LANDSCAPING GREEN COPPER CORROSION INHIBITORS AS AN ALTERNATIVE TO COMMONLY USED COMPOUNDS

A Chemical Company Specializing in Petroleum Additives

The client was looking for more environmentally sustainable alternatives to commonly used copper corrosion inhibitors in response to increasing regulatory pressure on these compounds.



CHALLENGE

The client engaged PreScouter in this Research Support Service Project to map out the tech landscape of "green" copper corrosion inhibitors as viable substitutes for those that were available on the market.

APPROACH

PreScouter began by examining commercialized applications and those close to commercialization. The PreScouter team also investigated earlier stage academic research and the status of any intellectual property. Technical parameters such as the mechanism of action, solubility/dispersibility, and temperature of application were considered. A Subject Matter Expert was also interviewed to provide insights on the different families that could be used, focusing on those categories that would not be harmful to the environment and would have lower prices.

Nine compounds were down-selected based on laboratory efficiency and commercial availability indications. In addition, 11 potential partners were contacted to learn more about their capabilities and relative bulk costs, and 4 companies claimed to provide at least one of the compounds of interest at scale.

OUTCOME

The PreScouter team presented the client with the top 3 copper corrosion inhibitors to be tested on their formulation, and 2 suppliers were recommended as the best opportunities based on business parameters.