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Augspurger Komm Engineering, Inc.
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EDUCATION

PH.D. University of Illinois (Metallurgical Engineering with Minor in Physics), 1969
M.S. Michigan Technological University (Metallurgical Engineering), 1964
B.S. Michigan Technological University (Metallurgical Engineering), 1963

PRINCIPAL AREAS OF TEACHING, RESEARCH AND CONSULTING

Materials Science, Physical Metallurgy, Mechanical Metallurgy, Engineering Design, Corrosion and Corrosion Control, Failure Analysis, X-Ray Diffraction, Statics, Dynamics. Mechanical Behavior of Materials, Corrosion and Environmental Reactions with Materials, Failure Analysis of Systems and Products, Accident Reconstruction, Process Development, Failure of Materials: Metal, Glass, Polymers, and Composites, Corrosion Failures, Mechanical Design Analysis, Force and Stress Analysis, Analytical Capabilities: Metallography, Fractography, Mechanical Testing, X-Ray Diffraction, Scanning Electron Microscopy, and Energy Dispersive Spectroscopy, Materials Testing Standards, Industrial and Product Safety Standards

INDUSTRIAL AND CONSULTING EXPERIENCE

Senior Consulting Engineer, BTI Consultants, Tempe, Arizona
Director, SEMTEC Laboratories, Incorporated, Phoenix, Arizona
Director, Fiberquant, Incorporated, Phoenix, Arizona
Consultant, Arizona Public Service, Phoenix, Arizona
Consultant, Salt River Project, Phoenix, Arizona
Consultant, Dynamic Science, Phoenix, Arizona
Consultant, City of Mesa Fire Department, Mesa, Arizona
Consultant, Garrett Turbine Engine Company, Phoenix, Arizona
Consultant, Motorola, Incorporated, Mesa, Arizona
Consultant, Sperry Flight Systems, Phoenix, Arizona
Consultant, TRW Safety Systems, Mesa, Arizona
Consultant, Dixon Electronics, Scottsdale, Arizona
Consultant, Reliance Trucking Company of Phoenix, Phoenix, Arizona
Consultant, Biddle and Young Engineering, Phoenix, Arizona
Consultant, Expert Witness Testimony: Arizona, Arkansas, California, Colorado, Illinois, Indiana, Michigan, Nevada, New Mexico, Oregon, South Carolina, Texas, Vermont, Virginia and Washington
Engineering Trainee, Wyman-Gordon Company, Worcester, Massachusetts

CONSULTING EXPERTISE

Twenty-five Years of Experience in Personal Injury and Products Litigation.

Areas of Expertise:

Failure Analysis of Consumer Products
Metallurgical and Materials Characterization
Engineering Mechanics
Engineering Design and Safety Analysis
Accident Reconstruction

PRINCIPAL PROFESSIONAL PUBLICATIONS AND PRESENTATIONS

- “Review of Stabilization of Polyolefin Insulated Conductors, Part II, Characterization of Stabilizers,” with K. Cannole, Polymer Engineering and Science, Vol. 35, No. 2, Pgs. 218-223, January 1995
- “Review of Stabilization of Polyolefin Insulated Conductors, Part I, Theory of Stability,” with K. Cannole, Polymer Engineering and Science, Vol. 35, No. 2, Pgs. 211-217, January 1995
- “The Effect of Tungsten on the Nucleation and Growth of Thin Aluminum Alloy Films,” with Bea Cao, N. David Theodore, Hank Shin, and Peter Fejer, Materials Research Conference Proceedings, Vol. 317, Pg. 227, 1994
- “Hillock Formation in Thin Aluminum Films,” with Bea Cao, N. David Theodore, Hank Shin, and Peter Fejer, Materials Research Conference, San Francisco, CA, Spring 1994
- “Residual Stresses in Two Orthopedic Composite Materials,” with M.K. Overland and J.B. Koeneman, 20th Annual Meeting of the Society for Biomaterials, Boston, MA, April 1994
- “The Influence of Radiation Sterilization on the Tensile Strength of Lipid Conditioned PSF and PEEK Polymers,” with M.K. Overland and J.B. Koeneman, 20th Annual Meeting of the Society for Biomaterials, Boston, MA, April 1994
- “Microbiologically Induced Corrosion of Stainless Steel by *Desulfovibrio Vulgaris*: A Scanning Electron Microscope Study,” with R. Garcia and F. Li, Proceedings of 49th Annual Meeting of Electron Microscopy Society of America, San Francisco, CA, August 1991
- “Study of Organic Tree Retardant Compounds Used with XLPE Cables,” with R. Gorur and M. Miller, Proceedings of the IEEE Conference on Electrical Insulation and Dielectric Phenomena, Pgs. 404-409, October 1990
- “A Low Energy Hydrometallurgical Extraction Process,” Presented at the Innovation Concepts Fair, Sponsored by United States Department of Energy, Crystal City, VA, November 1985
- “Physical Metallurgy of Fracture” Lecture Series, Presented to Engineering Science Group, Garrett Turbine Engine Company, 1984

