

## CURRICULUM VITAE

### DUANE P. JOHNSON, PhD, PE

Dr. Johnson has investigated the failure of many electrical and mechanical devices including consumer products, lighting, wiring, electrical vehicles, power systems, motors, generators, circuit disconnects, industrial machinery, transformers and electronic components. He has developed and installed numerous automated production line inspection systems and has conducted on site investigation of failures in homes, factories, farms, bridges, ships, aircraft, munitions, rails, processing plants and power generating facilities.

Through his career he has founded and managed three different companies involved in analysis and prevention of electrical and mechanical failures. He has conducted multiple research projects to improve the safety of automobiles, railroads, munitions, oil wells, power plants and aircraft.

Dr. Johnson has provided services to government agencies, research organizations, utilities, manufacturers, processing facilities, insurance providers, retail establishments, contractors, property owners, attorneys and individuals. He has testified before the Nuclear Regulatory Commission and in numerous court cases.

Located near Sacramento, Dr. Johnson is a registered Professional Electrical Engineer in the state of California, #E20680.

#### **Education:**

BS (Electrical Engineering) with high distinction  
University of Minnesota,  
MS (Physics)  
University of Washington,  
PhD (Physics)  
University of Washington.

Dr. Johnson has given many invited lectures and presentations to academic, industrial and lay audiences. He has published more than 50 technical papers.

## **Work Experience:**

### Electrical Engineer, Fire Cause Analysis, Inc.

Specializes in the investigation and prevention of electrical failures, including malfunctions, outages, electrical shocks, arcing faults and fires of electrical origin.

### Principal Engineer and Founder, Electrical Expert, Inc.

Specializes in the investigation and prevention of electrical failures, including malfunctions, outages, electrical shocks, arcing faults and fires of electrical origin.

### President and Cofounder, SE Systems, Inc.

Specialized in radio-waves assessment of the suitability of materials and parts for intended service. Developed advanced proprietary computer processing methods and hardware to allow automatic, high speed, 100% inspection.

### Managing Engineer, Failure Analysis Associates

Specialized in the analysis of electrical and mechanical failure. Investigated many high profile accidents. Involved in the early development of probabilistic methods for analyzing system failure. Developed methods and used these methods to assess the safety of nuclear power plant components and other critical components.

### President and Cofounder, Reluxtrol, Inc.

Specialized in proprietary high-sensitivity radio-wave sensors in nondestructive inspections. First to successfully apply high-frequency test methods to steel parts.

### Manager of Nondestructive Investigations, Pratt & Whitney Aircraft

Responsible for nondestructive inspections to assure the continued safe operation of critical gas turbines.

### Associate Professor of Physics, American University in Cairo

Taught physics and material science to international students in Cairo, Egypt.

Senior Lecturer in Physics, University of Western Australia

Teaching and Research Assistant, University of Washington