



# Materials Science Research Consulting Engineer Capabilities Statement

## COMPANY DATA

MSRCE, with over 27 years of research and development, failure analysis, manufacturing/logistics engineering - six sigma leadership, technical applications in material testing engineering interpretation, materials selection, design, performance development of mechanical, structural, electronic, chemical, thermal behavior development of materials for aerospace/aircraft, electronics/optical/magnetism, ocean/marine, petrochemical, civil engineering materials including metallurgy, ceramics, composites, plastics, adhesives, semiconductor-electronics materials science and engineering experience. Doctor Howard has received over 700-hours of training for corporate executives' military service (US Navy) and in the public sector.

## CERTIFICATIONS

- DBE (TXDOT-TBOD)
- MBE Minority Certification
- National Minority Supplier Development Council (NMSDC)
- Texas-HUB
- Service Disabled Veterans Owned Business (SDVOSB)
- 8A (Pending)



## DUNS#

06-328-7016

## CAGE CODE#

7CP28

## NAICS CODES

325211	331491	332112	332813
331110	331492	332117	423510
331410	331523	332811	541330
331420	331529	332812	541712

## INDUSTRIES SERVED

Academia	Litigations	Military/Government
Aerospace	Logistics	Nuclear
BioMedical	Manufacturing	Petrochemical
Civil	Marine/Ocean	Telecommunications
Electronics		

## COMPANIES SERVED

Applied Materials, Babcock & Wilcox Company, British Oxygen Company, Cameron Forge, Department of Defense (DoD), Department of Energy (DoE), Domco Flooring, Express-Consolidated Scientific Instruments, TAD, Burnett & ADIA Technical Services, IBM, Insituform Technologies, James A. Babb Engineering NOCO2 Energy Firm, MCI Telecommunications, NASA, Raytheon (Hill & Hill) DART Project, Standard Aero/Lockheed Martin, Texas Instruments, Trident Metals, Twinstar-Semiconductor, University of Texas

## CONTACT INFORMATION

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## SERVICES

- Adhesives and Sealants
- Alloy Development
- Biomedical Materials
- Casting
- Ceramics and Glasses
- Characterization Interpretation  
*Scanning Electron Microscopy, Transmission Electron Microscopy, Optical Microscopy, X-Ray Diffraction, Fourier Transform Infrared Spectroscopy, Raman Spectroscopy, Reflective High Energy Electron/Low Energy Diffraction, Photo-luminescence, Hall Effect, Shock Wave Physics*
- Chemical Behavior
- Coatings
- Composites
- Consulting
- Continuous Process Improvement
- Corrosion
- Electronics & Semiconductor Behavior
- Failure Analysis
- Foams
- Forging
- Fractography
- Fracture Mechanics
- Frac
- Heat Treatment
- High Temperature Materials
- Joining-Welding Brazing and Soldering
- Lubrication
- Machining
- Magnetic Behavior
- Materials Development
- Materials Engineering
- Materials Science
- Materials Selection
- Mechanical Behavior Structures
- Mechanical Testing Interpretation  
*Creep/Stress Rupture/Fracture/Tensile/Hardness/Impact/Fatigue*
- Medical Devices
- Melt Processing
- Metallography Interpretation
- Metallurgy/Superalloys
- Microfabrication
- Nanotechnology
- Non-Destructive Testing Interpretation
- Optical Behavior
- Polymer-Plastics
- Powder Metallurgy
- Printed Circuit Board
- Research and Commercialization
- Research Innovation and Implementation
- Root Cause Analysis-Troubleshooting
- Sensors and Semi-Conductor Electronics
- Sintering
- Solidification
- Steels
- Substantiation
- Super-Alloys
- Super-Ceramics
- Super-Composites
- Surface Engineering
- Synthesis Electronics  
*Chemical Vapor Deposition Molecular Beam Epitaxy, RF Magnetron Sputtering, Photolithography, Etch, Ion Implantation, Surface Mount Technology, Printed Circuit Board Module Card*
- Thermodynamics
- Wear Tribology