PARESH R. MODI

ASSOCIATE, DAYTON AEROSPACE, INC.

PROFILE

Recognized material and process engineering subject matter expert with over 40 years of experience in metallurgical, process, and materials science engineering; failure investigation and analysis; risk analysis; fracture mechanics; and electronics. During successful industry career at Lockheed Martin Corporation, made valuable contributions to national defense including development of three United States patents, four trade secrets, and other disclosures and earned multiple engineering and technology awards. Continues to solve issues for military, government, and industry organizations related to a variety of applications including mechanical structural parts and hardware; propulsion and thermal components; electronic parts, printed wiring boards and other technologies for space vehicles, launch vehicles, missiles, and fighter aircraft.

PRINCIPAL AREAS OF EXPERTISE

- Materials & Science Engineering
- Metallurgical Engineering
- Failure Investigation
- Risk Analysis
- Metals, Polymers, Composites
- Electronics & Semiconductor Materials
- Fracture Mechanics
- Process Engineering
- Additive Manufacturing
- Emerging Technologies
- Corrosion Science & Control

WORK HISTORY

Associate | Dayton Aerospace, Inc.
2024-present, *Dayton, OH*

Assists defense organizations with tough engineering challenges encountered during selection of materials, design and fabrication, testing, additive manufacturing and failure investigation.

Principal | LM&P ENGG FELLOW, LLC.
2022-present, *Fort Worth, TX*

Provides advisory services in support of national defense. Experience includes mechanical, structural, propulsion, thermal, and electronic parts and components failure analyses; stress analyses/fracture mechanics and fatigue crack growth assessments - durability and damage tolerance (DaDT) analyses; material selection; risk analyses, additive manufacturing, and more.

Senior Staff Engineer, Leader – Materials & Process Engineering | Lockheed Martin
1988-2022, *Various US Locations*

Broadly diversified contributions in a variety of areas such as parts; materials, metallurgical, and process engineering; material selection and application; destructive and non-destructive testing (NDT); heat treatment; failure analysis; additive manufacturing; fracture mechanics; and DaDT used in space and aircraft such as the GPS III, Atlas V and F-35. Established more than 150 requirements documents, including specifications, plans, statements of work (SOWs), etc. for material and process engineering, solved product assurance and reliability problems and led the PMP Engineering Group, ensuring each production phase was successful.

DAYTON AEROSPACE
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Dayton, Ohio 45431
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EDUCATION

MBA, Business Administration & Management
University of Colorado, Denver

MS, Materials & Metallurgical Engineering, Fracture Mechanics, and Semiconductor Materials
Polytechnic University of New York (NYU)

BS, Metallurgical Engineering
Maharaja Sayajirao University

CERTIFICATIONS & TRAINING

Certified NASGRO Crack Growth Analyst
Southwest Research Institute (SWRi)

Certificate in Entrepreneurial Studies
University of Colorado, Denver

Non-Destructive Testing (NDT)
American Society of NDT

Principles of Heat Treating
ASM International

Lockheed Martin Training
Control Account Manager (CAM)
Certified LM 21 Green Belt
EN 216 System Integrartion
EN125 Astrodynamics
Intro to Spacecraft Design

WORK HISTORY (CONT'D)

Prior to 1988

Design/Metallurgical/Quality Assurance (QA) Engineer

Held leadership positions at the following mechanical hardware manufacturing companies.

- Ford Fasteners, *Hackensack, NJ*
- Associated Manufacturing Company, *Mt. Laurel, NJ*
- Bi-Tech, Inc., *Maple Shade, NJ*
- Universal Brass Co, Inc., *Bronx, NY*
- Suessen Textile Bearing, Ltd, *Baroda, India*

Solved metallurgical problems in the manufacturing of cold headed and machined mechanical hardware products and introduced innovative ideas to develop products according to their applications. Developed procedures to control quality and increased product quality 15%, reliability of metal forming tools 20%, and productivity 25%. Reduced costs by improving efficiency and performance of metal forming tools and machines. Provided technical support in the areas of raw materials selection, tools design, and metal forming processes— decreasing tooling cost 15% and cost of production 20%.