

Ramesh J. Kar

PhD, PE, FASM, BCFE, FACFE
Senior Managing Consultant



Failure analysis, consultant on materials selection, product liability, product development. Expertise in scanning electron microscopy, fracture mechanics, metallurgical tests and techniques. Over 3500 failures investigated including steel roofing, copper and plastic piping, cast iron piping turbine/heat exchanger failures, welded joints, brazes, glass failures, metal and plastic chair failures, composite poles, ski-boots, chains, seatbelts, ladder failures, tire cases, automotive & airplane component failures. ABS piping/construction defect cases. Paints and engine contamination cases. Expert witness consultations / courtroom testimony in over 500 civil and criminal investigations (plaintiff and defense).

Education

PhD, Materials Science & Engineering, Mechanical Engineering, Business Administration (Minors) University of California, Berkeley (1979)

MS, Materials Science & Engineering University of California Berkeley (1976)

BS, Metallurgical Engineering, Indian Institute of Technology, Bombay (1974)

Licenses & Certifications

- State of California P.E. License No. MT 1739

Positions Held

Engineering Systems Inc., Santa Ana, California

- Senior Managing Consultant, 2022 – Present

Kars' Advance Materials, Inc., Anaheim, California

- President & Principal, 1990 – 2022

Northrop Corporation, Hawthorne, California

- Program Manager & Lead Engineer, 1982 – 1990

Anamet Laboratories, Berkeley, California

- Senior Metallurgist, 1979 – 1982

Contact Information

rjkar@engsys.com

(714) 527-7134

ESi Santa Ana

1719 S. Grand Ave.
Santa Ana, CA 92705

Areas of Specialization

- Failure analysis
- Consulting on materials selection
- Product Liability
- Product Development.
- Scanning Electron Microscopy
- Fracture Mechanics
- Metallurgical Tests and Techniques

Lawrence Berkeley Labs, Berkeley, California

- Research Scientist, 1974 – 1978

Independent Mechanical Metallurgy/Materials/Forensics Engineering Consultant, Anaheim, California

- Consultant, 1982 – Present

Professional Affiliations/Honors

ASM International

- Member, ASM Council of Fellows, 1995 - current
- Chairman, ASM European Failure Analysis Conference, Brussels Chairman, Orange Coast Chapter, ASM International, 1992-1993 Chairman, ISTFA Conferences
- 1987 - 1991, ASM International
- Chairman, Los Angeles Chapter, ASM International, 1987-1988 Vice-Chairman, MEI Seminar Committee, ASM Intl., 1991-1992
- Executive Committee Member, ASM International
- Golden Gate, Los Angeles & Orange Coast Chapters Technical Chairman, Westec 1986 (ASM /SME)

ASTM International

- Member – American Society for Testing & Materials (ASTM)
- Elected Fellow, ASM International (American Society for Metals) 1990 Regents of The University of California Fellow, 1974-75