PRINCIPAL PROFESSIONAL PUBLICATIONS AND PRESENTATIONS (CONTINUED)

- “The Mahalla Process - A Hydrometallurgical Method for Extracting Copper,” Final Report, United States Department of Energy Grant, July 1981
- “Ferrite Formation in Neutron-Irradiated Austenitic Stainless Steel,” with J.T. Stanley, Journal of Nuclear Materials, 1979
- “Extraction of Cu from Impure Cement Copper and from Leach Liquor Utilizing the Mahalla Process,” Engineering Research Center Report ERC-R-78043, September 1978
- “Extraction of Cu from AMAX Solution Utilizing the Mahalla Process,” Engineering Research Center Report ERC-R-78033, July 1978
- “The Mahalla Process - Energy and Cost Savings in Copper Production,” Engineering Research Center Report ERC-R-77032, July 1977
- “Properties of Copper Produced by the Mahalla Process,” Engineering Research Center Report ERC-R-76001, January 1976
- “Functioning/Malfunctioning of 23mm Projectiles in Aircraft Integral Fuel Tanks, Resultant Target Damage, and Relative Vulnerability of Neat and Modified JP-5 Fuels (U),” with Pat Zabel and Paul F. Piscopo, Symposium on Vulnerability and Survivability of Aerial Targets, San Francisco, CA, 1975
- “Ferrite Formation in Irradiated Austenitic Stainless Steel - Electron Diffraction Studies,” with J.T. Stanley, TMS-AIME Abstract Bulletin, Spring Meeting, Toronto, Canada, 1975
- “Ferrite Formation in Irradiated Austenitic Stainless Steel - Magnetization Measurements,” TMS-AIME Abstract Bulletin, Spring Meeting, Toronto, Canada, 1975
- “The Effects of Small Amounts of Fe and Cu on Sub-Grain Boundary Corrosion in Al,” with M. Metzger, Abstract Bulletin, TMS-AIME Fall Meeting, Cleveland, OH, October 1970
- “Corrosion of Lattice Defects,” with M. Metzger, U.S. Army Research Office - Durham, Review of the Military Theme Corrosion, Picatinny Arsenal, March 1970
- “Grain Boundary Corrosion in Zone Refined and Lower Purity Aluminum,” with M. Metzger, TMS-AIME Transactions, Vol. 242, November 1968
- “Creep of Intrinsic and Gallium-Doped Germanium,” with M.M. Shea and L.A. Heldt, Journal of Applied Physics, Vol. 37, No. 12, November 1966

MEMBERSHIP IN SCIENTIFIC AND PROFESSIONAL SOCIETIES

- American Society for Engineering Education (Member)
American Society for Testing Materials (Member)
The Metallurgical Society of AIME (Member)
The Materials Research Society (Member)
Southwest Association of Technical Accident Investigators (Member)

PROFESSIONAL SOCIETY ACTIVITIES

American Society of Metals, Phoenix Chapter: present), Chairman (1986-87, 1985-86, 1976-77), Vice Chairman (1975-76), Secretary (1974-75), Treasurer (1973-74), Executive Committee (1973-Present)

ASM International, National Student Affairs Committee (1987)

American Society for Testing Materials, Member Committee E-40 (1980)

ASM International, National Nominating Committee (1977)

AWARDS, SCHOLARSHIPS AND HONOR SOCIETIES

Tau Beta Pi, Michigan Technological University

Alpha Sigma Mu, Michigan Technological University

Sigma Xi Honorary Fraternity, University of Illinois

ACADEMIC EXPERIENCE

1995- Arizona State University, Professor Emeritus

1986-95 Arizona State University, Associate Professor, Chemical Bio and Materials Engineering. Associate Department Chairman, Materials Science and Engineering

1981-86 Arizona State University, Associate Professor, Mechanical and Aerospace Engineering

1973-81 Arizona State University, Associate Professor, Engineering Science

1968-73 Arizona State University, Assistant Professor, Engineering Science