Technology Innovation in the Fuels and Petrochemicals Industry

Dr. Gavin P. Towler
Senior Director of Development
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Des Plaines, Illinois

The hydrocarbon processing industries are currently facing a period of rapid evolution. Changes in product demand and feedstock supply are creating opportunities for new players to enter these markets and overturning many of the assumptions that have driven investment decisions for the last twenty years. These changes in product slate and feed quality have created a need for new processes, catalysts and adsorbents. UOP carries out fundamental research in materials and catalysis and uses this to develop technologies that meet our customers' needs for clean, efficient and economical processing routes. The lecture will survey some of the challenges faced by the refining and petrochemicals industry and discuss technologies that are now being commercialized to meet the future needs of society.

Gavin P. Towler Biography

Gavin Towler is the Senior Director of Development at UOP, a leading supplier of catalysts, process technology, proprietary equipment and services to the oil, gas and petrochemical industries. Gavin is accountable for managing technology development and delivery for all UOP business units. He has 20 years of broad experience of process and product design, including refining, gas and petrochemical processes, separations, heat integration, refinery optimization, fuel cells and process miniaturization and has 57 US patents. He is co-author of "Chemical Engineering Design", a textbook on process design, and is an Adjunct Professor at Northwestern University, where he teaches the senior design classes.

Gavin has a B.A. and M.Eng. in chemical engineering from Cambridge University and a Ph.D. from U.C. Berkeley. He is a Chartered Engineer and Fellow of the Institute of Chemical Engineers, and is a Fellow of the AIChE and Trustee of the CACHE Corporation.

Coffee and refreshments will be served prior to the lecture.

The 2012
Cedomir M. Sliepcevich Memorial Lecture in Chemical Engineering

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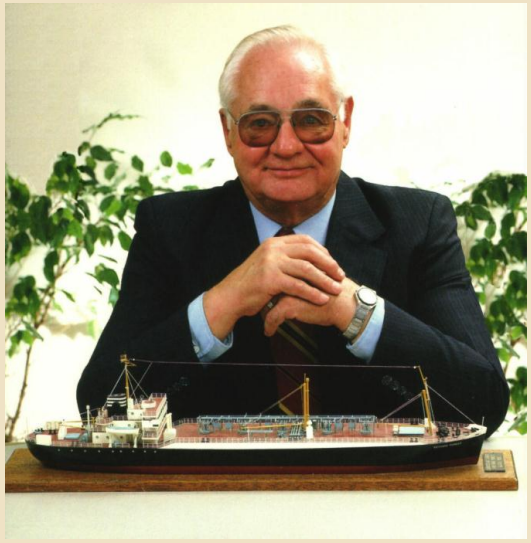
Thursday, January 19, 2012
Seminar – 3:00 P.M.
M-204 Sarkeys Energy Center
100 East Boyd
University of Oklahoma
Norman, Oklahoma

School of Chemical, Biological and Materials Engineering
College of Engineering

The photo shows Dr. Sliepcevich with the MV Methane Pioneer, the world's first Ocean LNG Cargo Carrier. The LNG carrier and plant development, design, conversion from dry cargo, and operations were carried out by Cheddy and staff at OU and the Constock (Continental Oil and Chicago Stockyards) team. The ship operated in 1959, successfully carrying 7 cargoes of LNG from Lake Charles, Louisiana to the Thames River near London, UK.



Cedomir M. Sliepcevich

Dr. C.M. "Cheddy" Sliepcevich devoted his life to teaching engineering and to improving the world through technology. He received his B.S. in 1941, M.S. in 1942 and Ph.D. in 1948, all from the University of Michigan in Chemical Engineering.

Shortly after completing his undergraduate degree, he began a long list of firsts, which include a wide range of important contributions. The magnitude and quality of these contributions led to his selection as the recipient of the renowned American Chemical Society's International Ipatieff Prize in 1959. He was elected to the National Academy of Engineering in 1972 and, in 1974, inducted into the Oklahoma Hall of Fame

He came to OU in 1955 as a Professor and Chair of the School of Chemical Engineering and from 1956 through 1962 he served as Associate Dean of the College. His leadership in research, graduate study, accreditation and faculty recruitment and development revitalized the College. In 1963, he returned to teaching and research full time as a George Lynn Cross Research Professor, the youngest person to receive this distinction. Cheddy pioneered the research, development and implementation of the first commercial process for liquefaction and ocean transport of liquefied natural gas (LNG) for which he received the 1986 Gas Industry Research Award from the American Gas Association Operating Section. His numerous awards also include the William H. Walker Award from AIChE, the Oklahoma Academy of Sciences Award of Merit, the University of Michigan's Sesquicentennial Award for Distinguished Alumni, and, in 1975, he was awarded OU's highest honor, the Distinguished Service Citation.

Although not a graduate of OU, he brought unparalleled honor and distinction to the College and the University during his distinguished 36-year career of teaching, research and administration. To honor his service he was chosen as the first recipient of an Honorary Membership in the College's Distinguished Graduates Society.

Dr. Sliepcevich passed away on October 22, 2009.

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