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Sept. 4, 2009

W. Ken Burchett
Eastman Chemical Company
Catalysis Research Laboratory
PO Box 1972
Kingstport, TN 37662

Dear Dr. Burchett:

I am pleased to nominate Joseph E. Baumgartner for the prestigious 2010 ACS National Chemical Technician Award. For over twenty nine years Joe has worked at ExxonMobil's Corporate Research Laboratory. This laboratory is responsible for longer-term research supporting both existing and emerging refining processes. My personal association with Joe spans more than twenty years, and for the last seventeen we have directly worked together. Over this lengthy relationship, Joe's role has evolved from a technical assistant to a trusted colleague and technical collaborator. In practice, Joe functions as a principal investigator in generating ideas, suggesting and executing experiments, critiquing and analyzing data and always approaching the solution to problems in a thoughtful and scientific manner.

Joe has been a significant member of the heterogeneous catalysis community at Corporate Strategic Research. For several years, he was involved in establishing mechanistic details in acid-catalyzed hydrocarbon reactions. Much of this work was done in collaboration with Dr. Enrique Iglesia (now chaired Professor at the University of California at Berkeley) using isotopic tracers and model compound reactions. He not only was responsible for generating this experimental data but he also provided significant insights in analysis and interpretation. This work generated a broad technical understanding with applications in a wide variety of commercially important reactions, such as propane dehydrocyclodimerization, methanol conversion to olefins, paraffin isomerization, alkylation and cracking. Joe presented this work at a national North American Catalysis Society Meeting.

Joe was also involved in the development of ExxonMobil's Gas To Liquids (GTL) technology. He helped elucidate primary and secondary reaction pathways in Fischer-Tropsch reactions, and demonstrated the consequences of olefin readsorption and chain initiation. His characterization work on Exxon's proprietary AGC-21 Fischer-Tropsch catalyst increased our understanding of the structural evolution of these materials through synthesis, pre-treatment and catalytic reactions. The studies describing the changes on stream of Fischer-Tropsch catalysts was recently presented at the North American National Meeting, and there was substantial feedback that this contribution has really helped workers in the field understand this chemistry

better. Joe has received internal Exxon recognition awards for his contributions to moving the AGC-21 program into development.

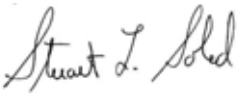
Joe has worked on understanding the behavior of numerous experimental hydroprocessing catalysts, and his work helped move the Nebula™ catalyst to commercial utilization in over 15 refineries worldwide. His current work involves finding enhanced versions of this catalyst using proprietary chemical modifications. He has received an internal ExxonMobil recognition award for this work. The implementation of Nebula is creditied with providing ExxonMobil with an savings over $100 million by removing the need to upgrade hardware configurations in several units in order to meet more stringent legislated sulfur specifications. Joe's work has provided the basis for sixteen refereed publications and 9 US granted and 7 pending patent applications- this testifies to his incredible contributions as a technician.

Finally, Joe has worked directly with several summer student interns at ExxonMobil, providing experimental support, ideas and encouragement. Two of these students have gone on to accept positions after their graduate studies at ExxonMobil and they are now contributing to ExxonMobil's research efforts.

Joe has demonstrated flexibility by working in diverse areas. He is as comfortable and productive in addressing fundamental problems in catalyst structure as he is in working important development issues. His technical skills are continually enhanced by his desire to learn new areas and accept difficult challenges. Joe is a meticulous experimentalist, who has designed, operated, and programmed fully automated microreactor units that are equipped with gas chromatographic and mass spectrometric capabilities. He serves as a resource in these areas within ExxonMobil's Corporate Strategic Research Labs and his help is continually being solicited by other laboratory workers. Because of this he has received an ExxxonMobil peer recognition award on two occassions.

Those of us who have benefited from collaborations with Joe recognize his unusual talent, energy, resourcefulness, and personal qualities that merit nomination for this award.

Sincerely yours,



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