

2. Shell Elastomers – Charles spent 15 years in Shell Elastomers working with famous materials chemists, such as Geoffrey Holden, in preparing elastomer formulations and polymer engineering of coatings for use in automotive applications. Many of their formulations were used in automotive molds of dashboards and exterior body parts. The contributions Charles made to those commercial processes lead to (2) patents and the production in excess of 100,000 lbs/year of elastomers; and millions of dollars (USD) in sales. Specifically, Charles developed unique methods for heat and light stabilization tests on elastomers used in the above applications. He also spent 5 years screening initiators for anionic polymers and block co-polymers for use in plastics development.

When Shell divested the elastomers business in the late 1990's, Charles spent 2 years working with Dr. Lynn Slaugh (a former ACS Industrial Chemistry Award recipient) on special projects exploring olefin functionalization, and other classical SHOP chemistry. Charles was chosen for this assignment based on his past experience as the "go-to" technician on tough assignments where technical improvising was essential to success.

In 2001, Charles was requested by Dr.'s Scott Wellington and Andreas Matzakos to build the prototype for the Shell Gamechanger sponsored MISR project. The success of this prototype led to the MISR Gas Separation Technology now licensed commercially by CRI International for separation of carbon dioxide and hydrogen for various industrial applications.

Currently, Charles has been reassigned to CRI International (a wholly owned subsidiary of Shell Oil) where he is the lead technician for catalyst development supporting Shell Upstream projects on oil conversion. His efforts and observations have already led to several invention disclosures for new future catalyst technologies. He now supervises contractors and continues to mentor scientists and technicians alike in laboratory procedures, methods and industrial chemical safety.

2. LEADERSHIP/MENTORING

Charles has mentored and trained several new technicians periodically throughout his 39 years of service. He currently supervises one contractor for making catalysts.

He has mentored multiple scientists including the author of this nomination package in best practices and safety in the Shell and CRI laboratories.

Charles was a lead technician and lab supervisor for famous Shell chemists and engineers such as Dr. Lynn Slaugh (a former ACS Industrial Award recipient and Shell scientist) and Dr. Geoffrey Holden; where his contributions led to their commercial successes.

3. PUBLICATIONS

- 2 patents granted
- 10+ internal reports authored

4. CONTRIBUTION TO QUALITY, SAFETY, AND OTHER INITIATIVES

Charles has been recognized periodically for his safety in the laboratory and at the refinery. Some recent highlights are given below.

1. He identified several outlets in his new laboratories and adjacent laboratories were not grounded properly and had incorrect receptacles for the electrical equipment in use.
2. Charles was cited by Shell HSSE and his line manager for a best practice method of handling an electrical fire due to faulty equipment. His actions for extinguishing the fire were met with minimal damage to equipment and no damage to personnel.
3. His laboratory has been cited by senior management during quarterly inspections as an example of excellence in laboratory hygiene.
4. Charles has intervened appropriately when other employees or contractors were conducting work in his laboratory or in the field.

5. Charles mentors new staff scientists and technicians on best practices in conducting experiments or analytical work safely in the 3 laboratories he monitors.

5. AWARDS

- Charles received the WTC - Technician Affiliate Group (TAG) 2009 Technician Achievement Award. This is the highest award given to technicians employed by Shell Oil Company and CRI International at the Westhollow Technology Center.
- Charles has received 3 Shell Oil Company Vantage Awards from 2001-2003.
- Charles has received the Shell Chemical Star Award (July 1999).
- Charles has been given several Shell Recognition Awards (SRA's) by managers over the past 39 years for his contributions on research projects and for safety.

6. PROFESSIONAL AND COMMUNITY ACTIVITIES (ACS, AIChE, etc)

- Charles has been a Boy Scout troupe co-leader for the past 10 years for Troop 1002 out of Richmond, Texas.
- He is a certified white water canoeing expert and takes his son, friends and the boy scouts on white water adventures throughout Texas.
- In 2005, after hurricane Rita hit the Texas coastline in Beaumont, Texas; Charles helped in the relief efforts through manual removal of debris and fallen trees in residential divisions.
- In 2008, Charles again volunteered his time in the aftermath of hurricane Ike by helping the impoverished community at Smith Point in Galveston, Texas through tree removal and cleanup efforts over the course of 2 weeks.
- Charles is also interested in geology and geochemistry of Texas rock formations. His amateur passion for this field has led to many insights about minerals that he has shared with Shell Oil Company Upstream scientists and reservoir engineers.

Michael A. Reynolds, Ph.D.

CRI International US LP
Westhollow Technology Center
3333 Highway 6 South
Houston, Texas 77450
Phone: 281-544-7286

Mr. W. Ken Burchett

Eastman Chemical Company
Catalysis Research Laboratory
PO Box 1972
Kingsport, TN 37662
Phone: 423-229-8357

Dear Mr. Burchett,

I am pleased to present this letter on behalf of Mr. Charles Donaho as part of the nomination packet for the ACS National Chemical Technician Award. Charles has worked with me for 5 years now as lead technician in the development of novel catalysts for oil conversion. I have been extremely impressed by his enthusiasm, creativity and prowess in the laboratory at preparing new catalyst formulations.

When I arrived at CRI in late 2003, I was assigned the challenging task of building a new unconventional laboratory for novel catalyst development. After screening several technicians to help lead the effort, only Charles stood out as having the attributes and credentials needed to deliver the project on time. He was influential in guiding me through the steps necessary for building a laboratory safely and efficiently. His contributions included procurement, equipment installation, writing commissioning procedures, and industrial safety for conducting experiments. He also contributed ideas for the design of the catalyst preparation units. Under his supervision the project was completed on time and under budget. Charles now operates the equipment, supervises technicians and even creates his own formulations that are effective for hydrocracking oil. Some of those formulations are currently under review for patenting.

Considering his 30+ years of service to Shell and CRI *and* his help to me personally on projects, it is my pleasure to recommend and nominate Charles for the ACS Technician Award. Thank you for your attention and consideration.

Sincerely,



Michael A. Reynolds, Ph.D.
Senior Research Chemist
CRI International US LP
9/23/2009