planning Committee for Advanced Materials	Member, 1990-91
National Academy of Sciences Committee on Fatigue of Composites	Member, 1988-1989
United States Air Force Academy (USAFA) Candidate Advisory Panel	Member, 1981
USAF Blue Ribbon Team to Investigate Failures in the F-111 Engines	Member, 1973

COURSES DEVELOPED AND TAUGHT

Undergraduate	**Graduate**
Introductory Engineering Mechanics	Fundamentals of Solid Mechanics
Statics	Finite Element Methods for Structural Analysis
Dynamics	Theory of Elasticity I
Strength of Materials	Theory of Elasticity II
Mechanical Properties of Materials	Variational Methods in Mechanics
Aircraft Structures I & II	Fracture Mechanics
Theory of Vibrations	Structural Stability
Advanced Structural Mechanics	

GRADUATE STUDENTS DIRECTED

Crack Growth under Thermo-Mechanical Cycling, Ph.D. Dissertation, M.L. Heil, 1986
Effects of Overloads on Sustained-Load Crack Growth in High Temperature Superalloys, M.S. Thesis, R. L. Hastie, 1985
Transition Region for Corner Cracks at Holes, M.S. Thesis, P.A. Chansler, 1984
Overload Effects on Sustained Load Crack Growth at Elevated Temperature, M.S. Thesis, K. E. Harms, 1984
Evaluation of Interpolative Modeling Concepts for Fatigue Crack Growth at Elevated Temperature, M.S. Thesis, G.O. Painter, 1984
Evaluation of Fatigue-Creep Crack Growth in an Engine Alloy, M.S. Thesis, J.R. Christoff, 1983
Transition of Corner Cracks at Holes into Through-the-Thickness Cracks, M.S. Thesis, S.W. Opel, 1983
Sustained Load Crack Growth in Inconel 718 Under Non-Isothermal Conditions, M.S. Thesis, D.L. Miller, 1983

POST-DOCTORAL RESEARCH ASSOCIATES SUPERVISED

David Lanning, Ph.D., Ohio State University, 1997-1999
George Jefferson, Ph.D., University of Pennsylvania, 1999-2003

RESEARCH INTERESTS

Mixed Boundary Value Problems in Solid Mechanics, Fracture Mechanics, Thermo-Mechanical Behavior of High Temperature Materials, Fatigue Crack Propagation, Biomimetics, Biomechanics, Elasto-Hydro-Dynamic (EHD) Contact Problems

RESEARCH AWARDS

Subsurface and Surface Damage Initiation and Growth in Rotating Components, 1979-81, Army Research Office and F. J. Seiler Research Laboratory ($190,000)

Low Cycle Fatigue in Turbine Engine Materials, 1980-82, Air Force Materials Laboratory ($15,000)*

Creep Crack Growth in Inconel 718 Under Non-Isothermal Conditions, 1983, Air Force Materials Laboratory ($7,000)*

RESEARCH AWARDS (cont)

Transition of Corner Cracks at Holes into Through-the-Thickness Cracks, 1983-84, Air Force Flight Dynamics Laboratory ($5,000)*

Evaluation of Interpolative Modeling Concepts for Fatigue-Creep Crack Growth in Engine Alloys at Elevated Temperature, 1983-84, Air Force Materials Laboratory ($5,000)*

Modeling the Effects of Overloads on Sustained-Load Crack Growth in High Temperature Superalloys, 1984-85, Air Force Materials Laboratory ($20,000)*

Crack Growth under Thermo-Mechanical Cycling, 1984-86, Air Force Materials Laboratory ($30,000)*

High Cycle Fatigue Behavior of Titanium Alloys Used in Aircraft Engines, 1997-99, Air Force Research Laboratory (Materials Directorate), $195,000

Matrix-Enabled Damage Tolerance in Oxide Continuous Fiber Ceramic Composites (CFCCs), 1999-2002, Air Force Office of Scientific Research, $750,000

Engineering Services, Lockheed Martin Corporation, 1/1/2004 – 12/31/2004, $10,000

