

# Exponent® Engineering & Scientific Consulting

# Ronald Latanision, Ph.D.

Senior Fellow and Principal Scientist | Materials and Corrosion Engineering Natick +1-508-652-8560 | rlatanision@exponent.com

# **Professional Profile**

Prior to joining Exponent, Dr. Latanision was the Director of The H.H. Uhlig Corrosion Laboratory in the Department of Materials Science and Engineering at M.I.T., and held joint faculty appointments in the Department of Materials Science and Engineering and in the Department of Nuclear Engineering. He led the School of Engineering's Materials Processing Center at MIT as its Director from 1985 to 1991. He is now an Emeritus Professor at MIT.

In April 2015, Dr. Latanision was appointed an Adjunct Professor in the Key Laboratory of Nuclear Materials and Safety Assessment of the Institute of Metal Research of The Chinese Academy of Sciences. In addition, he is a member of the National Academy of Engineering and a Fellow of ASM International, NACE International, and the American Academy of Arts and Sciences.

From 1983–1988, Dr. Latanision was the first holder of the Shell Distinguished Chair in Materials Science. He hosted the annual Siemens Science and Technology Competition on the MIT campus for more than ten years. Dr. Latanision was a founder of Altran Materials Engineering Corporation, established in 1992.

Dr. Latanision's research interests are focused largely in the areas of materials processing and in the corrosion of metals and other materials in aqueous (ambient as well as high temperature and pressure) environments. He specializes in corrosion science and engineering with particular emphasis on materials selection for contemporary and advanced engineering systems and in failure analysis. His expertise extends to electrochemical systems and processing technologies, ranging from fuel cells and batteries to supercritical water power generation and waste destruction. Dr. Latanision's research interests include stress corrosion cracking and hydrogen embrittlement of metals and alloys, water and ionic permeation through thin polymer films, photoelectrochemistry, and the study of aging phenomena/life prediction in engineering materials and systems. Dr. Latanision is a member of the International Corrosion Council and serves as Co-Editor-in-Chief of *Corrosion Reviews*, with Professor Noam Eliaz of Tel-Aviv University. He is Editor-in-Chief of the NAE Quarterly, *The Bridge*.

Dr. Latanision has served as a science advisor to the U.S. House of Representatives Committee on Science and Technology in Washington, D.C. He has also served as a member of the Advisory Committee to the Massachusetts Office of Science and Technology, an executive branch office created to strengthen the Commonwealth's science and technology infrastructure with emphasis directed toward future economic growth. Dr. Latanision has served as a member of the National Materials Advisory Board of the National Research Council and now serves as a member of the NRC's Standing Committee on Chemical Demilitarization. In June of 2002, Dr. Latanision was appointed by President George W. Bush to membership on the U.S. Nuclear Waste Technical Review Board, and was reappointed for a second four-year term by President Barack Obama.

# Academic Credentials & Professional Honors

Ph.D., Metallurgical Engineering, Ohio State University, Columbus, 1968

B.S., Metallurgy, Penn State University, 1964

2015 Lee Hsun Award of the Chinese Academy of Sciences

2014 Hosler Alumni Scholar Medalist, College of Earth & Mineral Sciences, Penn State University

2014 Lattman Visiting Scholar, College of Earth & Mineral Sciences, Penn State University

Chemist of the Year for 2007, New England Institute of Chemists

2004 Henry B. Linford Award, Electrochemical Society

2004 Best Paper of the Year in "Metals and Materials International," Korean Institute for Metals and Machinery

2001 T.P. Hoar Award, British Institute of Corrosion

NACE Fellow Award, NACE International, 1995

Willis Rodney Whitney Award, NACE International, 1994

Fellow, ASM International, 1988

Member — National Academy of Engineering, 1985

Shell Distinguished Professor of Materials Science, 1983-1988

Senior U.S. Scientist Award for Research and Teaching, the Alexander von Humboldt Foundation

Federal Republic of Germany, 1974

A.B. Campbell Young Author's Award for 1972, National Association of Corrosion Engineers

Election to various Honorary Fraternities including Phi Eta Sigma, Tau Beta Pi, Sigma Tau, Phi Kappa Phi, Sigma Gamma Epsilon, Alpha Sigma Mu

#### Academic Appointments

MIT, Professor Emeritus of Materials Science and Engineering and of Nuclear Engineering

MIT, Director Emeritus of the H.H. Uhlig Corrosion Laboratory

Purdue University, Industrial Engineering Department - Disruptive Plastic Flow in Metals by Adsorbed Monolayers, Advisor

#### **Prior Experience**

Co- Founder, Altran Materials Engineering, 2002

Professor of Materials Science and Engineering and Professor of Nuclear Engineering, MIT, through 2002

Humboldt Senior Scholar, Max-Plack-Insititue for Iron Research, Dusseldorf, 1974-1975

Acting Director, Materials Science, Martin Marietta Laboratories, through 1974

National Research Council Postdoctoral Fellowship at the National Bureau of Standards, Gaithersburg, 1968-1969

# **Professional Affiliations**

American Institute of Mining, Metallurgical and Petroleum Engineers

- Member, TMS-Committee on Chemistry and Physics of Metals, 1972-1983
- Member, Executive Committee Boston Section of AIME, 1976-1980
- Member, TMS Committee on Corrosion Resistant Metals, 1976-
- Member, Continuing Education Committee, 1980-1986
- Member, TMS Acta Metallurgica Gold Medal and Hume-Rothery Award Subcommittee, 1983-
- Member, Long Range Planning Committee, 1987-

American Society for Metals

- Member, Oxidation and Corrosion Activity, 1976-
- Member, Government and Public Affairs Committee 1984-
- Awards Chairman, Boston Chapter of ASM, 1984-1986
- 1985 National Nominating Committee, ASM
- World Materials Congress 1988, Organizing Committee

National Association of Corrosion Engineers

- Member, Governmental Affairs Committee, 1983-1986
- Member, Research Committee, 1974-1983
- Co-Editor, "Corrosion Research in Progress" Column, CORROSION Journal, 1973-1976
- Chairman, Awards Committee, 1990-1991
- Director, Ex Officio, 1990-1991
- Electric Power Research Institute
- Member, Corrosion Advisory Committee, 1978-1981

American Society for Testing and Materials

• Member, Committee G-2 on Erosion and Wear, 1972-1983

The Electrochemical Society

• Active Member

Institute of Electrical and Electronics Engineers

• Member, Committee on U.S. Competitiveness, 1987-

US/USSR Agreement for Cooperation in Science and Technology: Corrosion Working Group

• Project Coordinator, Mechanical-Chemical and Localized Corrosion Processes, 1978-1981

## Patents

Patent No. 5,614,332: Method and Apparatus for Increasing Charging and Discharging Efficiency in Batteries, March 25, 1997 (with R. Pavelle, P. Burstein).

Patent No. 5,501,846: Apparatus for Increasing Catalytic Efficiency, March 26, 1996 (with R. Pavelle, P. Burnstein, L. Farber).

Patent No. 5,228,573: Pharmaceutical Capsule and Method of Making, July 20, 1993 (with R. Pavelle, P. Burstein).

Patent No. 3,873,512: Machining Method: Electromechanical Machining of Metals and Alloys, March 25, 1975.

## **Publications**

Udupa A, Mohanty D, Mallick S, Mann J, Latanision R, Chandrasekar S. On the role of surface stress in environment-assisted fracture. De Gruyter 2024

Latanision RM. Electrocapillarity and the microhardness of zinc monocrystal electrodes. 5th International Congress on Metallic Corrosion, Tokyo, May 23, 1972.

Latanision RM. On the mechanical properties of metal electrodes. ASM Seminar, The Pennsylvania State University, April 18, 1972.

Latanision RM. Electrocapillary effects in the mechanical behavior of metals. Spring Meeting of the American Chemical Society, Boston, MA, April 12, 1972.

Latanision RM. Electrocapillarity and the microhardness of zinc monocrystal surfaces. Corrosion Research Conference, N.A.C.E., St. Louis, MO, March 21, 1972.

Latanision RM. The influence of applied potentials on the microhardness of zinc monocrystal electrodes: The electrocapillary effect. International Symposium on the Science of Hardness Testing and Its Research Applications, National Metal Congress, Detroit, MI, October 20, 1971.

Latanision RM. Electrocapillarity and mechanical behavior. Paul D. Merica Research Center, International Nickel Company, Suffern, NY, August 20, 1971.

Latanision RM. The characterization of metal surfaces. International Conference on Corrosion Fatigue, Storrs, CT, June 14, 1971.

Latanision RM. On the anisotropy observed during the passivation of nickel monocrystals. National

Association of Corrosion Engineers, Corrosion Research Symposium, Chicago, IL, March 22, 1971.

Latanision RM. The science of materials. Maryland Academy of Sciences, Junior Science and Humanities Seminar, Baltimore, MD, March 19, 1971.

Latanision RM. Surface effects on the plastic deformation of metal monocrystals. Columbia University, November 25, 1970.

Latanision RM. Surface effects on the plastic deformation of metals: The electrocapillary effect. Massachusetts Institute of Technology, November 12, 1970.

Latanision RM. The temperature dependence of stacking fault energy in Fe-Cr-Ni alloys. AIME Fall Meeting, Cleveland, OH, October 19, 1970.

Latanision RM. Surface-sensitive mechanical behavior of nickel monocrystals. Second International Conference on Strength of Metals and Alloys, A.S.M., Asilomar, CA, September 1, 1970.

Latanision RM. Surface- and environment-sensitive mechanical behavior of metals. Alpha Sigma Mu Seminar, Rensselaer Polytechnic Institute, April 22, 1970; Materials Engineering Seminar, University of Pittsburgh, January 20, 1970.

Latanision RM. Studies of extrinsic-intrinsic fault pairs in austenitic stainless steel. AIME Spring Meeting, Pittsburgh, PA, May 16, 1969.

Latanision RM. Elements of metallurgy. Metals Engineering Institute (ASM) Metallurgical Course, Washington Chapter of ASM, National Bureau of Standards February-June 1969.

Latanision RM. Plastic deformation of electrochemically polarized nickel single crystals. Materials Science Seminar, Research Institute for Advanced Studies (RIAS), June 12, 1968; Institute for Materials Research Seminar, National Bureau of Standards, May 9, 1968.

Latanision RM. Theoretical work on stress-corrosion. Joint Session of IMD (AIME), N.A.C.E. and Electrochemical Society, Carnegie-Mellon University April 25, 1968.

Latanision RM. Stress-corrosion cracking of Fe-Cr-Ni alloys. International Meeting on Fundamental Aspects of Stress-Corrosion Cracking, The Ohio State University September 12, 1967.

Latanision RM. On a mechanism for stress-corrosion cracking in austenitic stainless steel. Lehigh University April 13, 1967.

Udupa A, Mohanty D, Mallick S, Mann J, Latanision R, Chandrasekar S. On the role of surface stress in environment-assisted fracture. De Gruyter 2024

Environmental Degradation of Advanced and Traditional Engineering Materials. L.H. Hihara, R.P.I. Adler and R.M. Latanision (eds), Taylor & Francis/ CRC Press, 2013.

Kim H, Mitton DB, Latanision RM. Corrosion behavior of Ni-Base alloys in aqueous solution of pH2 at high temperature and pressure. Corrosion Science 2010; 52:801.

Kim H, Mitton DB, Latanision RM. Effect of pH and temperature of corrosion behavior of nickel-base alloys 625 and C-276 in high temperature and pressure aqueous solutions. Journal of the Electrochemical Society 2010; 157(5):194.

Latanision RM. Corrosion engineering of structural and architectural materials. Symposium on Aging Buildings sponsored by the Architectural Engineering Institute of ASCE and the Steel and Ornamental Metal Institutes of New York, New York, NY, December 9, 2009.

Duquette DJ, Latanision RM, DiBella CAW, Kirstein BE. corrosion issues related to disposal of high-level waste in the Yucca Mountain Repository. MRS, December 2008.

Duquette DJ, Latanision RM, DiBella CAW, Kirstein BE. Corrosion issues related to disposal of high-level nuclear waste in the Yucca Mountain Repository. NACE Corrosion 2008.

Mitton DB, Latanision RM. Corrosion in supercritical water—Waste destruction environments. ASM Handbook, Vol. 13B, Corrosion: Materials, Environments and Industries, ASM International, Metals Park, OH, 2006.

Kim HS, Yoon JH, Han JH, Mitton DB, Kim YS, Latanision RM. Influence of chromizing treatment on the corrosion behavior of AISI 316 stainless steel in supercritical water oxidation. Metals Mat Int 2004; 10(1):83. KIMM Best Paper of 2004.

Roy C, Fessler J, Foulds J, Taylor D, Latanision RM. Do all RPV head penetration leaks have the potential to cause head wastage? Proceedings, ICONE-12, 2004.

