Chris Christenson Ph.D.

Chris Christenson graduated from Iowa State University with a Ph.D. in chemistry in 1974 and joined The Dow Chemical Company as a production problem solver based in the analytical laboratories in Freeport, Texas. He spent 38 years working in a variety of roles in Research inventing new products, developing structure property relationships in polymers and solving complex production problems. In 1996 he was promoted to Corporate Fellow (the most senior scientific rank in Dow). During this period he authored over 300 internal reports and 59 external papers including patents. He has a very broad background going from Geothermal Power plants and the corrosion/fouling problems associated with hyper saline brine to reactive chemical challenges in world scale plants. He has also solved trace chemistry problems including odor, color and environmental challenges.

His work has taken him around the world. Working with diverse groups and developing skills in remote leaderships of problem solving teams enabled many challenging problems to be solved effectively.

While leading problem solving teams he has developed an operational problem solving methodology that speeds the problem solving effort. This methodology is based around three key questions:

1. A clear written definition of Success agreed to by all stakeholders.
2. The identification of the things that are Necessary for Success to be true. While this list may be extended, they all must be delivered.
3. Mapping the things that are Necessary on to a timeline and determining the Rate Limiting Step. This is where work must be focused. All else is secondary to the Rate Limiting Step.

The application of this methodology has been taught in Dow extensively and given as a short course at several universities. It was also the focus of a Symposium at an ACS National Meeting.

In addition to his work in chemistry he has worked with the Southwest SIDS Research Institute to develop methodology for studying SIDS in children. He has several publications in this area.

Chris won The Dow Chemical Company Genesis Award in 2008 for his work in mentoring.

Since retiring from Dow, Chris has consulted with a variety of companies solving production challenges and developing new products. He also teaches science enrichment at St. James School and lectures at Texas Lutheran University on methods to succeed in college, particularly in Chemistry.

Chris has a Ph.D in Chemistry from Iowa State University. He has won the ACS Brazosport section award for excellence and the Genesis Award for mentoring from The Dow Chemical Company.