(Development of) Undergraduate Degree Program in Aerospace Systems Engineering, 2005-2007, U. S. Department of Education, $198,400

Defense Materials Technology Center, 2007, Ohio Department of Development, $150,000

Corrosion Engineering Education Initiative, Engineering Research & Development Center – CERL, (OUSD(AT&L) CPO), 2007, $900,000

University of Akron Corrosion Engineering Education Initiative, Engineering Research & Development Center – CERL, (OUSD(AT&L) CPO), 7/21/2009 – 1/20/2011, $1,425,000

University of Akron Corrosion Engineering Education Initiative, Engineering Research & Development Center – US Air Force, 7/1/2010 – 6/30/2014, $6,380,982

National Center for Education and Research on Corrosion and Materials Performance (NCERCAMP): Enhancing and Sustaining Technical Support for the Office of Corrosion Policy and Oversight (OSD) – US Army, 8/29/2011 – 6/30/2016, $15,233,293

National Center for Education and Research on Corrosion and Materials Performance (NCERCAMP): Technical Efforts to Support the Office of Corrosion Policy and Oversight (OSD), 9/27/2011 – 5/27/2017, $16,719,709

* *These $ amounts are for materials and travel only—No salary charges allowed for Air Force employees.*

TECHNICAL JOURNAL REVIEWER

American Society for Testing and Materials
Applied Mechanics Reviews
Biomimetics
Composites
Engineering Fracture Mechanics
Journal of Biomechanical Engineering
Journal of Composite Materials
Journal of Engineering Materials and Technology
Journal of Theoretical and Applied Fracture Mechanics
International Journal of Damage Mechanics -- *Associate Editor*
International Journal of Fracture
International Journal for Solids and Structures

PUBLICATIONS
Refereed Journal Articles:

Haritos, G. K. and L. M. Keer, "Stress Analysis for an Elastic Half Space Containing an Embedded Rigid Block," Int'l. J. Solids Structures, Vol. 16, pp. 19-40, 1980

Keer, L. M., Bryant, M. D. and G. K. Haritos, "Subsurface and Surface Cracking Due to Hertzian Contact," J. Lubrication Technology, Vol. 104, pp. 347-351, 1982

Haritos, G. K. and L. M. Keer, "Pullout of a Rigid Insert Adhesively Bonded to an Elastic Half Plane," J. Adhesion, Vol. 18, pp. 131-150, 1985

Nicholas, T., Haritos, G. K. and J. R. Christoff, "Evaluation of Cumulative Damage Models for Fatigue Crack Growth in an Aircraft Engine Alloy," J. Propulsion, Vol. 1, No. 2, pp. 131-136, 1985

Haritos, G. K., Miller, D. L. and T. Nicholas, "Sustained-Load Crack-Growth in Inconel 718 Under Nonisothermal Conditions," J. Engineering Materials Technology, Vol. 107, pp. 172-179, 1985

Haritos, G. K., Hager, J. W., Amos, A. K., Salkind, M. J. and A. S. D. Wang, "Mesomechanics: The Microstructure-Mechanics Connection," Intl. J. Solids Structures, Vol. 24, No 11, pp. 1081-1096, 1988

Nicholas, Theodore, Heil, Michael L. and George K. Haritos, "Predicting Crack Growth under Thermo-Mechanical Cycling," International Journal of Fracture, Vol. 41, pp. 157-176, 1989

Nicholas, T., Haritos, G. K., Hastie, R. L., Jr. and K. Harms, "The Effects of Overloads on Sustained-Load Crack Growth in a Nickel-Base Superalloy: Part I--Analysis," Theo. Appl. Fracture Mech., Vol. 16, pp. 35-49, 1991

Nicholas, T., Haritos, G. K., Hastie, R. L., Jr. and K. Harms, "The Effects of Overloads on Sustained-Load Crack Growth in a Nickel-Base Superalloy: Part II--Experiments," Theo. Appl. Fracture Mech., Vol. 16, pp. 51-62, 1991