Eliaz N, Shemesh G, Latanision RM. Hot corrosion in gas turbine components. Engin Fail Anal 2002; 9:31.

Mitton DB, Wallace SL, Cantini NJ, Eliaz N, Bellucci F, Thompson GE, Latanision RM. The applicability of EIS for assessing substrate metal mass loss for polymer-coated metals. Proceedings, 2002 Tri-Service Corrosion Conference, 2002.

Mitton DB, Kim H, Zhang J, Latanision RM. An examination of degradation modes of constructional materials for supercritical water oxidation system fabrication. Proceedings, 2002 Tri-Service Corrosion Conference, 2002.

Mitton DB, Kim H, Zhang J, Eliaz N, Sydnor CR, Latanision RM. An examination of the corrosion phenomena of potential constructional materials for SCWO system fabrication. Paper 353, Corrosion '02, 2002.

Mitton DB, Wallace S, Cantini N, Bellucci F, Thompson GE, Eliaz N and Latanision RM, Mitton DB, Kim H, Zhang J, Eliaz N, Sydnor CR, Latanision RM. The correlation between substrate mass loss and electrochemical impedance spectroscopy data for a polymer-coated metal. J Electrochem Soc 2002.

Leisk G, Wender PJ, Mitton DB, Trainor CV, Latanision RM. Aerospace gerontology: Retained austenite as an aging mechanism in duplex bearings. Mat Technol/Adv Perform Mat 2001; 16:36.

Hong SB, Eliaz N, Sachs EM, Allen SM, Latanision RM. Corrosion behavior of advanced Ti-based alloys made by three-dimensional printing (3DPÔ) for biomedical applications. Corros Sci 2001; 43:1781. T.P. Hoar Prize of the Institute of Corrosion (UK).

Hong SB, Eliaz N, Leisk G, Sachs EM, Allen SM, Latanision RM. A new Ti-5Ag alloy for customized prostheses by three dimensional printing. J Dental Res 2001; 80(3):860.

Mitton DB, Eliaz N, Cline JA, Latanision RM. An overview of the current understanding of corrosion in SCWO systems for the destruction of hazardous waste products. Mat Technol/Adv Perform Mat 2001; 16:44.

Eliaz N, Mitton DB, Cantini NJ, Leisk G, Wallace SL, Bellucci F, Thompson GE, Latanision RM. The use of EIS and VSM for measuring the corrosion rate of polymer-coated ferromagnetic metals. Mat Technol/Adv Perform Mat 2001; 16:90.

Mitton DB, Yoon JH, Cline JA, Kim HS, Eliaz N, Latanision RM. The corrosion behavior of nickel-base

alloys in SCWO systems. Ind Eng Chem Res 2000; 39:4689.

Kim YS, Mitton DB, Latanision RM. Corrosion resistance of stainless steels in chloride containing SCWO systems. Korean J Chem Engin 2000; 17:58.

Cantini NJ, Mitton DB, Eliaz N, Leisk G, Wallace SL, Bellucci F, Thompson GE, Latanision RM. In-situ underfilm corrosion rate measurement by magnetic and electrochemical techniques. Electrochem Solid State Lett 2000; 3(6):275.

Mitton DB, Yoon JH, Latanision RM. An overview of corrosion phenomena in SCWO systems for hazardous waste destruction, Zairyo-to-Kankyo (corrosion engineering). Japan Soc Corrosion Engin 2000; 49:3.

Takemoto T, Eagar TW, Matsunawa A, Latanision RM. Electrochemical migration tests of solder alloys in pure water. Corrosion Sci 1997; 39:1415-1430.

Mitton DB, Ford TE, LaPointe E, Bellucci F, Mitchell R, Latanision RM. The potential for unanticipated biodegradation during EIS analysis of polymer-coated metallic substrates. Electrochem Acta 1997; 42:1859.

Outlaw RA, Rezaie-Serej S, Allen WP, Latanision RM. Desulfurization of Ni-based superalloys by combined heating and glow discharge. Scripta Materialia 1996; 34:1315.

Mitton DB, Bellucci F, Latanision RM. The effect of post-cure annealing on the protective properties of polyimides on chromium substrates. J Electrochem Soc 1996; 143:3307.

Mitton DB, Marrone PA, Latanision RM. Interpretation of the rationale for feed modification in SCWO systems. J Electrochem Soc 1996; 143(3):L59.

Attanasio SA, Latanision RM. Corrosion of rapidly solidified neodymium-iron-boron (Nd-Fe B) permanent magnets and protection via sacrificial zinc coatings. Mat Sci Engin 1995; A198:125.

Latanision RM. Corrosion science, corrosion engineering and advanced technologies. Corrosion 1995; 51:270.

Latanision RM. Education reform and the public will. American Education: Still Separate, Still Unequal, Daedalus 1995; 124(4):143.

Hara, Latanision RM. The effect of aging on the diffusivity of hydrogen in amorphous Ni-Si-B alloys. Corrosion Sci 1995; 37(6):865.

Damon W, Latanision RM. The role of universities in K-12 education. American Academy of Arts and Sciences, June 1995.

Moffat TP, Ruf RR, Latanision RM. An x-ray photoelectron spectroscopy study of chromium metalloid alloys-III. Electrochem Acta 1995; 40:1723.

Hihara LH, Latanision RM. Corrosion of metal matrix composites. Int Mat Rev 1994; 39(6):245.

Kloppers MJ, Bellucci F, Brennan JE, Latanision RM. Transport and dielectric properties of poly(ethyleneterephthalate) as determined via electrochemical techniques. J Appl Polymer Sci 1993; 48:2197-2205.

Fernandes MG, Searson PC, Latanision RM. Morphological aspects of anodic dissolution. Phys Rev 1993; B(47):11749.

Zuo Y, Latanision RM. Corrosion behavior of a steel surface laser-alloyed with chromium borides. J Mat Sci 1992; 27:3014.

Moffat TP, Latanision RM. Electrochemistry of chromium-metalloid alloys in sulfuric acid—II. J Electrochem Soc 1992; 139:1013.

Kloppers MJ, Bellucci F, Latanision RM. Electronic properties and defect structure of Fe and Fe-Cr passive films. Corrosion 1992; 48:229.

Zuo Y, Latanision RM. Environment-induced cracking of two Ni-base amorphous alloys in acid chloride solutions. Mat Sci Engin 1992; A159:87.

Hihara H, Latanision RM. Galvanic corrosion of aluminum-matrix composites. Corrosion 1992; 48:546.

Bellucci F, Nicodemo L, Monetta T, Kloppers MJ, Latanision RM. A study of corrosion initiation on polyimide coatings. Corrosion Sci 1992; 33:1203.

Khamis E, Bellucci F, Latanision RM. Acid corrosion inhibition of nickel by 2-(triphenyl phosphoranylidene) succinic anhydride. Corrosion 1991; 47:667.

Nagarkar PV, Kloppers MJ, Bellucci F, Latanision RM. Corrosion engineering in device packaging. Mat Res Soc Symp Proc 1991; 203:87.

Harris TM, Latanision RM. Grain boundary diffusion of hydrogen in nickel. Met Trans 1991; 22A:351.

Hihara LH, Latanision RM. Localized corrosion induced in graphite/aluminum metal-matrix composites by residual microstructural chloride. Corrosion 1991; 47:335.

Schussler A, Bellucci F, Senturia SD, Latanision RM. Na+ and Cl- transport across polyimide films. J Appl Polymer Sci 1991; 42:1567.

Moffat TP, Latanision RM. Production and characterization of extremely corrosion resistant chromiummetalloid alloys. J Electrochem Soc 1991; 138:3280.

Bellucci F, Kloppers MJ, Latanision RM. Protective properties of polyimide (PMDA-ODA) on aluminum metallic substrates. J Electrochem Soc 1991; 138:40.

Bellucci F, Nicodemo L, Latanision RM. The effect of composition on the performance of epoxy paints. J Mat Sci 1990; 25:1097.

Jacobs J, Rose RM, Veeck SJ, Latanision RM. The effect of porous coating processing on the corrosion behavior of cast Co-Cr-Mo surgical implant alloys. J Orthop Res 1990; 8:874.

Bellucci F, Khamis E, Schussler A, Latanision RM. Moisture affecting electrical conductivity in kapton polyimide. J Electrochem Soc 1990; 137:1778.

Searson PC, Latanision RM. A photoelectrochemical study of the passive film on chromium. Electrochemica Acta 1990; 35:445.

Hihara LH, Latanision RM. Residual microstructural chloride in graphite-aluminum metal matrix composites. Mat Sci Engin 1990 A126:231.

Harris TM, Latanision RM. Comments on detection of hydrogen permeation on the microscopic scale in nickel. Scripta Metallurgica 1989; 23:1027.

Searson PC, Nagarkar PV, Latanision RM. The effect of density of states, work function and exchange

integral of polycrystalline and single crystal surfaces on the hydrogen evolution reaction. Int J Hydrogen Energy 1989; 14:131.

Harris T, Latanision RM. Investigation of hydride formation and decomposition in palladium using the electrochemical permeation technique. Int J Hydrogen Energy 1989; 14:683.

Searson PC, Stimming U, Latanision RM. Analysis of the photoelectrochemical response of the passive film on iron in neutral solutions. J Electrochem Soc 1988; 135:1358.

Hihara LH, Latanision RM. Cathodic overprotection of silicon carbide/6061-T6 and graphite/6061-T6 aluminum alloy metal matrix composites. Scripta Metallurgica 1988; 22:413-418.

Moffat TP, Ruf RR, Latanision RM. Electrochemistry of chromium-base binary metallic glasses. Mat Sci Engin 1988; 99:525.

Hashimoto M, Latanision RM. Experimental study of hydrogen transport during plastic deformation in iron. Met Trans 1988; 19A:2789.

Latanision RM. Physical metallurgy of nickel-base alloys as it relates to corrosion. Mat Engin 1988; 10:143-162.

Hashimoto M, Latanision RM. The role of dislocations during transport of hydrogen in hydrogen embrittlement of iron. Met Trans 1988; 19A:2799.

Hashimoto M, Latanision RM. Theoretical study of hydrogen transport during plastic deformation in iron. Acta Metallurgica 1988; 36:1837.

Sedriks AJ, Latanision RM. Aqueous corrosion resistance. J Met 1987; 39(12):20.

Burleigh TD, Latanision RM. The effect of phosphorus on the corrosion of glassy copper zirconium alloys. Corrosion 1987; 43:471.

Lee TSF, Latanision RM. Effects of grain boundary segregation and precipitation on the hydrogen susceptibility of nickel. Met Trans 1987; 18A:1653.

Nishimura R, Hubler EK, Latanision RM. Hydrogen permeation behavior in polycrystalline nickel implanted with helium, argon, nickel, yttrium and platinum. Mat Sci Engin 1987; 90:243.

Burleigh TD, Latanision RM. The use of photocurrents to characterize anodic films on Ti, Zr, Cu, and 304 stainless steel. J Electrochem Soc 1987; 134:135.

Searson PC, Latanision RM. A comparison of the general and localized corrosion resistance of conventional and rapidly solidified A1S1 303 stainless steel. Corrosion 1986; 42:161.

Saito N, Searson PC, Latanision RM. The corrosion performance of microcrystalline, titanium-modified 316 stainless steel. Corrosion Sci 1986; 26(8):629.

Latanision RM. Corrosion resistance of metastable alloys processed by rapid solidification. Amorphous Metals and Semiconductors, Acta-Scripta Metallurgica Proceedings Series, Vol. 3, p. 413, 1986.

Frankel GS, Latanision RM. Effect of hydrogen on the easy glide extent in single crystal nickel. Scripta Metallurgica 1986; 20:681.

Frankel S, Latanision RM. Hydrogen transport during deformation in nickel: Part I. Polycrystalline nickel. Met Trans 1986; 17A:861.

Frankel S, Latanision RM. Hydrogen transport during deformation in nickel: Part II. Single crystal nickel. Met Trans 1986; 17A:869.

Eberhart ME, Johnson KH, Latanision RM. The chemistry of fracture—A basis for analysis. Acta Metallurgica 1985; 33:1769.

Searson PC, Latanision RM. Corrosion and oxidation resistance of iron-and aluminum-based powder metallurgy alloys. Corrosion Sci 1985; 25:947.

Sandenbergh RF, Latanision RM. The stress corrosion cracking of a glassy Fe32Ni36Cr14P12B6 alloy. Corrosion 1985; 41:369.

Sorensen NR, Hunkeler FJ, Latanision RM. The anodic polarization behavior of Fe-Ni-P-B and Fe-Ni-Cr-P-B amorphous alloys. Corrosion 1984; 40:619-624.

Eberhart ME, Johnson KH, Latanision RM. A molecular orbital model of intergranular embrittlement. Acta Metallurgica 1984; 32:955-959.

