



METALLURGICAL CONSULTING
C. Kendall Clarke, Ph.D., P.E.
1146 Leroy Stevens Rd., Ste. A Mobile, AL 36695
Phone: (251) 639-3433 Fax: (251) 639-3105
Email: kclarke@metalconsult.com

Metallurgical Analysis
Corrosion
Welding
SEM
Failure Analysis
Fracture Mechanics

AREAS OF EXPERTISE

- Accident Investigation & Failure Analysis
- Axle Failures/Fractures
- Corrosion
- Fasteners (Rivets, Bolts, Blind Fasteners)
- Fracture Mechanics
- Industrial Accident Investigation & Reconstruction
- Metallurgical Engineering
- Metals – Strength & Fatigue
- Product Liability
- Stress Fractures
- Welding
- Wheel Failure

PROFESSIONAL REGISTRATION

State of Alabama Professional Engineer #15088
State of Mississippi Professional Engineer #18136

WORK EXPERIENCE

Metallurgical Consulting, Inc. - President 4/1977 to Present

-This company provides consulting services in the areas of metallurgy and materials, corrosion, welding, fracture mechanics, and failure analysis. Clients have been in shipbuilding, paper, chemicals, power generation, aircraft, insurance, and law firms.

University of South Alabama- Associate Professor in Mechanical Engineering 9/1976 to 5/1977

-*Mobile, Alabama*, Developed and taught two materials courses. First course provided fundamentals, and the second involved industrial metallurgy. Taught one course each on manufacturing processes and fluid dynamics. Taught two-part course on strength of materials.

Boeing Wichita Division - Principal Investigator 6/1973 to 9/1976

-*Wichita, Kansas*, Worked in the Metals and Materials Technology Unit and the Commercial Stress Unit. Primary duties were setting up and running the scanning electron microscope, development of new failure analysis techniques, and serving as an in-house consultant on failure analysis and fatigue crack growth calculations.

SOCIETIES

- Alabama Society of Professional Engineers
- American Society of Metals
- American Society of Testing and Materials
- National Association Corrosion Engineers
- National Society of Professional Engineers
- Society of Automotive Engineers

RECENTLY PUBLISHED PAPERS

CK Clarke and GE Borowski: "Evaluation of a Leaf Spring Failure," J. Failure Analysis & Prevention, 2005, vol.5, #6, pp 54-63

CK Clarke and D Halimunanda: "Imperfections in Tree Stand Failures," Journal of Failure Analysis and Prevention, 2006, Vol 6, # 2, pp 24-30.

CK Clarke: "Evaluation of Fire Damaged Copper Wire," Advanced Materials and Processes, 2006, Vol 164, # 4, pp 37-39.

CK Clarke and D. Halimunanda: "Failure Analysis of Induction Hardened Automotive Axles", Journal of Failure Analysis and Prevention, 2008, Vol 8, #4, pp 386-396.