George K. Haritos, Theodore Nicholas, David B. Lanning, "Notch Size Effects in HCF Behavior of Ti-6Al-4V," Int'l. J. Fatigue, Vol. 21, pp. 643-652, 1999

PUBLICATIONS (cont)

Refereed Journal Articles (cont):

David B. Lanning, George K. Haritos and Theodore Nicholas, "Influence of Stress State on High Cycle Fatigue of Notched Ti-6Al-4V Specimens," Intl. J. Fatigue, Vol. 21, pp. S87-S95, 1999

D. Lanning, G. K. Haritos, T. Nicholas and D. C. Maxwell, "Low-Cycle Fatigue/High-Cycle Fatigue Interactions in Notched Ti-6Al-4V," Fatigue Fract Engng Mater Struct, Vol. 24, pp. 565-577, 2001

George Jefferson, George K. Haritos, and Robert M. McMeeking, "The Elastic Response of a Cohesive Aggregate – A Discrete Element Model with Coupled Particle Interaction," J. Mech. Phys. Solids, Vol. 50, pp. 2539-2575, 2002

Lanning, David B., Nicholas, Theodore and George K. Haritos, "Effect of Plastic Prestrain on High Cycle Fatigue of Ti-6Al-4V," Mechanics of Materials, Vol. 34, pp. 127-134, 2002

David B. Lanning, Theodore Nicholas, George K. Haritos, "On the Use of Critical Distance Theories for the Prediction of the High Cycle Fatigue Limit Stress in Notched Ti-6Al-4V," International Journal of Fatigue, Vol. 27, pp. 45-57, 2005

Books Edited:

Damage Mechanics in Composites, ASME AD-Vol. 12, 1987 (with A. S. D. Wang)

Failure Mechanisms in High Temperature Composite Materials, ASME AD-Vol. 22/AMD-Vol. 122, 1991 (with G. Newaz and S. Mall)

Damage and Oxidation Protection in High Temperature Composites, Volume 1, ASME AD-Vol. 25-1, 1991 (with O. O. Ochoa)

Damage and Oxidation Protection in High Temperature Composites, Volume 2, ASME AD-Vol. 25-2, 1991 (with O. O. Ochoa)

Smart Structures and Materials, ASME AD-Vol. 24/AMD-Vol. 123, 1991 (with A.V. Srinivasan)

Creep-Fatigue Interaction at High Temperature, ASME AD-Vol. 21, 1991 (with O. O. Ochoa)

Proceedings, Reports, Other:

Haritos, G. K., "AC-130E Gunship II, PAVE SPECTRE II Aircraft--Stress Analysis," Aeronautical Systems Division Technical Report (Limited Distribution), Wright-Patterson AFB, OH, 1973
Haritos, G. K., Pendergast, J. P. and M. Snead, "HH-53 PAVE LOW III Helicopter Night Recovery System--Stress Analysis," Aeronautical Systems Division Technical Report (Limited Distribution), Wright-Patterson AFB, OH, 1974
Haritos, G. K., Stress Analysis of a Rigid Block Embedded in an Elastic Half Space, Doctoral Dissertation, Northwestern University, Evanston, IL, 1978
Haritos, G. K. and L. M. Keer, "A Loaded Rigid Block Embedded in an Elastic Half Space," Proceedings, Third ASCE Engineering Mechanics Conference, pp. 785-788, 1979
Keer, L. M., Bryant, M.D. and G. K. Haritos, "Subsurface Cracking and Delamination, "Solid Contract and Lubrication, ASME AMD-Vol 39, pp. 79-95, 1980
Haritos, G. K. and L. M. Keer, "Pullout of a Rigid Insert Adhesively Bonded to an Elastic Half Plane," FJSRL-TR-83-0017, F. J. Seiler Research Laboratory Technical Report, USAF Academy, CO, 1983
Haritos, G. K. and L. M. Keer, "Pullout of a Rigid Insert from an Elastic Medium," Proceedings, Fifth ASCE Engineering Mechanics Division Specialty Conference, pp. 555-558, 1984