Kurkela M, Latanision RM. Hydrogen permeability and diffusivity in nickel and Ni- base alloys. Corrosion 1983; 39:174-181, 1983.

Turn, Jr., JC, Latanision RM. The influence of structure on the corrosion of glassy copper-zirconium alloys. Corrosion 1983; 39:271-279.

Tsuru T, Latanision RM. Grain boundary transport of hydrogen in nickel. Scripta Metallurgica 1982; 16:575-578.

Landis WJ, Grynpas MD, Martin JR, Latanision RM. Mineralized biological tissues studied by auger electron and x-ray photoelectron spectroscopy. Microbeam Anal 1982; J-3:121-127.

Tsuru T, Latanision RM. The corrosion resistance of microcrystalline stainless steel. J Electrochem Soc 1982; 129:1402-1408.

Frankel GS, Latanision RM. Effect of joule heating in electrochemical measurement of hydrogen transport. Scripta Metallurgica 1982; 16:1097-1100.

Kurkela M, Latanision RM. Concerning electrochemical measurements of hydrogen permeation in metals. Scripta Metallurgica 1981; 15:1157-1161.

Was GS, Tischner H, Pelloux RMN, Latanision RM. The fatigue crack growth behavior of Inconel 600 at cathodic potentials. Met Trans 1981; 12A:1409-1418.

Was GS, Tischner H, Latanision RM. The influence of thermal treatment on the chemistry and structure of grain boundaries in Inconel 600. Met Trans 1981; 12A:1357-1409.

Kurkela M, Latanision RM. The effect of plastic deformation on the transport of hydrogen in nickel. Scripta Metallurgica 1979; 13:927-932.

Klimowicz TF, Latanision RM. On the embrittlement of aluminum alloys by cathodic hydrogen: The role of surface films. Met Trans 1978; 9A:597-599.

Beckham KF, Latanision RM. Modification of the strength of solids by chemisorption. Crit Rev Solid State Mat Sci 1978; II:317-331.

Opperhauser, Jr., H, Westwood ARC, Latanision RM. The influence of surface charge density on the fracture of zinc single crystal electrodes. Scripta Metallurgica 1978; 12:475-479.

Macmillan NH, Latanision RM. Surface- and environment-sensitive mechanical behavior. Physics Teacher 1976; 14(3):135 and 14(4):220.

Latanision RM. Surface effects in crystal plasticity. J Colloid Interface Sci 1976; 6:267-312.

Westwood ARC, Latanision RM. What we would like to know about surface and environmental effects in deformation. Mat Sci Engin 1976; 25:225-231.

Opperhauser, Jr., H, Latanision RM. Further observations on the effect of grain boundary segregation in the hydrogen embrittlement of nickel. Met Trans 1975; 6A:233-234.

Swain MV, Westwood ARC, Latanision RM. Further observations on the environment-sensitive hardness and machinability of alumina. J Am Ceramics Soc 1975; 58:372.

Opperhauser H, Latanision RM. The intergranular embrittlement of nickel by hydrogen: The effect of grain boundary segregation. Met Trans 1974; 5:483-492.

Nielsen KC, Kirschbaum R, Latanision RM. Electromechanical machining—A new metal cutting technique under study at Martin Marietta Laboratories. Modern Machine Shop Magazine 1974; 46(9):69-76.

Green JAS, Latanision RM. Factors controlling the corrosion behavior of titanium and titanium-nickel alloys in saline solutions. Corrosion 1973; 29:386-392.

Macmillan NH, Lye RG, Latanision RM. On the surface physics of metal electrodes. Corrosion Sci 1973; 13:387-393.

Opperhauser H, Latanision RM. Passivation of nickel monocrystal surfaces. Corrosion 1971; 27:509-515.

Ruff, Jr., AW, Latanision RM. The temperature dependence of stacking fault energy in Fe-Cr-Ni alloys. Met Trans 1971; 2:505-509.

Westwood RC, Lye RG, Latanision RM. Adsorption sensitive anelastic effects in glass. Phys Stat Sol 1970; A:K17-K20.

Mauvais CJ, Ruff, Jr., AW, Latanision RM. On the anisotropy observed in the passivation of Ni monocrystals. J Electrochem Soc 1970; 117:902-903.

Ruff, Jr., AW, Latanision RM. Extrinsic-intrinsic fault pairs in an Fe-Cr-Ni alloy. J Appl Phys 1969; 40:2716-2720.

Latanision RM. On the dislocation distribution near the surface of lightly deformed copper single crystals. Scripta Metallurgica 1969; 3:465-469.

Staehle RW, Latanision RM. Plastic deformation of electrochemically polarized nickel single crystals. Acta Metallurgica 1969; 17:307-319.

Staehle RW, Latanision RM. Effect of continuous hydrogenation on the deformation of nickel single crystals. Scripta Metallurgica 1968; 2:667-672.

#### **Presentations and Published Abstracts**

Mitton DB, Wallace SL, Cantini NJ, Eliaz N, Bellucci F, Thompson GE, Latanision RM. The applicability of EIS for assessing substrate metal mass loss for polymer-coated metals. Proceedings, 2002 Tri-Service Corrosion Conference, San Antonio, TX, January 14-18, 2002.

Mitton DB, Kim H, Zhang J, Eliaz N, Sydnor CR, Latanision RM. An examination of the corrosion phenomena of potential constructional materials for SCWO system fabrication. Paper 353, Corrosion 02, Denver, CO, April 7-12, 2002.

Mitton DB, Kim H, Zhang J, Latanision RM. An examination of degradation modes of constructional materials for supercritical water oxidation system fabrication. Proceedings, 2002 Tri-Service Corrosion Conference, San Antonio, TX, January 14-18, 2002.

Mitton DB, Yoon JH, Eliaz N, Cline JA, Latanision RM. Assessing degradation mechanisms in supercritical water oxidation systems. Paper 352, Corrosion 01, Houston, TX, March 11-16, 2001.

Cline JA, Marrone PA, Tester JW, Mitton DB, Latanision RM. Corrosion mechanisms in N10276 in hydrothermal HCI solutions. Paper 362, Corrosion 01, Houston, TX, March 11-16, 2001.

Mitton DB, Eliaz N, Latanision RM. Stress corrosion cracking in supercritical water systems for waste destruction. Chemistry and Electrochemistry of Stress Corrosion Crashing: A Symposium Honoring R.W. Staehle, p. 597, 2001.

Mitton DB, Yoon JH, Cline JA, Kim HS, Eliaz N, Latanision RM. The corrosion behavior of nickel-base alloys in SCWO systems. Proceedings, 5th International Symposium on Supercritical Fluids, Atlanta, GA, April 8-12, 2000.

Mitton DB, Latanision RM. Stress corrosion cracking in supercritical water systems. Proceedings, 1st International Symposium on Supercritical Water-Cooled Reactors, Design and Technology (SCR-2000), Tokyo, Japan, November 6-9, 2000.

Yoon J-H, Kim TW, Lee JH, Kim HS, Leisk G, Mitton DB, Latanision RM. Aluminizing and boroaluminizing surface modifications of Mar-M247 and their effects on hot corrosion resistance in Na2SO4-NaCl molten salt. Abstract 1729, 196th Electrochemical Society Meeting, Honolulu, HI, 1999.

Leisk G, McBrine WJ, Esselman T, Van Der Schijff OJ, Wender PJ, Latanision RM. Application of practical aging management concepts to corrosion engineering. Plenary Lecture, 14th International Corrosion Congress, Cape Town, South Africa, September 26-October 1, 1999.

Mitton DB, Yoon J-H, Cline JA, Latanision RM. Corrosion considerations for employing SCWO during hazardous waste destruction. Proceedings, 1st International Symposium on SCWO Technology, Changwon, Korea, December 15, 1999.

Mitton DB, Kim YS, Yoon JH, Take S, Latanision RM. Corrosion of SCWO constructional materials in Cl containing environments. Paper 257, Symposium on Corrosion in Supercritical Processes—Corrosion 99, 1999.

Yoon J-H, Son MS, Lee GW, Kim HS, Leisk G, Mitton DB, Latanision RM. Effect of pre-sputtering on nitride layer formation in ion nitriding of STS 304 stainless steel. Abstract 1297, 196th Electrochemical Society Meeting, Honolulu, HI, 1999.

Take S, Okuyama M, Yuditskaya S, Mitton DB, Latanision RM. Evaluation of corrosion resistance of metal evaporated tape by electrochemical measurements. Proceedings, 196th Meeting of The Electrochemical Society, Honolulu, HI, October 17-22, 1999.

Mitton DB, Toshima S, Chang SS, Bellucci F, Ford TE, Gu J-O, Mitchell R, Latanision RM. Biodegradation of polyimide-coated chromium substrates. Symposium on Corrosion Control by Coatings (ACS Symposium 689), p. 211, ACS, Washington, DC, 1998.

Mitton DB, Zhang SH, Cline JA, Quintana MS, Caputy N, Marrone PA, Latanision RM. Corrosion engineering of supercritical water oxidation systems for chemical waste destruction. Corrosion in

Advanced Materials and Systems, p. 129, NACE, Houston, TX, 1998.

Mitton DB, Zhang SH, Quintana MS, Cline JA, Caputy N, Marrone PA, Latanision RM. Corrosion mitigation in SCWO systems for hazardous waste disposal. Paper 414, Symposium on Corrosion in Supercritical Fluids, Corrosion 98, 1998.

Take S, Maruyama S, Okuyama M, Mitton DB, Latanision RM. Evaluation of hot corrosion resistance of alloys under molten sulfate film by electrochemical techniques. Paper 294, 194th Electrochemical Society Meeting, Boston, MA, 1998.

Leisk G, Mitton DB, Latanision RM. Evaluation of retained austenite as an aging mechanism in a duplex bearing. Proceedings, 24th Joint Service Data Exchange, Anaheim, CA, 1998.

Mitton DB, Quintana MS, Cline JA, Caputy N, Latanision RM. An investigation of the degradation of nickel alloys in supercritical water oxidation systems. Paper 1014, Symposium on Electrochemistry in Unusual Media and Under Unusual Conditions, 193rd Electrochemical Society Meeting, San Diego, CA, 1998.

Kim YS, Park YS, Mitton B, Latanision RM. The role of nitrogen and molybdenum in the corrosion of stainless steels. Paper 236, 194th Electrochemical Society Meeting, Boston, MA, 1998.

Yoon J-H, Song J-S, Mitton B, Kim H-S, Latanision RM. A study of the wet etching behavior of CoNbZr/Cu/CoNbZr multi-layer films formed by RF magnetron sputtering. 194th Electrochemical Society Meeting, Boston, MA, 1998.

Montero-Ocampo, Latanision RM. Effects of pre-heating on the electrochemical impedance and microstructure of an As-Cast Co-Cr-Mo alloy. Proceedings, Symposium on Passivity and Breakdown, Electrochemical Society, Pennington, 1997.

Mitton DB, Zhang S-H, Hautanen KE, Cline JA, Han E-HJ, Latanision RM. Evaluating stress corrosion in supercritical water oxidation systems for the destruction of hazardous waste. Paper No. 203, Corrosion 97, NACE, Houston, TX, 1997.

Mitton DB, Zhang S-H, Cline JA, Quintana MS, Caputy N, Latanision RM. Corrosion mechanisms in supercritical water oxidation systems for hazardous waste destruction. Proceedings, 1997 Tri-Service Conference on Corrosion, 1997.

Mitton DB, Han E-H, Zhang S-H, Hautanen KE, Latanision RM. Degradation in supercritical water oxidation systems. p. 242. In: ACS Symposium Series, Supercritical Fluids: Extraction and Pollution Prevention, Abraham MA, Sunol AK (eds), American Chemical Society, Washington, DC, 1997.

Takemoto T, Eagar TW, Matsunawa A, Latanision RM. Evaluation method for electrochemical migration susceptibility in pure water. Microjoining and Assembly Technology in Electronics (Japan Welding Society), 1997.

Latanision RM. A greenfield for corrosion engineering. Keynote address given at Intercorr 96—1st Global Internet Corrosion Conference, 1996.

Mitton DB, Orzalli JC, Latanision RM. Corrosion in supercritical water oxidation systems. p. 638. In: Physical Chemistry of Aqueous Systems—Meeting the Needs of Industry, Proc 12th International Conference on the Properties of Water and Steam, Begell House, New York, 1995.

Mitton DB, Orzalli JC, Latanision RM. Corrosion phenomena associated with supercritical fluids. 3rd International Symposium on Supercritical Fluids, Vol. 3, p. 43, 1995.

Mitton DB, Orzalli JC, Latanision RM. Corrosion studies in supercritical water oxidation systems. Innovations in Supercritical Fluids: Science and Technology, ACS Symposium Series, Vol. 608, p. 327, 1995.

