

# DEREK A. KING, M.S., P.E., CFEI Mechanical and Electrical Engineer

#### **SUMMARY**

Prior to joining Berkeley Engineering And Research, Inc., Mr. King was an assistant engineer for Lawrence Berkeley National Laboratories and was responsible for data collection, programming, and system testing for the analysis of energy loss in residential hot water systems. Mr. King's broad engineering work with BEAR has played an integral role in developing his expertise in applied research, design, prototyping, failure analysis, and both destructive and non-destructive testing. He continues to assist BEAR's Principal Engineers with failure analysis and incident investigations. In 2015, he began to lead cases focused on product design failures as well as consulting for the oil and gas industry.

#### **EDUCATION**

M.S. in Electrical Engineering from Ohio University (2020) B.S. in Mechanical Engineering from U.C. Berkeley (2009)

## PROFESSIONAL AFFILIATIONS

Registerd Mechanical Engineer, State of California CFEI, CVFI, National Association of Fire Investigators

### PROFESSIONAL EXPERIENCE

## **2009** – present

*Mechanical & Electrical Engineer* - Berkeley Engineering And Research, Inc. Engineering Research, Design and Failure Analysis, Programming, Inspection Services

Mr. King has over 15 years of experience identifying the root cause of failures and creating innovative and targeted solutions. He regularly designs and prepares experiments for automotive, consumer products, and other applications to aid in failure analysis. His skills include ASME & Safety Compliance for the Gas & Oil Industry, design and fabrication, and technical justification for design decisions and expert opinions. His responsibilities include data and error analysis and the iterative process of refining experimental parameters and comprehensive documentation. He manages BEAR contracts with Chevron, Phillips66, and Marathon Oil to provide onsite non-destructive inspections (laser scaning) at their refineries and performing data analysis, and design reviews using the ASME Boiler and Pressure Vessel code. He provides machine shop and engineering for the BEAR team to aid in destructive and non-destructive field testing, and maintains a proprietary software library.