PUBLICATIONS (cont)

Proceedings, Reports, Other (cont):

Haritos, G. K., Nicholas, T. and D. L. Miller, "Life Prediction Methodology for Non-Isothermal Creep Crack Growth," Proceedings, Fourth Int'l Conf. on Structural Safety and Reliability, Vol. I, pp. 445-454, Kobe, Japan, 1985

Haritos, G. K., "Modeling of Crack Growth Behavior for Turbine Engine Alloys," Air Command and Staff College Report No. 86-1060, Maxwell AFB, AL, 1986

Haritos, G. K., Hager, J. W., Amos, A. K., Salkind, M. J. and A. S. D. Wang, "Mesomechanics: The Microstructure-Mechanics Connection," AIAA-87-0726 CP, pp. 812-818, 28th Structures, Structural Dynamics and Materials Conference, Monterey, CA, 1987

Heil, M. L., Nicholas, T. and G. K. Haritos, "Crack Growth in Alloy 718 Under Thermal-Mechanical Cycling," Thermal Stress, Material Deformation, and Thermo-Mechanical Fatigue-PVP-Vol. 123, H. Sehitoglu and S. Y. Zamrik, Eds, pp. 23-29, ASME, NY, 1987

Haritos, George K. "Air Force Interests in Composites Research," Proceedings, Twelfth Annual Mechanics of Composites Review, pp. 1-11, Bal Harbour, FL, 16-17 October, 1987

Haritos, George K., "Progress and Future Challenges in the Mechanics of Composites, Proceedings, Thirteenth Annual Mechanics of Composites Review, pp.1-11, Bal Harbour, FL, 2-3 November, 1988

Haritos, G. K., Nicholas, T. and G. O. Painter, "Evaluation of Crack Growth Models for Elevated Temperature Fatigue," Fracture Mechanics: Eighteenth Symposium ASTM STP 945, D. T. Read and R. P. Reed, Eds, pp. 206-220, Amer. Society for Testing and Materials, Philadelphia, 1988

Haritos, George K., "Basic Research Needs in the Mech of Materials," in Developments in Mechanics, Vol. 15, Proceedings Twenty-first Midwestern Mechanics Conference, Houghton, MI, 13-16 August, 1989

Haritos, George K., "Engineered Multimaterials--The Role of Mechanics," Proceedings, Fifteenth Annual Mechanics of Composites Review, pp. 29-39, Dayton, OH, 24-25 October, 1990

Haritos, G. K., Hager, J. W., Amos, A. K., Salkind, M. J. and A. S. D. Wang, "Mesomechanics: The Microstructure-Mechanics Connection," Mechanics Monograph M6: Mechanics Division, ASEE, 1990

Haritos, George K., "Engineered and Adaptive Materials--Challenges for Solid Mechanics," in Constitutive Laws for Engineering Materials: Recent Advances and Industrial and Infrastructure Applications, Desai, C.S., et al, Eds, pp. 597-604, ASME Press, New York, 1991

Hedberg, Frederick L. and George K. Haritos, "Biometrics: Natural Materials as Paradigms for Superior Aerospace Systems," Proceedings, Workshop on the Design and Processing of Materials by Biomimicking, Seattle, WA, 2-4 April, 1991

Tishkoff, J. M., McMichael, J. M. and G. K. Haritos, "Air Force Basic Research for Airbreathing Propulsion," ASME Paper No. 91-GT-358, International Gas Turbine and Aeroengine Congress and Exposition, Orlando, FL, 3-6 June, 1991

Srinivasan, A. V., Haritos, George K. and Frederick L. Hedberg, "Biomimetics: Advancing Manmade Materials through Guidance from Nature," Applied Mechanics Reviews (Invited Feature Article), Vol. 44, No. 11, Part 1, pp. 463-482, 1991

Srinivasan, A. V., Haritos, George K., Hedberg, Frederick L. and W. L. Jones, "Biomimetics: Advancing Manmade Materials through Guidance from Nature—An Update," Applied Mechanics Reviews, Vol. 49, No. 10, Part 2, 1996