Ezaki H, Berera G, Latanision RM. Effect of alloy additions on the electronic properties of passive films on Ti and Fe: A photoelectrochemical investigation. p. 127. In: Proceedings, H.H. Uhlig Memorial Symposium, Electrochemical Society Monograph Series, 94-26, 1995.

Nenov, Latanision RM. Lifetime prediction for polymide metal structures immersed in 0.5 MNaCl. 3rd International Symposium on Corrosion and Reliability of Electronic Materials and Devices, Electrochemical Society, Monograph Series, 1995.

Tan EK, Mitton DB, Nagarkar PV, Bellucci F, Latanision RM. Improving the corrosion resistance of polyimide coated metallic substrates. Proceedings, 2nd Intl. Symposium on Corrosion and Reliability of Electronic Materials and Devices, Toronto, Canada, The Electrochemical Society, 1993.

Peters WA, Griffith P, Harris JG, Herzog HJ, Howard JB, Smith KA, Tester JW, Latanision RM. Supercritical water oxidation for wastes cleanup: Enabling research for practical applications. First International Conference on Solvo-Thermo Reactors, paper 5-6, p. 1, 1995.

Mitton DB, Bellucci F, Tan EK, Nagarkar PV, Latanision RM. Transport and protective properties of polyimides as studied via electrochemical impedance spectroscopy. Advances in Polyimide Science and Technology, Proceedings, 4th International Conference on Polyimides, Technomic Publishing Co., Ellenville, NY, 1993.

Kenney GB, Allen TJ, Latanision RM. A materials and processing agenda for the 1990s. Presentation to the Federation of Materials Societies Biennial Meeting on Developing a Vision for Materials Processing in the 1990s: The Role of National Policy, FMS, Washington, DC, 1991.

Latanision RM. Education in America—A need for stewardship. Keynote address presented before the MIT Alumni Leadership Conference, Cambridge, MA, September 15, 1990.

Zuo Y, Latanision RM. Hydrogen embrittlement of two nickel base amophous alloys in acidic chloride solution. Corrosion Control -- 7th APCCC, (1):475-480, 1991.

Tan EK, Mitton DB, Bellucci F, Nagarkar PV, Latanision RM. Transport and protective properties of polyimides as studied via electrochemical impedance spectroscopy. p. 169. In: Fourth International Conference on Polymides, 1991.

Bellucci F, Khamis E, Latanision RM. The effect of thickness on the electrical conductivity of kapton polyimide. Vol. 2, pp. 215-222. In: 11th International Corrosion Conference, 1990.

Bellucci F, Khamis E, Nagarkar PV, Searson PC, Schussler A, Senturia SD, Latanision RM. Corrosion engineering in the packaging of electronic, magnetic, and optical devices. International Symposium on Corrosion Science and Engineering (in honor of Marcel Pourbaix's 85th Birthday). Rapp RA, Gokcen NA, Pourbaix A (eds.), CEBELCOR, 2:491, 1989.

Bellucci F, Schussler A, Nagarkar PV, Latanision RM. Electrochemical and transport properties of polyimide. Proceedings, 2nd International Symposium on ULSI Science and Technology, The Electrochemical Society, Los Angeles, CA, May 7-12, 1989.

Nagarkar PV, Searson PC, Bellucci F, Allen MG, Latanision RM. Interfacial interactions affecting polyimide reliability. 39th Electronic Components Conference, p. 160, IEEE, 1989.

Moffat TP, Latanision RM. The passive state of chromium. p. 202. In: Proceedings, Symposium on Transient Techniques in Corrosion Science and Engineering. Smyrl W, MacDonald DD, Lorenz WJ (eds.), Electrochemical Society, Pennington, NJ, 1989.

Nagarkar PV, Moffat TP, Searson PC, Latanision RM. Electrochemistry of Cr- and Ni-base binary metallic glasses. p. 597. In: Proceedings, 10th International Congress on Metallic Corrosion, Oxford and IBH Publishing, New Delhi, 1987.

Latanision RM. Current and projected impact of corrosion science and engineering. 33rd Sagamore Army Materials Research Conference, July 28-August 1, 1986, Materials Performance, 26(10):9, 1987.

Latanision RM. Physical metallurgy of nickel-base alloys as it relates to corrosion. p. 13. In: Proceedings, International Conference on The Corrosion of Nickel-Base Alloys, ASM, 1985.

Burleigh TD, Johns ERC, Latanision RM. The effect of phosphorus on the corrosion resistance of rapidly quenched alloys. pp. 1457-1464. In: Proceedings, 5th International Conference on Rapidly Quenched Metals, 1985.

Shastry R, Townsend HE, Latanision RM. Corrosion behavior of rapidly solidified Fe-Ti-P Alloys With Cu, Cr, and B additions. pp. 219-225. In: Proceedings, Materials Research Society 1983 Annual Meeting, North Holland, 1984.

Latanision RM. Corrosion resistance of microcrystalline aluminum alloys. Proceedings, 9th International Congress on Metallic Corrosion, (3):122-129, 1984.

Burleigh TD, Latanision RM. The effect of phosphorus on the corrosion and photocorrosion of glassy copper-zirconium alloys. Proceedings, 9th International Congress on Metallic Corrosion, 2:645-648, 1984.

Burleigh TD, Latanision RM. The effect of phosphorus on the corrosion resistance of glassy copperzirconium alloys. pp. 227-231. In: Proceedings, Materials Research Society 1983 Annual Meeting, North Holland, 1984.

Johns C, Vander Sande JB, Latanision RM. The effect of rapid quenching on microstructure and passivity in iron-titanium alloys. Proceedings, 9th International Congress on Metallic Corrosion, 1:228-233, 1984.

Sheeks K, Ballinger RG, Latanision RM. Fatigue crack growth of Inconel Alloy X-750 in simulated BWR environments. Proceedings, 9th International Congress on Metallic Corrosion, 3:310-316, 1984.

Compeau CR, Kurkela M, Latanision RM. Hydrogen permeation and embrittlement studies on metallic glasses. pp. 297-313. In: Alexander R. Troiano Honorary Symposium on Hydrogen Embrittlement and Stress Corrosion Cracking, ASM, Metals Park, 1984.

Hashimoto M, Latanision RM. Hydrogen transport during plastic deformation. Proceedings, 9th International Congress on Metallic Corrosion, 4:427-436, 1984.

Frankel S, Latanision RM. The interaction of hydrogen permeation and deformation in poly- and single crystal nickel. Proceedings, 9th International Congress on Metallic Corrosion, 4:466-472, 1984.

Kackley ND, Latanision RM. A study of localized corrosion in aluminum using the scanning potential microprobe. Proceedings, 9th International Congress on Metallic Corrosion, 4:191-197, 1984.

Ballinger RG, Moshier WC, Siebein KN, Latanision RM. A study of the thermal aging behavior of alloy-600. Proceedings, 9th International Congress on Metallic Corrosion, 3:265-273, 1984.

Smith SW, Kackley ND, Latanision RM. Corrosion of aluminum in salt water and seawater as influenced by magnesium and copper. Corrosion 83, NACE, Houston, TX, 1983.

Saito A, Sandenbergh R, Zhang S-X, Latanision RM. Corrosion resistance of rapidly quenched alloys. pp. 153-171. In: Proceedings, Symposium on the Chem. and Phys. of Rapidly-Solidified Materials, TMS, 1983.

Sheeks S, Moshier WC, Ballinger RG, Pelloux RMN, Latanision RM. Fatigue crack growth in alloys x-750 and 600 in simulated PWR and BWR environments. p. 702. In: International Symposium on Environmental Degradation of Materials in Nuclear Power Systems, Electric Power Research Institute, 1983.

Tsuru T, Zhang SX, Latanision RM. The corrosion resistance of microcrystalline alloys. pp. 1437-1442. In: Proceedings, 4th International Conference on Rapidly Quenched Metals, 1982.

Ballinger RG, Moshier C, Pelloux RMN, Latanision RM. The role of uncertainty in the measurement of crack length by compliance techniques. pp. 261-285. In: International Conference on Subcritical Crack Growth, Freiberg, Germany, 1981.

Was GS, Latanision RM. Synergistic effects of thermal treatment and cathodic polarization on the fatigue crack growth behavior of Inconel 600. pp. 400-405. In: Proceedings, 8th International Congress on Metallic Corrosion, DECHEMA, Frankfurt, 1981.

Tsuru T, Latanision RM. The corrosion resistance of microcrystalline stainless steels. pp. 238-248. In: Corrosion and Corrosion Protection (Uhlig Symposium), Electrochemical Society, 1981.

Smith, Jr., SW, Latanision RM. The redistribution of cathodic activity on an aluminum surface in seawater upon the introduction of copper ions. Corrosion 81, NACE, Houston, TX, 1981.

Turn, Jr., JC, Compeau CR, Latanision RM. The corrosion resistance of glassy metals. Proceedings, Third International Conference on Mechanical Behavior of Metals, 2:475-483, Pergamon Press, Toronto, 1979.

Gastine OH, Compeau CR, Latanision RM. Stress corrosion cracking and hydrogen embrittlement: Differences and similarities. pp. 48-70. In: Proceedings, Symposium on Environment Sensitive Fracture of Engineering Materials, TMS-AIME, Warrendale, 1979.

Turn, Jr., JC, Latanision RM. Mechanisms of corrosion of glassy copper zirconium alloys. Proceedings, Seventh International Congress on Metallic Corrosion, 1:279-288, 1978.

Latanision RM. Surface effects in crystal plasticity: General overview. pp. 3-47. In: Proceedings, NATO Advanced Study Institute on Surface Effects in Crystal Plasticity, Noordhoff International Publishing Co., Leyden, Holland, 1977

Opperhauser, Jr., H, Westwood ARC, Latanision RM. The influence of surface charge density on the plasticity and fracture of zinc monocrystal electrodes. Proceedings, 4th International Conference on the Strength of Metals and Alloys, 2:903-904, 1976.

Westwood RC, Latanision RM. Surface- and environment-sensitive mechanical behavior—Some current issues. Proceedings, 4th International Conference on the Strength of Metals and Alloys, 3:1092-1121, 1976.

Opperhauser, Jr., H, Westwood ARC, Latanision RM. Electrocapillarity and the microhardness of zinc monocrystal electrodes. pp. 111-114. In: Proceedings, 5th International Congress on Metallic Corrosion, NACE, Houston, TX, 1974.

Green JAS, Latanision RM. Electrochemical techniques in the study of embrittlement phenomena. Presented at Symposium on Electrochemical Techniques Applied to Corrosion Problems, Corrosion 74, NACE, Houston, TX, 1974.

Swain MV, Westwood ARC, Latanision RM. Environment-sensitive hardness and machinability of alumina. Proceedings, NSF-Hard Materials Workshop, Lehigh University, July 1974.

Latanision RM. The chemical and physical nature of surfaces. Proceedings, International Conference on Surface Technology, pp. 1-22, Society of Manufacturing Engineers, Dearborn, 1973.

Opperhauser, Jr., H, Latanision RM. Intergranular cracking of pure nickel electrodes at cathodic potentials. Proceedings, Third International Conference on the Strength of Metals and Alloys: The Microstructure and Design of Alloys, 1:472-476, The Institute of Metals and Iron and Steel Institute, 1973.

Opperhauser H and Westwood ARC, Latanision RM. The influence of applied potential on the microhardness of zinc monocrystal electrodes: The electrocapillary effect. pp. 432-439. In: Proceedings, International Conference on the Science of Hardness Testing and Its Research Applications, ASM, Metals Park, 1973.

Westwood RC, Latanision RM. Comments on adsorption-sensitive cracking. pp. 62-103. In: Proceedings, Conference on the Environmental Degradation of Stressed Materials, ARPA, Woods Hole, MA, July 1971.

Latanision RM. Surface-sensitive mechanical behavior of nickel monocrystals. pp. 446-450. In: Proceedings, Second International Conference on the Strength of Metals and Alloys, ASM, Metals Park, 1970.

Staehle RW, Latanision RM. Stress-corrosion cracking of iron-nickel-chromium alloys. Proceedings, pp. 214-307. In: Conference on Fundamental Aspects of Stress-Corrosion Cracking, NACE, Houston, TX, 1969.

#### Reports

Latanision RM, Shaw RW. 1993. Corrosion in supercritical water oxidation systems. MIT EL 93 006.

#### **Book Chapters**

Abdul-Hamid OS, Latanision RM. Diffusion of hydrogen in titanium. p. 205. In: Hydrogen Effects in Materials, Thompson AW, Moody NR (eds), TMS, 1996.

Mitton DB, Orzalli JC, Latanision RM. Corrosion studies in supercritical water oxidation systems. p. 327. In: Innovations in Supercritical Fluid Science and Technology, ACS Symposium Series, Vol. 608, ACS, Washington, DC, 1995.

