



POSITION TITLE: Modeling/Sr. Modeling Scientist
LOCATION: 900 Forge Ave. Audubon, PA
Type: Permanent – Full Time
Contact: Krishna Mehta – mehtak01@jmusa.com

SUMMARY OF POSITION:

This position entails responsibility for computational modeling support of various customer focused technical programs. The support includes, but is not limited to, the development, application and support of computer models to simulate the performance of reacting flow in a catalytic device. In addition, responsibility for supporting the customers in the utilization of these models and the communication of computational modeling results internally and at customer sites are included.

JOB DESCRIPTION:

- Interact closely with the HDD customers and JM Technical Program Managers to identify customer and internal modeling needs
- Interact closely with the modeling team at JM Sonning to ensure that model development programs are correctly focused and planned to ensure timely delivery of the appropriate models
- Develop catalyst and reacting flow models to simulate catalytic device performance in diesel engine exhaust applications
- Design and execute reactor bench and engine based experimental programs needed to calibrate and validate the models
- Apply the catalytic models to provide catalyst sizing recommendations for internal and customer applications
- Analyze, interpret and summarize data obtained from the modeling analyses, and present the data internally and at customer locations
- Provide support to US OE customers who utilize JM computer models
- Comply with all Johnson Matthey Hazardous Waste procedures and local, state and federal regulatory requirements

REQUIREMENTS:

- MS (required)/PhD (preferred) Degree in Chemical/Mechanical/Materials engineering or Chemistry
- 3+ years of experience in exhaust aftertreatment related fields with specialization in computer modeling, preferably of diesel exhaust aftertreatment devices, or PhD in one of the above fields with focus in modeling catalytic reacting flow
- MATLAB/Simulink experience and working knowledge of commercially available CFD and reacting flow packages are required
- Good working knowledge of catalyst design and/or application is needed
- Skillful in the use of computer packages to analyze data and prepare presentation materials for customers
- Ability to work independently and in a team environment
- Excellent follow-up, written and oral communication, organization and interpersonal skills