Lanning, David, Haritos, George, K. and Theodore Nicholas, "Notch Size Effects in HCF Behavior of Ti-6Al-4V," Proceedings, 3rd National Turbine Engine High Cycle Fatigue Conference, San Antonio, TX, 2-5 February, 1998

Lanning, David B., Haritos, George, K. and Theodore Nicholas, "High Cycle Fatigue Behavior and Notch Size Effects in Ti-6Al-4V," ASME MD-Vol. 84, Mechanical Behavior of Advanced Materials, pp.19-25, 1998

Lanning, David, Haritos, George, K. and Theodore Nicholas, "Notch Size Effects and LCF/HCF Interactions in Ti-6Al-4V," Proceedings, 4th National Turbine Engine High Cycle Fatigue Conference, Monterey, CA, 8-11 February, 1999

PUBLICATIONS (cont)
Proceedings, Reports, Other (cont):

Lanning, D., Haritos, G. K., Nicholas, T. and D. C. Maxwell, "LCF/HCF Interactions and Fatigue Life Prediction in Notched Ti-6Al-4V," Proceedings, 5th National Turbine Engine High Cycle Fatigue (HCF) Conference, Phoenix, AZ, 7-9 March, 2000
McMeeking, R. M., Jefferson, G. and G. K. Haritos, "Elastic and Visco-elastic Response of Finite Particle Junctions in Granular Materials," in Recent Developments in Computer Modeling of Powder Metallurgy Processes, pp. 50-62, Zavaliangos, Z. and A. Laptev, Eds, IOS Press, Amsterdam, 2001
Jefferson, George, Haritos, George, K. and Robert M. McMeeking, "Discrete Element Modeling of the Elasticity and Fracture of Polyphase Porous Ceramic Aggregates," Proceedings, 26th Annual Conference on Composites, Materials, and Structures, Cape Canaveral/Cocoa Beach, FL, 28 January-1 February, 2002

PRESENTATIONS

Conferences, Workshops:

A Loaded Rigid Block in an Elastic Half-Space, Third ASCE Engineering Mechanics Specialty Conference, University of Texas, Austin, TX, Sep 1979
Two-and Three-Dimensional Stress Analyses of an Elastic Half Space Containing a Partially Embedded Finite Rod, XVth Int'l Congress of Theoretical and Applied Mechanics, University of Toronto, Toronto, Canada, Aug 1980
Subsurface Cracking and Delamination, 101st ASME Winter Annual Meeting, Chicago, IL, Nov 1980
Evaluation of Fatigue-Creep Crack Growth in an Engine Alloy, AIAA Tenth Annual Mini-Symposium on Aerospace Science and Technology, Air Force Institute of Technology, Dayton, OH, Mar 1984
A Rigid Fiber Bonded to an Elastic Half-Plane: Pullout Stresses, Fifth ASCE Engineering Mechanics Division Specialty Conference, University of Wyoming, Laramie, WY, Aug 1984
Transition of Corner Cracks at Holes into Uniform Through-the-Thickness Cracks, Seventeenth National Symposium on Fracture Mechanics, Albany, NY, Aug 1984
Life Prediction Methodology for Non-Isothermal Creep Crack Growth, Fourth Int'l Conference on Structural Safety and Reliability, Kobe, Japan, May 1985
Evaluation of Crack Growth Models for Elevated Temperature Fatigue, Eighteenth National Symposium on Fracture Mechanics, Boulder, CO, Jun 1985
Transitional Behavior of Corner Cracks at Holes, Eighteenth National Symposium on Fracture Mechanics, Boulder, CO, Jun 1985
Overload Effects on Sustained-Load Crack Growth at Elevated Temperature, Nineteenth Midwestern Mechanics Conference, Columbus, OH, Sep 1985
Future Directions of AFOSR Solid Mechanics Branch, 107th ASME Winter Annual Meeting, Anaheim, CA, Dec 1986
Mesomechanics: The Microstructure-Mechanics Connection, Twenty-eighth Structures, Structural Dynamics, and Materials Conference, Monterey, CA, Apr 1987
Crack Growth in Alloy 718 Under Thermal-Mechanical Cycling, ASME Thermal Stress, Material Deformation, and Thermomechanical Fatigue Symposium, San Diego, CA, Jun-Jul 1987
Experimental Mechanics Needs of Mesomechanics, Workshop on Optical Observations at the Microscale and Beyond -- A Look to the Future, San Diego, CA, Aug 1987
Heterogeneous Mechanics -- Future Challenges, Meeting of the Advisory Panel of the National Center for Composite Materials, David W. Taylor Naval Ship Research and Development Center, Bethesda, MD, Aug 1987
Air Force Interests in Composites Research, Twelfth Annual Mechanics of Composites Review, Bal Harbour, FL, Oct 1987