Buonanno MA, Hihara LH, Chiang JF, Latanision RM. Corrosion of graphite aluminum metal matrix composites. pp. 267-282. In: Environmental Effects on Advanced Materials, TMS, Warrendale, 1991.

Buonanno MA, Schmitt T, Werner P, Latanision RM. The effect of aluminum carbide formation in graphite fiber/1100 and 6061 aluminum metal matrix composites. In: Parkins Symposium on Fundamental Aspects of Stress Corrosion Cracking, TMS, Warrendale, 1991.

Searson PC, Nagarkar PV, Latanision RM. Electrochemistry of metallic glasses. pp. 121-161. In: Modern Aspects of Electrochemistry, White RE, Bockris JOM, Conway BE (eds.), Plenum Press, New York, NY, 1990.

Harris TM, Latanision RM. Hydride formation in palladium. p. 133. In: Hydrogen Effects on Materials Behavior, Thompson AW, Moody NR (eds), TMS, Warrendale, 1990.

Hihara LH, Latanision RM. Localized corrosion of graphite fiber/6061-t6 aluminum alloy metal matrix composites in aerated and deaerated sodium sulfate solutions. p.213. In: Space Age Metals Technology, Froes FH, Cull RA (eds.), Vol. 2, SAMPE, Covina, CA, 1988.

Latanision RM. Developments in advanced materials in the industrialized countries. p. 21. In: Advanced

Manufacturing, Materials and International Competitiveness, Federation of Materials Societies, Washington, DC, 1988.

Nagarkar PV, Searson PC, Latanision RM. The electrochemical behaviour of 80ni-20p glassy alloy in acidic sulphate solutions. pp. 118-133. In: Corrosion, Electrochemistry and Catalysis of Metallic Glasses, Diegle RB, Hashimoto K (eds), The Electrochemical Society, Pennington, 1988.

Moffat TP, Ruf RR, Latanision RM. The electrochemistry of chromium, chromium-boron and chromiumphosphorus alloys. pp. 25-40. In: Corrosion, Electrochemistry and Catalysis of Metallic Glasses, Diegle RB, Hashimoto K (eds.), The Electrochemical Society, Pennington, 1988.

Nishimura R, Hubler JK, Latanision RM. Hydrogen Permeation behavior of P-, B-, and Bi-implanted nickel with amorphous alloy layers. pp. 277-288. In: Corrosion, Electrochemistry and Catalysis of Metallic Glasses, Diegle RB, Hashimoto K (eds.), The Electrochemical Society, Pennington, 1988.

Searson PC, Latanision RM. Chemical properties of metastable crystalline and glassy alloys. p. 184. In: Electrochemistry and Solid State Science Education, Smyrl WH (ed.), The Electrochemical Society, Pennington, NJ, 1987.

Hashimoto M, Latanision RM. The role of hydrogen transport in hydrogen embrittlement. p. 505. In: Chemistry and Physics of Fracture, Latanision RM, Jones RH (eds.), Martinus-Nijhoff, Holland, 1987.

Nagarkar PV, Latanision RM. An electrochemical and XPS investigation of sputter deposited Ni44Fe32Cr11P8B5 on 304 stainless steel. p. 157. In: Science and Technology of Rapidly Quenched Alloys, Tenhover N, Johnson WL, Tanner LE (eds.), Materials Research Society, Boston, MA, 1987.

Searson PC, Stimming U, Latanision RM. Photoelectrochemical studies of the passive film on iron in neutral solutions. p. 175. In: Surfaces, Inhibition, and Passivation, McCafferty E, Brodd RJ (eds.), The Electrochemical Society, Princeton, NJ, 1986.

Searson PC, Latanision RM. Corrosion resistance of stainless steels processed by rapid solidification technology. p. 7. In: New Developments in Stainless Steel Technology, ASM, 1985.

Eberhart ME, Latanision RM. The electrochemistry and solid state chemistry of intergranular hydrogen embrittlement. p. 125. In: Modeling Environmental Effects on Crack Growth Processes, Jones RH, Gerberich WW (eds.), The Metallurgical Society of AIME, 1985.

Burleigh TD, Latanision RM. The effect of phosphorus on the corrosion resistance of amorphous copperzirconium alloys. pp. 321-326. In: Passivity of Metals and Semiconductors, Elsevier, Amsterdam, 1983.

Latanision RM. General Overview: Atomistics of Environmentally-Induced Fracture. pp. 3-38. In: NATO Advanced Research Institute on Atomistics of Fracture, Plenum Press, New York, NY, 1983.

Diegle RB, Sorensen NR, Tsuru T, Latanision RM. The corrosion resistance of glassy alloys. pp. 59-102. In: Corrosion: Treatise on Materials Science and Technology, Vol. 23, Academic Press, New York, NY, 1983.

Berkowitz J, Kurkela M, Latanision RM. The effect of ordering on the hydrogen embrittlement susceptibility of Ni2CR. pp. 411-418. In: Hydrogen Effects in Metals, TMS AIME, Warrendale, 1981.

Kurkela M, Lee F, Latanision RM. The role of grain boundary chemistry and the environment on intergranular fracture. pp. 379-395. In: Hydrogen Effects in Metals, TMS-AIME, Warrendale, 1981.

Latanision RM. Surface effects in crystal plasticity. pp. 255-294. In: Fundamentals of Tribology, MIT Press, 1980.

Opperhauser, Jr., H, Latanision RM. Intergranular embrittlement of Ni by cathodically produced hydrogen. pp. 539-544. In: Hydrogen in Metals, ASM, Metals Park, 1974.

Sedriks AJ, Westwood ARC, Latanision RM. Surface sensitive mechanical behavior of metals. pp. 500-538. In: Structure and Properties of Metal Surfaces, The Honda Memorial Series of Materials Science, No. 1, Maruzen Co. Ltd., Tokyo, 1973.

Latanision RM. Characterization of metal surfaces. pp. 185-200. In: Corrosion Fatigue, NACE, Houston, TX, 1972.

Westwood RC, Parr, Jr., GH, Latanision RM. Adsorption-sensitive machining behavior of glass. pp. 533-543. In: Amorphous Materials, John Wiley, London, 1972.

Westwood RC, Latanision RM. Environment-sensitive machining behavior of nonmetals. pp. 141-155. In: The Science of Ceramic Machining and Surface Finishing, NBS Spec. Pub. 348, 1972.

Westwood RC, Latanision RM. Adsorption-induced embrittlement by liquid metals. pp. 405-415. In: Corrosion by Liquid Metals, Plenum Press, New York, NY, 1970.

Westwood ARC, Latanision RM. Surface- and environment-sensitive mechanical behavior. pp. 51-145. In: Advances in Corrosion Science and Technology, Vol. I, Plenum Press, New York, NY, 1970.

#### **Books Edited**

Mitton DB, Latanision RM. Corrosion in advanced materials and systems, NACE, Houston, TX, 1998.

Hashimoto K, Latanision RM. Development and environmental characteristics of new materials, special issue of Materials Science and Engineering, A198, 1995.

Mansfeld F, Asphahani A, Bohni H, Latanision RM. The H.H. Uhlig memorial symposium, Electrochemical Society Monograph Series, 94-26, 1995.

Fischer TE, Latanision RM. Advances in the mechanics and physics of surface, Vol. 3, Harwood Academic Publishers, New York, NY, 1986.

Fischer TE, Latanision RM. Advances in the mechanics and physics of surfaces, Vol. 2, Harwood Academic Publishers, New York, NY, 1983.

Pickens JR, Latanision RM. Atomistics of fracture, Plenum Press, New York, NY, 1983.

Courtel R, Latanision RM. Advances in the mechanics and physics of surfaces, Vol. 1, Harwood Academic Publishers, New York, NY, 1981.

Fourie JT, Latanision RM. Surface effects in crystal plasticity, Noordhoff International Publishing Company, Leyden, The Netherlands, 1977.

Jones RH, Latanision RM. Chemistry and physics of fracture, Martinus-Nijhoff, Holland, 1987.

#### Lectures

Latanision RM. Preventative maintenance and failure analysis of aircraft components. First World Congress on Corrosion in the Military, Sorrento, Italy, June 8, 2005.

Latanision RM. Corrosion assisted cracking of metallic materials in SCWO. Engineering Degradation of Engineering Materials, Bordeaux, France, July 1, 2003.

Latanision RM. The mechanisms of corrosion: The effects of fabrication, exposure and interaction with other materials. International Conference on 20th Century Exterior Architectural Metals, MIT, April 5, 2003.

Latanision RM. Materials issues in supercritical water oxidation of chemical wastes. Sauveur Lecture, Boston Chapter of TMS International, November 15, 2001.

Latanision RM. Considering materials challenges during scwo systems design. ONR Workshop on Supercritical Water Oxidation—Achievements and Challenges in Commercial Applications, August 14, 2001.

Latanision RM. Progress in understanding corrosion in supercritical water waste treatment systems. Corrosion 2001, Houston, TX, March 12, 2001.

Latanision RM. Stress corrosion cracking in supercritical water systems for waste destruction. Symposium Honoring the Contribution of Roger Staehle, TMS International, New Orleans, LA, February 16, 2001.

Latanision RM. Stress corrosion cracking in supercritical water oxidation systems for waste destruction. Symposium Honoring the Contribution of Roger W. Staehle, TMS International, New Orleans, LA, February 14, 2001.

Latanision RM. Corrosion of constructional materials in SCWO reactors. IHI Headquarters, Tokyo, Japan, November 9, 2000.

Latanision RM. Corrosion engineering issues in supercritical water reactors. First International Symposium on Supercritical Water Reactors, Tokyo, Japan, November 7, 2000.

Latanision RM. Materials issues in supercritical water oxidation of chemical wastes materials. Department of Materials Science and Engineering Seminar Series, University of Florida, October 2, 2000.

Latanision RM. Aging management concepts to corrosion engineering. Tri-Services Corrosion Symposium, Myrtle Beach, November 17, 1999.

Latanision RM. Let's get serious about teacher education. Tri-Services Corrosion Symposium, Myrtle Beach, November 17, 1999.

Latanision RM. Supercritical water oxidation of chemical wastes materials science seminar. University of Virginia, November 12, 1999.

Latanision RM. Plenary lecture: Application of practical aging management concepts to corrosion engineering. 14th International Congress, Cape Town, South Africa, September 28, 1999.

Latanision RM. Teaching solid state chemistry at MIT. New England Association of Chemistry Teachers, Cambridge, MA, August 9, 1999.

Latanision RM. Corrosion mitigation in SCWO systems for hazardous waste destruction. Chemical Engineering Seminar Series, University of Rhode Island, March 4, 1999.

Latanision RM. Corrosion research beyond the year 2000. Gordon Conference on Corrosion, New London, NH, July 9, 1998.

Latanision RM. Corrosion in advanced engineering systems. Materials Department ETH-Zurich, May 28,

1998.

Latanision RM. Metals in advanced engineering systems. McFarland Award Golden Anniversary Symposium, The Pennsylvania State University, April 24, 1998.

Latanision RM. Corrosion engineering of SCWO systems for chemical waste destruction. TRS CORROSION/98, San Diego, CA, March 24, 1998.

Latanision RM. Corrosion mechanisms in supercritical water oxidation systems for hazardous waste disposal. Tri-Service Conference on Corrosion, Wrightsville Beach, November 19, 1997.

Latanision RM. Corrosion in supercritical water systems for chemical waste destruction. New England Section of the Electrochemical Society, Boston, MA, September 30, 1997.

Latanision RM. Corrosion and corrosion mechanisms in supercritical water oxidation systems for hazardous waste disposal. Toyota Higarshifiji Technical Center, Shizuokon, Japan, May 16, 1997; Asaki Chemical Corporate R&D, Kawasaki, Japan, May 15, 1997; 4th Intl. Symposium on Supercritical Fluids, Sendai, Japan, May 14, 1997.

Latanision RM. What do students need to know for physical science and engineering. Massachusetts Association of Science Supervisors, Marlboro, MA, May 8, 1997.

Latanision RM. How can schools of science, math and education work together to prepare teachers for the next century. Massachusetts Department of Education, Marlboro, MA, April 18, 1997.

Latanision RM. Corrosion of nickel base alloys in supercritical water oxidation systems. Corrosion '97 (Task Group T-5A-40), New Orleans, LA, March 12, 1997.

Latanision RM. An assessment of corrosion and failure mechanisms in supercritical water oxidation systems. 13th International Corrosion Congress, Melbourne, Australia, November 27, 1996.

Latanision RM. Corrosion of materials in supercritical water oxidation systems for waste destruction. Japan Corrosion Society, Hiroshima, Japan, November 19, 1996.

Latanision RM. Corrosion related issues in device packaging. Department of Materials Science and Engineering, Kyushu Institute of Technology, Kitakqushu City, Japan, November 14, 1996.

