Rama S Koripelli
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Education

- Ph.D. (Mechanical Engineering) University of Nevada, Las Vegas, NV, USA, Fall 2007 GPA: 3.63
- M.S. (Mechanical Engineering) McNeese State University, Lake Charles, LA, USA, Summer 2004 GPA: 3.75
- B.E. (Mechanical Engineering), Nagarjuna University, Vijayawada, AP, India
- Diploma in Automobile Engineering, State Board of Technical Education and Training, AP, India

Professional and Research Experience

David N French Metallurgists (DNFM) Brooks, KY, USA
Technical Director Oct 2009 – Present
Engage in metallurgical projects, condition assessment of components and conducting seminars of metallurgical failures in boilers.

David N French Metallurgists (DNFM) Brooks, KY, USA
Metallurgical Engineer Jan 2008 – Sep 2009
Metallurgical investigations of failures in fossil boiler tubes and wide variety of industrial components like shafts, springs, valves etc. Life assessment of superheater and reheater tubes for sub-critical and super critical boilers. Condition assessments for the water wall tubes. Evaluation of non-destructive and chemical test results.

University of Nevada, Las Vegas, (UNLV) Las Vegas, NV, USA
Research Assistant summer 2005- fall 2007
Assists in research, developing techniques for specialized mechanical and corrosion testing for various materials, supervise the materials performance laboratory (MPL).

University of Nevada, Las Vegas, (UNLV) Las Vegas, NV, USA
Teaching Assistant, fall 2004-spring 2005
Preparing lab manuals and teaching MEG 330L and MEG 337L.

McNeese State University Lake Charles, LA, USA
Graduate Assistant fall 2001 - summer 2004
Preparing lab experiments and assisting in research work.

Vijayawada Thermal Power Station (VTPS) Vijayawada, AP, India
Internship summer 1997

Cooling load calculations, efficiency analysis and general maintenance of steam condensers

Dissertation

"Tensile Deformation, Corrosion and Crack Growth Characterization of Nickel-base Alloys" This investigation is aimed at characterizing the deformation at elevated temperatures under tensile loading, corrosion characterization in the presence of H_2SO_4 and evaluation of crack propagation of candidate structural materials (Alloy-22) to be used in heat exchangers for nuclear hydrogen generation. Defects, microstructure, and failure analysis was analyzed using TEM, OM, and SEM.

Selected Publications

Ajit K Roy, Rama S Koripelli and Joydeep Pal ***"Tensile Deformation of a Nickel-Base Superalloy for Application in Hydrogen Generation"*** International Journal of Hydrogen Energy, Volume 33 Issue 3, February 2008, Pages 945-952.

Rama S. Koripelli, David N. French and Jonathan Brand "***Stress-Corrosion-Cracking in Carbon, Low-Alloy and Stainless Steels***" Power Gen 2010, December 14-16, 2010, Orange County Convention Center, Orlando.

Rama S Koripelli, David C Crowe, David N French and Jonathan Brand **"Role of Fireside Corrosion on Boiler Tube Failures"** Electric Power 2009, EP09 Session 12C, May 2009, Rosemont, IL.

Rama S Koripelli, Joydeep Pal, Ajit K Roy ***"The Corrosion Behavior of Nickel-base Austenitic Alloys for Nuclear Hydrogen Generation"*** MRS 2006 Spring Proceedings, SFO, CA, USA Paper # 0929-II05-06.
http://www.mrs.org/s_mrs/sec.asp?CID=6474&DID=173966

Rama S Koripelli, Ajit K Roy ***"Tensile Deformation of Alloy-22 at Ambient and Elevated Temperatures"*** ASME PVP-2007 Conference, July 22- July 26, 2007, San Antonio, TX, USA

Rama S Koripelli ***"Use of Alloy-22 for Nuclear Hydrogen Generation"*** ANS Student Conference, March 29-March 31, 2007, Corvallis, OR, USA

Rama S Koripelli, Joydeep Pal, Ajit K Roy **"Tensile Properties and Fracture Toughness of Super Alloys for Hydrogen Generation"** MS&T 06 October 15-October 17, 2006, Cincinnati, OH, USA

Certification

- Engineer Intern (FE) 0T5144 (Nevada), June 2006
- Boiler Inspection Techniques (UDC), June 2008
- Joint Approach to Boiler Tube Failure Prevention, (UDC and DNFM), June 2008
- Fundamentals of Technical Writing (Terra Community College), August 2008

Professional Affiliations

- Student Chapter President, UNLV ANS Student Chapter President 2005-2006
- Student Member, Material Advantage UNLV Student Chapter
- Student Member, UNLV SAMPE Student Chapter
- Student Member, American Society of Mechanical Engineers (ASME)
- Student Member, The American Society of Materials (ASM)

Litigation Experience:

2009-2011, AES Warrior Run versus National Boiler Service Inc.
2011-2012, Astoria Queens versus Plymouth Tube Co.

Professional Affiliations
ASM International
ASME

Software Skills

AutoCAD, Pro/Engineer, SolidWorks, HyperMesh, HyperView, LS DYNA, MathCAD, Matlab, LabVIEW, Data Acquisition (DAQ), and Microsoft Office

Standards and Operational Skills

ASME, AWS, ASTM, NACE, Instron, MTS, Transmission Electron Microscopy (TEM), Scanning Electron Microscopy (SEM), and Optical Microscopy