PRESENTATIONS (cont)

Conferences, Workshops (cont):

Mechanics of Composite Materials Research: Present and Future, First Joint Applied Mechanics and Engineering Sciences Conference, Berkeley, CA, Jun 1988
Life Prediction for Composites, National Academy of Sciences Workshop, Washington, DC, Oct 1988
Progress and Future Challenges in the Mechanics of Composites, Thirteenth Annual Mechanics of Composites Review, Bal Harbour, FL, Nov 1988
Basic Research Needs in the Mechanics of Materials, Twenty-first Midwestern Mechanics Conference, Houghton, MI, Aug 1989
Research Needs in the Mechanics of Engineered Multimaterials, Workshop on Damage Mechanics in Composite Material Design, Santa Barbara, CA, Jun 1990
Future Research Needs in Aeronautics and Astronautics, Air Force - MIT Workshop, The Pentagon, Arlington, VA, Aug 1990
Engineered Microstructures -- The Role of Mechanics, Int'l Conference on Mechanics, Physics, and Structure of Materials, Thessaloniki, Greece, Aug 1990
Engineered Multimaterials -- The Role of Mechanics, Fifteenth Annual Mechanics of Composites Review, Dayton, OH, Oct 1990
High-Temperature, Brittle-Matrix Composites: Research Issues, Symposium on Microcracking Induced Damage in Composites, 111th ASME Winter Annual Meeting, Dallas, TX, Nov 1990
Research Thrusts in Solid Mechanics, 111th ASME Winter Annual Meeting, Dallas, TX, Nov 1990
Engineered and Adaptive Materials -- Challenges for Solid Mechanics, Third Int'l Conference on Constitutive Laws for Engineering Materials: Theory and Applications, Tucson, AZ, Jan 1991
Biomimetics: Natural Materials as Paradigms for Superior Aerospace Systems, Workshop on the Design and Processing of Materials by Biomimicking," Seattle, WA, Apr 1991
Materials for Future Air Force Systems, University Materials Council Annual Meeting, Washington, DC, May 1991
Research Issues in Composite Materials of Interest to the Air Force, Sixth Technical Conference on Composite Materials, American Society for Composites, Albany, NY, Oct 1991
Nature-Inspired, Multifunctional Materials and Structures, The International Mechanical Engineering Congress and Exposition - ASME Winter Annual Meeting, Chicago, IL, Nov 1994
Matrix-Enabled Damage Tolerance in Oxide CFCCs, AFOSR Mechanics of Materials Program Review, Dayton, OH, 29 Sep-1 Oct 1999 (F.W. Zok et al.)