Latanision RM. Photoelectrochemistry of passive films. Institute of Materials Research, Tohoku University, Sendai, Japan, November 13, 1996.

Latanision RM. Corrosion of materials in supercritical water oxidation systems for chemical waste destruction. Conference on Energy and The Environment, Institute for Materials Research, Tohoku University, Sendai, Japan, November 11, 1996.

Latanision RM. Corrosion issues and materials selection in supercritical water oxidation systems. Toshiba Heavy Apparatus Engineering Laboratory, Yokohama, Japan, November 7, 1996.

Latanision RM. Corrosion of materials in supercritical water oxidation systems for chemical waste destruction. Tokyo Institute of Technology, November 6, 1996; JGC Corporation Oarai Nuclear Research Center, Mito, Japan, November 5, 1996.

Latanision RM. Photoelectrochemical characterization of surfaces. JIM/TMS Joint Meeting, Honolulu, HI December 14, 1995.

Latanision RM. New England science teachers. Woburn Public Schools Awards Ceremony, Woburn, MA, June 12, 1995.

Latanision RM. Keynote address. Cape Cod Academic All Star Award Banquet, Hyannis, MA, June 8, 1995.

Latanision RM. Science literacy in America. NSTA National Convention, Philadelphia, PA, March 25, 1995.

Berera G, Latanision RM. A photoelectrochemical investigation of the effect of alloying additions on the electronic properties of passive titanium. TMS Symposium on Localized Dissolution and Corrosion, Rosemont, IL, October 6, 1994.

Latanision RM. K-12 education reform: Public will vs. political will. Plenary Lecture, MIT Parents' Weekend, October 15, 1994.

Latanision RM. MIT's programs in K-12 Education. Massachusetts Board of Library Commissioners, Boston, MA, July 29, 1994.

Latanision RM. Corrosion science, corrosion engineering and advanced technologies. Industrial Technology Research Institute, Materials Research Laboratories, Chutung, Hsinchu, Taiwan, July 11, 1994.

Latanision RM. Current research activities in corrosion and corrosion resistant materials. Taipower Company Seminar, Taipei, Taiwan July 9, 1994; Korean Electric Power Corporation Research Center, Taejeon, Korea, July 7, 1994.

Latanision RM. Corrosion resistance of rapidly solidified Nd-Fe-B permanent magnets. U.S.-Japan Symposium on Development and Environmental Characteristics of New Materials, Mt. Hood, OR, June 7, 1994.

Latanision RM. K-12 education reform: Political will vs. public will. MIT Club of Southeastern Massachusetts, New Bedford, MA, April 24, 1994.

Latanision RM. The chemical properties of advanced materials. Joint NACE/ASM Meeting, Baltimore/Washington Sections, Baltimore, MD, April 5, 1994.

Latanision RM. Education reform: Public will vs. political will. Friends of the Snow Library, Orleans, MA, March 27, 1994.

Latanision RM. Corrosion science, corrosion engineering and advanced technologies. Willis R. Whitney Award Lecture, NACE International Corrosion 94, Baltimore, MD, March 1, 1994.

Latanision RM. Advances in corrosion science and engineering. Plenary Lecture, 6th Middle East Corrosion Conference, Bahrain, January 24, 1994.

Latanision RM. Your child: Educated for tomorrow? Community Education Alliance, South Shore Lecture Series, Norwell, MA, November 9, 1993.

Latanision RM. K-12 educational reform: Political will vs. public will. Sigma Xi Dinner Meeting, GTE Laboratories, November 3, 1993.

Latanision RM. Educational system reform. MIT Club of New York, Princeton Club, October 19, 1993.

Latanision RM. Corrosion of materials of construction in supercritical water oxidation systems. ARO/URI Project Review Meeting, University of Delaware, August 17, 1993.

Latanision RM. Programming schools for the year 2000: A Systems Approach. Designing New American

Schools, MIT Department of Architecture Symposium, April 24, 1993.

Latanision RM. Corrosion engineering. Peoria Chapter of ASM, Peoria, IL, April 21, 1993.

Latanision RM. MIT programs in K-12 education. MIT Club of South Texas, Houston, TX, April 19, 1993.

Latanision RM. A call to arms for American K-12 education. Engineering Council of Houston, Houston, TX, April 20, 1993.

Latanision RM. Crisis in American K-12 education: What can be done about it? MIT Club of New Haven, February 16 1993.

Latanision RM. Restructuring teacher education—Will it make a difference. Keynote Address, Project CONNSTRUCT, Connecticut Academy for Science, Cromwell, CT, January 22, 1993.

Latanision RM. MIT's initiative in K-12 education. ASM Fellows Night, Cambridge, MA, December 5, 1992.

Latanision RM. MIT and K-12 education. MIT Alumni Club of Northeast Ohio, Cleveland, OH, November 18, 1992.

Latanision RM. American K-12 education: The role of the research universities. NTU Materials Science Program, North Carolina State University, Raleigh, NC, November 11, 1992.

Latanision RM. MIT and K-12 education. MIT Club of Boston, MA, November 4, 1992; MIT Club of Portland, ME, October 27, 1992.

Latanision RM. The state of American K-12 education. Gordon Conference on Corrosion Banquet Address, July 23, 1992.

Latanision RM. Crisis in American K-12 education: What can be done about it? Cape Ann Chamber of Commerce, Cape Ann, MA, June 11, 1992; Banquet Address, Tri-Services Conference on Corrosion, Plymouth, MA, May 13, 1992; MIT Club of Southeast Michigan, Ann Arbor, MI, May 12, 1992; MIT Club of Cape Cod, Hyannis, MA, May 7, 1992; Raytheon Engineering Seminar, Lexington, MA, May 6, 1992; Banquet Address, 1st Annual TPAM Workshop, Williamsburg, VA, April 22, 1992; MIT Club of Virginia, Charlottesville, VA, April 21, 1992; Rotary Club of Woburn, Woburn, MA, April 14, 1992; Massachusetts Academy for Teachers, University of Massachusetts, Boston, MA, March 21,1992; AMLT Seminar, Watertown, MA, March 16, 1992; MIT Alumni Club of Minneapolis, MN, February 20, 1992.

Latanision RM. World class education. Business-Education Partnership, York College, York, PA, May 8, 1992.

Latanision RM. Corrosion engineering of advanced materials and advanced engineering systems. University of Virginia, Materials Science Seminar, April 21, 1992.

Latanision RM. MIT and The New England science teachers. National Science Teachers Association Annual Conference, Boston, MA, March 27, 1992.

Latanision RM. Engineers and public service. Tau Beta Pi Initiation Banquet, Boston, MA, February 9, 1992.

Latanision RM. U.S. science and engineering education: New rationales for new initiatives. 7th Annual Conference of the National Association for Science Technology and Society, Alexandria, VA, February 8, 1992.

Latanision RM. Education equity roundtable, American Association of University Women, 1st and 2nd

Church, Boston, MA, January 31, 1992.

Latanision RM. MIT's initiative in K-12 education. Center for Talented Youth, Cambridge, MA, October 19, 1991.

Latanision RM. Corrosion of advanced metal systems. ADVMAT, San Diego, CA, June 19, 1991.

Latanision RM. The corrosion engineering of advanced materials. Europe-USA Symposium on New Frontiers in Science and Engineering in a European Perspective, Paris, France, May 28, 1991.

Latanision RM. Reversing the trend to technical illiteracy in the USA. MIT Alumni Club of the Capital District of New York, NY, May 16, 1991.

Latanision RM. Improving science literacy—An MIT model. Massachusetts Association of Science Supervisors Annual Meeting, Worcester, MA, May 2, 1991.

Latanision RM. Science literacy: A major problem—and opportunity. MIT Alumni Club of Western Pennsylvania, April 24, 1991; MIT Alumni Club of Northern California, January 30, 1991; MIT Alumni Club of San Diego, CA, January 29, 1991; MIT Alumni Club of Southern California, Los Angeles, CA, January 28, 1991; North Shore Science Supervisors Association; Saugus, MA, November 1, 1990.

Latanision RM. The MIT science and engineering program for science teachers. Pittsburgh Conference, Chicago, IL, March 5, 1991; MIT Club of Washington, December 5, 1990; MIT Alumni Club of Puget Sound, Seattle, WA, October 16, 1990.

Latanision RM. MIT electronics packaging program. Intel, Santa Clara, CA, January 30, 1991; Rockwell Science Center, Thousand Oaks, CA, January 28, 1991.

Latanision RM. Materials for electronic device packaging. Materials Research Society Meeting, Boston, MA, November 27, 1990.

Latanision RM. An agenda for the materials processing center in the 1990s. MPC 10th Anniversary Symposium, Cambridge, MA, November 18, 1990.

Latanision RM. Corrosion failure of the polyimide-metal interface. Electrochemical Society Fall Meeting, Seattle, WA, October 15, 1990.

Latanision RM. Corrosion of electronic materials and devices. Boston Section of NACE; Newport, RI, October 4, 1990.

Latanision RM. Education in America—A need for stewardship. Keynote Address, MIT Alumni Leadership Conference, Cambridge, MA, September 15, 1990.

Latanision RM. Corrosion engineering of new materials and new engineering systems. Gordon Conference, New London, NH, July 24, 1990.

Latanision RM. A processing agenda for the 1990s. 11th Biennial Conference on National Materials Policy, Williamsburg, VA, June 12, 1990.

Latanision RM. An experiment in freshman chemistry at MIT. American Chemical Society, Boston, MA, April 27, 1990.

Latanision RM. Overview of corrosion in integrated circuit packages. Corrosion '90, Las Vegas, NV, April 25, 1990.

Bellucci F, Latanision RM. The effect of thickness on the electrical conductivity of kapton polyimide. 11th

© 2025 Exponent, Inc. All Rights Reserved • www.exponent.com • 888.656.EXPO • Page 24

International Corrosion Congress, Florence, Italy, April 2, 1990.

Latanision RM. Materials processing research at MIT. Joint Symposium of Welding Research Institute/Materials Processing Center, Osaka University, January 11, 1990.

Latanision RM. Corrosion engineering of metal matrix composites. University of Naples, Naples, Italy, June 9, 1989.

Latanision RM. Electrochemistry of metastable alloys. University of Naples, June 8, 1989.

Latanision RM. Advanced organic coatings for packaging of electronic, magnetic and optical devices. IBM, Essex Junction, VT, March 23, 1989.

Latanision RM. Corrosion engineering in the packaging of electronic magnetic and optical devices. International Symposium on Corrosion Science and Engineering (in honor of Marcel Pourbaix's 85th Birthday), Brussels, Belgium, March 14, 1989.

Latanision RM. The corrosion engineering of metal-matrix composites. Lockheed Palo Alto Research Center Seminar, February 10, 1989.

Latanision RM. The use of electrochemical methods to study corrosion of advanced materials and engineering systems. Golden Gate Materials Technology Conference, Santa Clara, CA, February 9, 1989.

Latanision RM. Corrosion engineering of metal-matrix composites. ONR Workshop on Environmental Effects in Metal, Ceramic and Organic Composites, NIST, Gaithersburg, MD, November 18, 1988.

Latanision RM. Processing and process sensors. Diamond Jubilee of Metallurgy at NBS (NIST), Gaithersburg, MD, November 10, 1988.

Latanision RM. A materials centennial at MIT. MIT Club of New Haven, CT, November 9, 1988.

Latanision RM. The electrochemistry of advanced engineering materials. Gordon Conference and Physical Electrochemistry, Colby-Sawyer College, New London, NH, August 11, 1988.

Latanision RM. Materials processing. Seminar for Astronaut Candidates, Johnson Space Flight Center, Houston, TX, April 5, 1988.

Latanision RM. Electrochemical properties of metal-matrix composites. Materials Science Colloquium, Battelle Pacific Northwest Laboratories, Richland, WA, January 12, 1988.

Latanision RM. The chemical stability of advanced materials. The University of Poona, India, November 12, 1987.

Latanision RM. Corrosion education and corrosion research. Plenary Lecture, 10th International Congress on Metallic Corrosion, Madras, India, November 8, 1987.

Latanision RM. Developments in advanced materials in the industrialized nations. University of Virginia Materials Science Colloquium, October 25, 1987.

Latanision RM. The corrosion resistance of metastable alloys. Greater Boston Section of NACE, Chestnut Hill, MA, September 10, 1987.

Latanision RM. Developments in advanced materials in the industrialized nations. 9th Biennial Conference on National Materials Policy, FMS, Fredericksburg, VA, August 4, 1987.

Latanision RM. Recent research in the materials processing center at MIT. Japan R & D Center for Metals, Tokyo, Japan, April 24, 1987.

Latanision RM. Recent research activities in the Materials Processing Center at MIT. Inauguration of the Furukawa Electric Company's Materials Research Center, Yokohama, Japan, April 23, 1987.

