

## Selected Final Technical Reports (T) and Manuals (M)

- T1. "Heat Exchanger Tube Sheet Hole Enlargement Limit (Phase II)", **Final Report, Saudi-Aramco** ME2203, June, 2007.
- T2. "Temperature and Frequency Effects on Fatigue Crack Propagation Rate in CPVC and HDPE Pipes" **Final Report, SABIC/KFUPM, SAB2003/15, Nov 2005.**
- T3. "Study on PVC Pipe Products and Causes of Failures", **Final Report, Sabic R&T Riyadh CRP** 2216, Oct. 2005.
- T4. "Development of a Pass-Through Electric Submersible Pump, Phase I: Technical Feasibility Study" **Final Report, Saudi-Aramco, CPM2230, February, 2004.**
- T5. "Design of an Intelligent Telepresence Robotic System", **Final Report, KACST AT 20-80, April 2004.**
- T6. "Investigation of Heat Exchanger Tube Sheet Hole Enlargement", **Final Report, Saudi-Aramco** ME2203, Feb.2001.
- T7. "Crack Initiation and Growth in CPVC Weld Zone," **Final Report, Saudi-Aramco PN20015, July, 2000.**
- T8. "Computational Residual Stress Analysis for Induction Heating of Welded BWR Pipes," RP 1394 for Electric Power Research Institute, Palo Alto California, June 30, 1981.
- M1 **Merah, N.** and Al-Zaharnah, I. "Machine Design Laboratory Manual: General Design Procedures and Guidelines", KFUPM, 2001.
- M2 **Merah, N.** "Machine Design Laboratory Manual: Design Procedures, Guidelines and Solutions", KFUPM, 2002.
- M3 Eleiche, A., **Merah, N.** and Sheltami, K., "Machine Design Cookbook", KFUPM, 2004.

## Funded Research Projects

1. PI "*Natural and Accelerated Weathering Effects on Tensile and Impact Properties of CPVC Pipe Material*". **KFUPM Project**, Project No. IN080408, (SR 248,000) 2008-
2. Co-PI "*Exploring The Effect of Thickness on the Crack Tip Plastic Zone and Crack Initiation Angles*", **KFUPM-Fast Track-SF** 2008/28, (SR 75,000.00).
3. CI "*Determination of Maximum Boiler Swing Rates*" **Saudi-Aramco** funded 2.5 year project # ME2277, (SR 1,500,000), May 2007-Dec. 2009.
4. CI "*Design and Manufacture of an Unmanned Ground Vehicle*", **KFUPM-RI** funded 1.5 year project (SR 183,500), Sep. 2007-Feb 2010.
5. CI "*Environmental Degradation and its Effect on Long-Term Performance and Durability of Glass Fiber Reinforced Composite Used in Oil Production/Transportation pipes*", **Saudi-Aramco** funded 5 year project # ME2236, (SR 1,900,000), May 2004-Jan. 2010.
6. CI "*Heat Exchanger Tube Sheet Hole Enlargement Limit (Phase II)*", **Saudi-Aramco** project # ME2203, (SR 1,283,000), 5/2004-5/2007.
7. CI "*Study on PVC Pipe Products and Causes of Failures*", **Sabic R&T Riyadh** funded project # CRP 2216 (SR 950,000.00), October 2003-September 2005.
8. PI "*Temperature and Frequency Effects on Fatigue Crack Propagation Rate in CPVC and HDPE Pipes*" **SABIC** project # SAB2003/15 (SR 60,500.00), May 2003-Nov. 2004).
9. CI \*\* "*Design of an Intelligent Telepresence Robotic System*" **KACST** Funded two-year-375,000 SR project under the number AT 20-80 (September 2001-April 2004, Completed).
10. CI "*Development of a Pass-Through Electric Submersible Pump, Phase I: Technical Feasibility Study*" **Saudi-Aramco** funded project # CPM2230 (SR 750,000) (January 2003- February 2004).
11. CI "*Investigation of Heat Exchanger Tube Sheet Hole Enlargement*", **Saudi-Aramco** project number ME2203, SR 300,000 (1/2000-2/2001).
12. Co-PI "*Crack Initiation and Growth in CPVC Weld Zone*," Saudi-Aramco funded two-year, SR 412,000 project under the number 20015, (8/1998-8/2000).
13. CI "*Computational Residual Stress Analysis for Induction Heating of Welded BWR Pipes*," RP 1394 **Electric Power Research Institute**, Palo Alto California, Jan. 1979-June, 1981.
14. CI "*Measurement of Sound Level in Industrial Fishing Reels*", **Zebco**, USA funded 3 month project, 1979.

\*\* received 1 local and 1 national award

## Other Projects

1. Strategic Partnership and Faculty Recruitment Project (SUPR) (May 2006- March 2007).  
*Project funded by KFUPM (about SR 1,000,000.00).*