Seminars:
On Certain Mixed Boundary Value Problems in Solid Mechanics: Coupled Singular Integral Equation Solutions, Air Force Office of Scientific Research, Washington, DC, Nov 1985
Future Trends in Structures Research, Texas A&M University, College Station, TX, Oct 1986
Structures Renaissance, Ohio State University, Columbus, OH, Nov 1986
Structures Renaissance: A New Research Thrust in Solid Mechanics, University of California at Los Angeles, Los Angeles, CA, Dec 1986
Structures Research Needs for Future Air Force Systems, Jet Propulsion Laboratory, Pasadena, CA, Dec 1986
Mechanics for Emerging and Future Aerospace Systems, Northrop Aircraft Corporation, Hawthorne, CA, Dec 1986
New Directions in Solid Mechanics Research, University of Maryland, College Park, MD, Feb 1987
Heterogeneous Mechanics -- Future Challenges, Virginia Polytechnic Institute and State University, Blacksburg, VA, Apr 1987
Multiphase Materials -- Damage Mechanics, Georgia Institute of Technology, Atlanta, GA, May 1987
Heterogeneous Damage Mechanics -- Future Challenges, University of California at San Diego, San Diego, CA, Aug 1987

PRESENTATIONS (cont)

Seminars (cont):

Research Needs in the Mechanics of Multiphase Materials, University of Rhode Island, Kingston, RI, Nov 1987
Air Force Research in Structural Mechanics -- Present and Future, United Technologies Research Center, East Hartford, CT, Nov 1987
Future Challenges in Strucrural Mechanics Research, United States Air Force Academy, Colorado Springs, CO, Dec 1987
Mesomechanics: A New Research Thrust in Structural Mechanics, University of Colorado, Boulder, CO, Dec 1987
Needed: Mechanics for Multiphase Materials, Texas A&M University, College Station, TX, Feb 1988
Role of Mechanics in the Design of Future Structural Materials, University of Minnesota, Minneapolis, MN, Aug 1988
Air Force Interests in Structural Durability, University of Wisconsin, Madison, WI, Aug 1988
Mechanics for Engineering Materials -- Future Challenges, Purdue University, W. Lafayette, IN, Sep 1988
Mesomechanics: Challenges Ahead, Lockheed Palo Alto Laboratory, Palo Alto, CA, Sep 1988
Meeting the Challenge: Mechanics for Emerging Structural Materials. Northwestern University, Evanston, IL, May 1989
Mesomechanics: A New Research Thrust in Structural Mechanics, University of Illinois at Chicago, Chicago, IL, May 1989
Basic Research Trends in Mechanics for Future Materials, Howard University, Washington, DC, Sep 1989
Engineered Multifunctional Materials--The New Challenge for Solid Mechanics, University of Cincinnati, Cincinnati, OH, Apr 1990
Air Force Basic Research Interests in the Mechanics of Materials, Rockwell International Science Center, Thousand Oaks, CA, Jun 1990
Mechanics for Engineered High-Temperature Materials, Illinois Institute of Technology, Chicago, IL, Jun 1990
Materials Designed to Order--The Role of Mechanics, Massachusetts Institute of Technology, Cambridge, MA, Sep 1990
Air Force Research in Aerospace Sciences--Present and Future, Massachusetts Institute of Technology, Cambridge, MA, Sep 1990
Mechanics for Engineered Structural Materials, Drexel University, Philadelphia, PA, Oct 1990
New Basic Research Directions in Aerospace Sciences, Virginia Polytechnic Institute and State University Seminar, Blacksburg, VA, Oct 1990
Basic Research Trends in Solid Mechanics, Rensselaer Polytechnic Institute, Troy, NY, Dec 1990
Structural Materials for Future Air Force Systems--Challenges for Solid Mechanics, Cornell University, Ithaca, NY, Feb 1991
Future Air Force Research Needs in Materials, McDonnell Douglas Research Laboratories, St. Louis, MO, Mar 1991
Matrix-Enabled Damage Tolerance in Oxide CFCCs, AFRL Ultracompact Ceramic Combustor Group Meeting, Wright-Patterson Air Force Base, OH, 1 Oct, 1999
Discrete Element Modeling of Porous Ceramic Matrices, AFRL Ultracompact Ceramic Combustor Group Meeting, Wright-Patterson Air Force Base, OH, 25 Apr 2000
Computer Simulation of Particle Aggregates, AFRL Ultracompact Ceramic Combustor Group Meeting, Wright-Patterson Air Force Base, OH, 18 Aug 2000