Latanision RM. Current research in the Uhlig Laboratory. Nippon Steel Company Research Center, Kawasaki, Japan, April 22, 1987.

Latanision RM. Current research in the Materials Processing Center at MIT. Hitachi Central Research Laboratory, Hitachi City, Japan, April 21, 1987.

Latanision RM. Chemical stability of advanced materials. Chemistry Department Colloquium, Texas A & M University, March 24, 1987.

Latanision RM. Corrosion research: Past, present and future. Shell Westhollow Laboratories, Houston, TX, March 23, 1987.

Latanision RM. Current projected impact of corrosion technology. Thirty-Third Sagamore Army Materials Research Conference, Burlington, VT, July 28, 1986.

Latanision RM. High technology materials. Special Libraries Association, Annual Meeting, Boston, June 10, 1986.

Latanision RM. The chemical properties of metastable crystalline and glassy alloys. Spring Meeting of the Electrochemical Society, Boston, May 7, 1986.

Latanision RM. The need for leadership in the materials industries. David Ford McFarland Award Lecture, The Pennsylvania State University, April 26, 1986.

Latanision RM. Overview of the Materials Processing Center at MIT. Battelle Pacific Northwest Laboratories, Richland, WA, January 30, 1986.

Latanision RM. Chemistry of fracture. 2nd Intl. Conf. on Fundamentals of Fracture, Gatlinburg, TN, November 6, 1985.

Latanision RM. Hydrogen transport in metals. Materials Science Seminar, Brown University, October 24, 1985.

Latanision RM. Prospects for the establishment of a Massachusetts advanced materials center. New England Chapter of American Ceramics Society, Boston, October 9, 1985.

Latanision RM. Corrosion resistance of metastable alloys processed by rapid solidification. EPRI Workshop on Amorphous Metals and Semiconductors, San Diego, May 17, 1985.

Latanision RM. Do we need a national materials policy? Graduate Materials Committee, MIT, April 1, 1985.

Latanision RM. Corrosion resistance of alloys processed by rapid solidification technology. NACE, 1985 Annual Meeting, Boston, March 27, 1985.

Latanision RM. Materials processing research at MIT. Nippon Steel Corporation Fundamental Laboratories, Kawasaki, Japan, March 15, 1985.

Latanision RM. Corrosion resistance of rapidly quenched alloys. USA-Japan Corrosion Seminar on Critical Issues in Reducing the Corrosion of Steel, Nikko, Japan, March 12, 1985.

Latanision RM. Hydrogen embrittlement of iron and nickel alloys. Tokyo Institute of Technology, Japan, March 8, 1985.

Latanision RM. The need for a national materials policy. The Philosophical Society of Washington, 1880th Meeting, Washington, DC, February 22, 1985.

Latanision RM. The corrosion resistance of metastable alloys. The Carl Gunnard Johnson Memorial Colloquium in Materials Science, Worcester Polytechnic Institute, November 13, 1984.

Latanision RM. The physical metallurgy of nickel-base alloys as it relates to corrosion. International Conference on Corrosion of Nickel-Base Alloys, Cincinnati, OH, October 23, 1984.

Latanision RM. The atomistics of fracture. Los Alamos National Laboratory, Center for Materials Science Colloquium, October 17, 1984.

Latanision RM. Corrosion resistance of stainless steels processed by rapid solidification technology. International Conference on New Developments in Stainless Steel Technology, ASM Fall Meeting, Detroit, MI, September 17, 1984.

Latanision RM. Corrosion resistance of rapidly solidified alloys. Materials Processing Seminar, MIT, September 14, 1984.

Latanision RM. The effect of phosphorus on the corrosion of rapidly quenched alloys. Fifth International Conference on Rapidly Quenched Metals, Wurzburg, Federal Republic of Germany, September 5, 1984.

Latanision RM. Krumb lecture. Chicago Section TMS, June 19, 1984; Intermountain Section, SME, Climax, CO, May 17, 1984; Pinal Mountain Section, SME, Miami, AZ, May 15, 1984; Trinity Section, SME, Dallas, TX, March 15, 1984; Detroit Section, TMS, March 5, 1984; El Paso Section, SME, February 8, 1984.

Hashimoto M, Latanision RM. Hydrogen transport during plastic deformation. 9th International Congress on Metallic Corrosion, Toronto, Canada, June 5, 1984.

Latanision RM. Does the U.S. need a materials policy. Sandia Colloquium, Albuquerque, NM, May 16, 1984.

Latanision RM. Environmentally-induced embrittlement. Am. Phys. Soc. Meeting, Detroit, MI, March 29, 1984.

Frankel GS, Latanision RM. Hydrogen transport through nickel during deformation. TMS-AIME Meeting, Los Angeles, CA, March 1, 1984.

Searson P, Latanision RM. Corrosion and oxidation of powder metallurgical alloys. TMS-AIME Annual Meeting, Los Angeles, CA, February 28, 1984.

Latanision RM. Prospects for the development of a national materials policy in the 98th Congress. Coeur d'Alene Section, SME, Kellogg, ID (Krumb Lecture), January 18, 1984.

Latanision RM. Hydrogen transport processes in iron and nickel. Battelle Pacific Northwest Lab., Richland, WA, January 17, 1984.

Burleigh TD, Latanision RM. The effect of phosphorus on the corrosion resistance of amorphous copperzirconium alloys. Materials Research Society Annual Meeting, Boston, MA, November 16, 1983.

Latanision RM. Corrosion: The environmental degradation of materials. Ottawa Valley Chapter of ASM,

November 8, 1983.

Latanision RM. Congressional action to develop a national materials policy. Metallurgical Engineering Colloquia, The Ohio State University, Columbus, OH, October 14, 1983.

Lee FTS, Latanision RM. Effects of grain boundary segregation and precipitation on the hydrogen susceptibility of nickel. TMS-AIME Fall Meeting, Philadelphia, PA, October 5, 1983.

Latanision RM. Electrochemical studies of hydrogen transport in metal electrodes. Conference on Crack Tip Structure and Processes, NBS, Gaithersburg, MD, June 7, 1983.

Burleigh TD, Latanision RM. The Effect of phosphorus on the corrosion resistance of amorphous copperzirconium alloys. 5th International Congress on Passivity, France, June 1, 1983.

Latanision RM. Scientists' role in the evolution of public policy. Awards Banquet, National Capital Section of the Electrochemical Society, Washington, DC, May 5, 1983.

Latanision RM. Prospects for the development of a national materials policy in the 98th Congress. Center for Materials Science & Engineering Colloquium, MIT, April 7, 1983; Martin Marietta Laboratories, Baltimore, MD, April 5, 1983; Battelle Pacific Northwest Laboratories, Richland, WA, January 26, 1983.

Latanision RM. Hydrogen permeation and embrittlement of metals. U.S. Bureau of Mines, Avondale, MD, March 8, 1983.

Latanision RM. Corrosion of rapidly solidified glassy and crystalline alloys in aqueous media. MIT/ILP Symposium, December 2, 1982.

Latanision RM. Corrosion of aluminum in seawater. MIT/Marine Industry Colloquium, December 1, 1982.

Latanision RM. Corrosion resistance of rapidly quenched alloys. Materials Science Seminar, Johns Hopkins University, November 10, 1982; AIME Fall Meeting, St. Louis, MO, October 28, 1982; Corrosion Center, University of Minnesota, September 17, 1982.

Latanision RM. Grain boundary chemistry and environmental interactions in Ni-Base alloys. AIME Fall Meeting, St. Louis, MO, October 26, 1982.

Sorensen NR, Latanision RM. An experimental investigation of anodic oxide film growth on amorphous alloys. Electrochemical Society Meeting, Montreal, May 11, 1982.

Latanision RM. Failures from corrosion. ASM Metals Engineering Institute Course on Principles of Failure Analysis, Boston, MA, March 11, 1982.

Latanision RM. Recent advances in understanding embrittlement phenomena. Boston Chapter ASM Student's Night Symposium, January 14, 1982.

Latanision RM. Problems in corrosion of metals. Physico-Mechanical Institute of the Ukranian Academy of Sciences, L'vov, November 12, 1981.

Latanision RM. Atomistics of environmentally-induced fracture. Institute of Physical Chemistry of the Academy of Sciences of the USSR, Moscow, November 10, 1981.

Latanision RM. Corrosion resistance of microcrystalline alloys. Fourth International Conference on Rapidly Quenched Metals, Sendai, Japan, August 25, 1981.

Latanision RM. Corrosion resistance of rapidly quenched alloys. Beijing University of Iron and Steel Technology, Beijing, People's Republic of China, August 21, 1981; Symposium of the Provincial Chemical

Engineering Society, Canton, People's Republic of China, August 17, 1981; South China Institute of Technology, Canton, People's Republic of China, August 17, 1981.

Latanision RM. Hydrogen embrittlement. Beijing University of Iron and Steel Technology, Beijing, People's Republic of China, August 20, 1981.

Latanision RM. Atomistics of fracture. South China Institute of Technology, Canton, People's Republic of China, August 18, 1981.

Latanision RM. Hydrogen embrittlement. South China Institute of Technology, Canton, People's Republic of China, August 15, 1981.

Latanision RM. Corrosion engineering short course. Instituto Nacional de Technologia Industrial (INTI), Buenos Aires, Argentina, June 15-19, 1981.

Latanision RM. General overview: Atomistics of environmentally-induced fracture. NATO Advanced Research Institute on Atomistics of Fracture, Calcatoggio, Corsica, May 23, 1981.

Latanision RM. Corrosion resistance of rapidly quenched alloys. Joint Meeting of Boston Chapters of AIME and ECS, March 2, 1981.

Latanision RM. Corrosion engineering short course. Kuwait Institute for Scientific Research, January 10-14, 1981.

Latanision RM. Metallic corrosion. What's New in Engineering, General Motors Institute, Flint, MI, September 19, 1980.

Latanision RM. The Role of grain boundary chemistry and the environment on intergranular fracture. Third International Conference on Effects of Hydrogen on Behavior of Materials, Jackson, WY, August 27, 1980.

Latanision RM. Hydrogen permeation and embrittlement studies on metallic glasses. Alexander R. Troiano Honorary Symposium, Case Western Reserve University, Cleveland, OH, June 3, 1980.

Latanision RM. Corrosion research on metallic glasses. Pacific Northwest Metals and Minerals Conference, Seattle, WA, May 9, 1980.

Latanision RM. Surface analysis of electrochemically pretreated metals. University of Minnesota UNITE Seminar April 15, 1980.

Latanision RM. Atomistics of environmentally-induced fracture. NACE Corrosion/80 Research Conference, Chicago, IL March 3, 1980.

Latanision RM. Corrosion resistance of metallic glasses. Materials Research Society, Boston, MA, November 29, 1979.

Latanision RM. Metallic corrosion. What's New in Engineering, General Motors Institute, Flint, MI, November 2, 1979.

Latanision RM. Hydrogen entry and permeation in metallic glasses. Electrochemical Society Meeting, Los Angeles, CA, October 15, 1979.

Latanision RM. Hydrogen entry and permeation in nickel-base alloys. Sandia Laboratories, Livermore, CA, October 12, 1979.

Latanision RM. Lectures on corrosion. UCLA Short Course on Corrosion Engineering, Los Angeles, CA,

October 10-11, 1979.

Latanision RM. Chemical stability of metallic glasses. Allied Chemical Corporate Development Center, Morristown, NJ, September 27, 1979.

Latanision RM. New techniques in corrosion prevention. Advanced Manufacturing Engineering Council Seminar, Raytheon Corporate Offices, Lexington, MA, September 26, 1979.

Latanision RM. The corrosion resistance of metallic glasses. Third International Conference on Mechanical Behavior of Materials, Cambridge University, UK, August 22, 1979.

Latanision RM. Grain boundary impurity-environment interactions. Battelle Workshop on the Role of Grain Boundary Chemistry and the Environment in Intergranular Fracture, Seattle, WA, August 6, 1979.

Latanision RM. Corrosion research at MIT. Martin Marietta Seminar, Baltimore, MD, July 12, 1979.

Latanision RM. Advances in surface analytical methods. University of Connecticut Institute of Materials Science Symposium, Storrs, CT, May 4, 1979.

Latanision RM. Environmental fracture of Ni-base alloys. Symposium on SCC and Environmental Fracture of Structural Materials. Schenectady, NY, April 26, 1979.

Latanision RM. Lectures on corrosion. UCLA Short Course on Corrosion Engineering, University of Maryland, College Park, MD, March 28-29, 1979.

Latanision RM. Hydrogen permeation and embrittlement of metallic glasses. NACE Corrosion '79 Research Conference, Atlanta, GA, March 12, 1979.

Latanision RM. An introduction to the surface analytical facility at MIT. Center for Materials Science and Engineering Colloquium, Massachusetts Institute of Technology, December 1, 1978.

Latanision RM. Hydrogen embrittlement/stress corrosion cracking: A comparison. Boston Chapter of NACE, November 8, 1978.

Latanision RM. The embrittlement of aluminum alloys by cathodic hydrogen. Fall Meeting of AIME, St. Louis, MO, October 18, 1978.

Latanision RM. Hydrogen permeation and embrittlement studies on metallic glasses. Fall Meeting of AIME, St. Louis, MO, October 18, 1978.

Latanision RM. Contemporary issues in environmentally-induced fracture. Materials Science and Engineering Colloquium Series, Massachusetts Institute of Technology, Cambridge, MA, September 26, 1978.

Latanision RM. Contemporary corrosion research. Keynote Address at the American Vacuum Society Symposium on Macroscopic and Microscopic Aspects of Corrosion, Mt. Hood, OR, August 19, 1978.

Latanision RM. Stress corrosion cracking and hydrogen embrittlement: Differences and Similarities. Battelle Pacific Northwest Laboratories, Richland, WA, July 26, 1978.

Latanision RM. Corrosion resistance of metallic glasses. Gordon Conference on Corrosion, Colby-Sawyer College, New London, NH, July 14, 1978.

Latanision RM. Surface effects in crystal plasticity. International Conference on Tribology, Massachusetts Institute of Technology, Cambridge, MA, June 21, 1978.

Latanision RM. Environmental degradation of materials. IBM, Poughkeepsie Technical Center, May 9, 1978; Alpha Sigma Mu Lecture, Rennselaer Polytechnic Institute, Troy, NY, April 12, 1978.

Latanision RM. Corrosion control. Union Carbide, Tarrytown Technical Center, April 4, 1978.

Latanision RM. Differences between stress corrosion cracking and hydrogen embrittlement. Industrial Liaison Symposium on Corrosion, Massachusetts Institute of Technology, Cambridge, MA, January 19, 1978.

Latanision RM. Environmental degradation of materials. Industrial Liaison Symposium on Corrosion, Massachusetts Institute of Technology, Cambridge, MA, January 19, 1978.

Latanision RM. Stress corrosion cracking and hydrogen embrittlement: Differences and similarities. Symposium on Environment Sensitive Fracture of Engineering Materials, Fall Meeting of AIME, Chicago, IL, October 24, 1977.

Latanision RM. Modification of the strength of solids by chemisorption. International Summer Institute on Surface Science, University of Wisconsin at Milwaukee, August 23, 1977.

Latanision RM. Interface dependent mechanical behavior. Gordon Conference on Chemistry at Interfaces, Kimball Union Academy, Meriden, NH, July 20, 1977.

Latanision RM. Crack tip chemistry. Battelle Pacific Northwest Laboratories, Richland, WA, June 23, 1977.

Latanision RM. Surface effects in crystal plasticity. Battelle Pacific Northwest Laboratories, Richland, WA, June 20, 1977.

Latanision RM. Corrosion and passivation of metals. T.R. Evan Research Center, Diamond Shamrock Corporation, Gainesville, OH, May 3, 1977.

Latanision RM. Corrosion: Environmental degradation of materials. 9th Annual Frontiers in Chemistry Lecture Series, State University of New York at New Paltz, April 28, 1977.

Latanision RM. Hydrogen embrittlement of nickel and its alloys. Stanford Research Institute, March 17, 1977.

Latanision RM. Surface effects in crystal plasticity. 106th AIME Annual Meeting, Atlanta, GA, March 8, 1977.

Latanision RM. Environmental degradation of materials. Chemistry Department Colloquium, Northeastern University, Boston, MA, February 7, 1977.

Latanision RM. Environmental degradation of materials. Materials Colloquium, Department of Materials Science and Engineering, Massachusetts Institute of Technology, Cambridge, MA, December 14, 1976.

Latanision RM. Applications of surface chemistry to industrial problems. 3M Research Center, St. Paul, MN, October 29, 1976.

Latanision RM. The influence of surface charge density on the plasticity and fracture of zinc monocrystal electrodes. ICSMA4, Nancy, France, August 31, 1976.

Latanision RM. Corrosion and corrosion control of steels. Fourth Transmission Seminar, Meyer Industries, Minneapolis, MN, August 20, 1976.

Latanision RM. Surface analytical approaches to environmentally-induced embrittlement. Battelle

Northwest Laboratories, August 13, 1976.

Latanision RM. Surface phenomena in metal cutting and ceramic machining—and earthquakes to order. Carolinas Control Chapter, ASM, Raleigh, NC, May 9, 1974.

Latanision RM. The intergranular embrittlement of nickel by hydrogen: Relation to the cracking of PWR steam generator tubes. Battelle Northwest Laboratories, Richland, WA, August 12, 1976.

Latanision RM. Some applications of surface science to materials technology. Esso Corporate Research Center, Linden, NJ, April 16, 1974.

Latanision RM. The principles and applications of surface effects in crystal plasticity. Metallurgy Division Seminar Series, National Bureau of Standards, Gaithersburg, MD, May 24, 1976.

Latanision RM. Materials science. Maryland Academy of Science Junior Science and Humanities Seminar, Baltimore, MD, March 22, 1974.

Latanision RM. Hydrogen embrittlement: A surface analytical approach. Materials Science Seminar Series, Department of Materials Science and Engineering, Massachusetts Institute of Technology, April 6, 1976.

Latanision RM. Electrochemical techniques in the study of embrittlement phenomena. National Association of Corrosion Engineers Annual Spring Meeting, Chicago, IL, March 7, 1974.

Latanision RM. The use of electrochemical and surface analytical techniques in the study of embrittlement phenomena. Shell Westhollow Research Center, Houston, TX, March 26, 1976.

Latanision RM. Some applications of surface science to materials technology. Department of Chemical Engineering and Materials Science, University of Minnesota, February 25, 1974; Department of Metallurgy and Materials Science, University of Pennsylvania, February 14, 1974; Department of Metallurgy and Materials Science, Massachusetts Institute of Technology, January 29, 1974.

Latanision RM. The principles and applications of surface effects in crystal plasticity. McMaster University Institute for Materials Research Seminar, Hamilton, Ontario, March 8, 1976.

Latanision RM. Surface effects in crystal plasticity. Mechanical and Aerospace Engineering Seminar Series, University of Delaware, November 16, 1973.

Latanision RM. The effect of electrolytically enhanced fracture or slip on grinding ceramics. Ceramics Seminar Series, Department of Materials Science and Engineering, Massachusetts Institute of Technology, March 4, 1976.

Latanision RM. Intergranular embrittlement of Ni by cathodically produced hydrogen. Conference on Hydrogen in Metals, Seven Springs, PA, September 25, 1973.

Latanision RM. Electrocapillary effects in the plasticity and fracture of zinc monocrystals. 1976 Annual Meeting AIME, Las Vegas, NV, February 24, 1976.

Latanision RM. Intergranular cracking of pure nickel electrodes at cathodic potentials. Third International Conference on the Strength of Metals and Alloys, Cambridge University, England, August 24, 1973.

Latanision RM. The use of electrochemical and surface analytical techniques in the study of embrittlement phenomena. New England Combined Chapter, American Vacuum Society, Boston, MA, February 11, 1976.

Latanision RM. Hydrogen embrittlement of F.C.C. metals and alloys. Max-Planck-Institut fur

Eisenforschung, Dusseldorf, Germany, August 15, 1973.

Latanision RM. Surface effects in crystal plasticity. Maryland Institute of Metals, Baltimore, MD, December 9, 1975.

Latanision RM. Surface effects in crystal plasticity. Max-Planck-Institut fur Metallforschung, Institut fur Physik, Stuttgart, Germany, August 13, 1973.

Latanision RM. The intergranular embrittlement of nickel by hydrogen. Institute of Physical Chemistry, Academy of Sciences of the USSR, Moscow, November 14, 1975.

Latanision RM. Electromechanical machining of metals and alloys. Engineering Conference, Society of Manufacturing Engineers, Detroit, MI, May 9, 1973.

Latanision RM. Surface effects in crystal plasticity: General Overview. NATO Advanced Study Institute on Surface Effects in Crystal Plasticity, Hohegeiss, Federal Republic of Germany, September 6, 1975.

Latanision RM. The chemical and physical nature of surfaces. International Conference on Surface Technology, Carnegie-Mellon University, May 1, 1973.

Latanision RM. Surface effects in crystal plasticity. Institut fur Grenzflachenforschung und Vakuumphysik, Kernforschungsanlage, Julich, Federal Republic of Germany, June 12, 1975.

Latanision RM. Electromechanical machining. Army Weapons Command, Research Seminar, Rock Island Arsenal, March 28, 1973.

Latanision RM. The intergranular embrittlement of nickel by hydrogen: The role of impurities. Max-Planck-Institut fur Metallforschung, Stuttgart, Federal Republic of Germany, June 6, 1975.; Studsvik - AB Atomenergi Sweden, Nykoping, Sweden, May 22, 1975.

Latanision RM. Materials science. Maryland Academy of Sciences Junior Science and Humanities Symposium, Baltimore, MD, March 23, 1973.

Latanision RM. Surface effects in crystal plasticity. Fritz-Haber-Institut der Max-Planck-Gesellschraft, Berlin, Federal Republic of Germany, May 5, 1975; Ecole Nationale Superieure de Chemie, Paris, France, April 30, 1975.

Latanision RM. Intergranular cracking of pure nickel at cathodic potentials. N.A.C.E., Corrosion Research Conference, Anaheim, CA, March 21, 1973.

Latanision RM. The use of electrochemical and surface analytical techniques in the study of embrittlement phenomena. Central Electricity Generating Board, Research Laboratories, Leatherhead, England, March 7, 1975.

Latanision RM. The mechanical properties of metal electrodes. Washington Chapter of the Electrochemical Society, Washington, DC, March 1, 1973.

Latanision RM. Surface effects in crystal plasticity. Department of Metallurgy and Materials Science, Cambridge University, England, March 3, 1975; Philips Research Laboratories, Eindhoven, The Netherlands, February 20, 1975; Physikalisch Chemisches Institut der Universitat, Munchen, Federal Republic of Germany, January 21, 1975.

Latanision RM. The science and technology of environmental effects on the mechanical behavior of solids. State University of New York at Stony Brook, December 13, 1972.

Latanision RM. The embrittlement of nickel by cathodic hydrogen. Joint meeting of the G.V. Akimov State

Research Institute for the Protection of Materials and the Institute of Chemical Technology, Prague, Czechoslovakia, January 7, 1975.

Latanision RM. Environment-sensitive mechanical behavior of metals and alloys. Fundamental Research Laboratories, Nippon Steel Company, Kawasaki, Japan, June 2, 1972.

Latanision RM. The use of electrochemical and surface analytical techniques in the study of embrittlement phenomena. Joint meeting of the G.V. Akimov State Research Institute for the Protection of Materials and the Institute of Chemical Technology, Prague, Czechoslovakia, January 7, 1975; Polish Academy of Sciences, Warsaw, Poland, January 3, 1975.

Latanision RM. Surface effects in crystal plasticity. Kyushu University, Fukuoka, Japan, May 31, 1972.

Latanision RM. Surface effects in crystal plasticity II: Technological applications. Max-Planck-Institut fur Eisenforschung, Dusseldorf, Germany, November 13, 1974.

Latanision RM. Environment-sensitive mechanical behavior of metals. Research Institute for Iron, Steel and Other Metals, Tohoku University, Sendai, Japan, May 30, 1972.

Latanision RM. Surface effects in crystal plasticity I: Scientific aspects. Max-Planck-Institut fur Eisenforschung, Dusseldorf, Germany, October 30, 1974.

Latanision RM. Stress corrosion cracking of Al-Zn-Mg alloys: The corrosion behavior of grain boundary constituents. 5th International Congress on Metallic Corrosion, Tokyo May 25, 1972.

# **Deposition & Trial Testimony**

FENOC v. NEIL, Arbitration, 2007.

Kingdom of Spain v. ABS, 2007.

Zeller v. Equitaqble, Circuit Court of Cook County, IL, No. 03L2468, 2006.

City of Baltimore v. CSX Transp., US District Court of Maryland, No. RBD-04-2348, 2005-2006.

Fujitsu v. Cirrus Logic, Sumitomo, et al. Superior Court, State of CA, (Santa Clara), No. 1-03-CV-009885, 2005.

David & Tina Pafford v. Del Monte Corp., Superior Court, State of CA, (San Francisco), No. CGC03422797, 2005.

Bodycote IMT v. Nalco Chemical Co., Superior Court of MA, Essex, CA No. 00-776-B, 2004.

Miller et al., v. MB 72 Partners, Superior Court of CA, Orange County, No. 01CC00235, 2003.

Consumers Energy v. Certain Underwriters at Lloyds, London et al., U.S. District Court, Eastern Dist. of MI, No. 98-74779, No. 98-60521, 2000-2001.