Position Title: Catalyst Development Engineer

Job Responsibilities:

1) Guides R&D projects in support of the aromatics alkylation business. Projects include both catalyst and process development, from laboratory high throughput screening studies, through process scale up, commercial trials, and plant startup. Primary contact with ExxonMobil Research and Engineering’s Catalyst Technology Laboratory for catalyst development and manufacturing support activities. Assists Licensing activities with process design and new technology development efforts.
2) Leads catalyst screening activities for commercial proposals and specific client needs. Designs and conducts experiments to evaluate new catalytic materials and processes. Oversees laboratory and pilot plant operations and provides work direction to research technicians. Evaluates licensee feeds compatibility with ExxonMobil catalysts to support design and operation of pretreatment systems.
3) Provides catalyst related support to Licensing’s Technical Support Group and ExxonMobil Catalyst Technologies for new and existing customers. Evaluates effects of operating conditions on catalyst performance. Assists in plant startups, developing unit Catalyst Operating Guides, and establishing catalyst performance monitoring tools by applying learnings from pilot plant evaluations. Provides assistance with commercial catalyst production and regeneration.
4) Captures learnings from R&D projects and pilot plant simulations of commercial operations in patent applications and internal reports.

Job Requirements:

1) MS or BS in Chemical Engineering or Chemistry; PhD preferred
2) Minimum two years of experience in heterogeneous catalysis
3) Experience in laboratory and pilot plant operations required
4) Strong verbal and written communication skills
5) Strong computer skills including experience with process simulations
6) Excellent teamwork and interpersonal skills
7) Background in refining or chemicals processes with experience providing technical support in a plant environment

Preferred Knowledge, Skills, and Abilities:

1) Background in zeolites and catalysis strongly desired
2) Knowledge of reactor and distillation system operations desirable
3) Experience in process scale-up desirable

All interested students and post-docs can contact Bill Lonergan directly at: william.w.lonergan@exxonmobil.com.