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SULPHUR

People

Roy Pickren recognised for service to the sulphur industry

As part of its 50th anniversary celebrations, the Sulphur Institute (TSI) has chosen to recognise Roy A. Pickren, Jr., president of New Orleans-based Crescent Technology, Inc. for over 50 years of contribution to the sulphur industry.

In 1959, Pickren joined Freeport Minerals, