

Andrew J. Neuhalfen, Ph.D., P.E.

President and Chief Technical Officer

PROFESSIONAL EXPERIENCE

2008 - Present NEUHALFEN ENGINEERING CORPORATION, INC. - Algonquin, Illinois

Projects and expertise provide for the investigation, analysis, evaluation, and management of electrical-related and materials-related product and process performance issues; including electrical arc fault incidences, electrical shock and electrocution incidences, electrical-related fire incidences, product liability issues, and intellectual property assessments and evaluations. Additionally, projects and expertise include the assessment of applied research, manufacturing process control and optimization, failure analysis of microelectronic components and processes, and product development programs in the power, telecommunications, transportation, and computer industries.

1998 - 2008 Packer Engineering, Inc. - Naperville, Illinois

Senior Vice President and Head of the Electrical Engineering Department responsible for performing and managing electrical-related accident investigations, electrical shock and electrocution issues, electrical-related fire investigations, product liability issues, intellectual property evaluations, applied research, manufacturing process analysis, failure analysis of microelectronic components and processes, and product development programs in the power, telecommunications, automotive, and computer industries.

1992 - 1998 Littelfuse, Inc. - DesPlaines, Illinois

Engineering Manager responsible for the direction of activities associated with the research/development, selection, application, and analysis of materials, products, and technologies incorporated into company operations and products. Led the efforts to develop and implement electrical circuit protection devices for the industrial, electronic, telecommunications, automotive, and computer industries.

1983 - 1988 Motorola, Inc. - Schaumburg, Illinois

Development Engineer responsible for the design and manufacturability of electronic technologies for industrial, telecommunications, and automotive applications.

ACADEMIC

Ph.D. Northwestern University, Evanston, Illinois - Materials Science and Engineering (1992)

B.S. University of Illinois at Urbana-Champaign - Electrical Engineering (1983)

AFFILIATIONS

Institute of Electrical and Electronics Engineers (IEEE)
American Society of Materials (ASM)
International Microelectronics and Packaging Society (IMAPS)
Illinois Society of Professional Engineers (ISPE)
National Society of Professional Engineers (NSPE)
International Association of Arson Investigators (IAAI)
National Fire Protection Association (NFPA)

HONORS AND AWARDS

Tau Beta Pi - National Engineering Honor Society
Eta Kappa Nu - Electrical Engineering Honor Society
Alpha Sigma Mu - Materials Science Honor Society
Optical Society of America - Research Award 1989-1990
Newport Research Award - Research Award 1990-1991
Cabel Fellowship – Northwestern University 1991 - 1992

APPOINTMENT

Vice-Chairman, Village of Algonquin; Planning and Zoning Commission

PUBLICATIONS and PATENTS

PUBLICATIONS

1. A.J. Neuhalfen and B.W. Wessels, "Photoluminescent Properties of Er-Doped $\text{In}_{1-x}\text{Ga}_x\text{P}$ Prepared by Metalorganic Vapor Phase Epitaxy," Appl. Phys. Lett. 59, 2317 (1991).
2. A.J. Neuhalfen, D.M. Williams, and B.W. Wessels, "Photoluminescent Properties of Yb-Doped InAsP Alloys," Materials Science Forum, edited by G.Davies, G.G.DeLeo, M.Stavola (Trans Tech Publications, Aedermannsdorf, Switzerland), vol. 83-87, p.689 (1992).
3. A.J. Neuhalfen and B.W. Wessels, "Electronic and Photoluminescent Properties of InP Prepared by Flow Modulation Epitaxy," Appl. Phys. 71, 281 (1992).
4. A.J. Neuhalfen and B.W. Wessels, "Rare-Earth Doped $\text{In}_{1-x}\text{Ga}_x\text{P}$ Prepared by Metalorganic Vapor Phase Epitaxy," Advanced III-V Compound Semiconductor Growth, Processing and Devices, edited by S.J. Pearton, D.K. Sadana, J.M. Zavada (Mater. Res. Soc. Proc., Pittsburgh, PA), vol. 240, p. 195 (1992).

5. A.J. Neuhalfen and B.W. Wessels, "Thermal Quenching of Er³⁺-Related Luminescence in In_{1-x}Ga_xP," Appl. Phys. Lett. 60, 2657 (1992).
6. I.A. Buyanova, A.J. Neuhalfen, and B.W. Wessels, "Symmetry Properties of Er³⁺-Related Centers in In_{1-x}Ga_xP with Low Alloy Compositions," Appl. Phys. Lett. 61, 2461 (1992).
7. A.J. Neuhalfen, "Miniaturization of Circuit Protection Devices to Meet Surface Mount Applications," Surface Mount International Symposium Proceedings, p. 784 (1995).

PATENTS

1. Patent No. 6,043,966; March 28, 2000; "Printed Circuit Board Assembly Having An Integrated Fusible Link"
2. Patent No. 6,023,028; February 8, 2000; "Surface-Mountable Device Having A Voltage Variable Polymeric Material For Protection Against Electrostatic Damage To Electronic Components"
3. Patent No. 5,974,661; November 2, 1999; "Method Of Manufacturing A Surface Mount Device For Protection Against Electrostatic Damage To Electronic Components"
4. Patent No. 5,943,764; August 3, 1999; "Method Of Manufacturing A Surface Mount Fuse"
5. Patent No. 5,923,239; July 13, 1999; "Printed Circuit Board Assembly Having An Integrated Fusible Link"
6. Patent No. 5,844,477; December 1, 1998; "Method of Protecting A Surface Mount Fuse Device"
7. Patent No. 5,790,008; August 4, 1998; "Surface Mounted Fuse Device With Conductive Terminal Pad Layers And Groove On Side Surfaces"
8. Patent No. 5,552,757; September 3, 1996; "Surface Mounted Fuse Device"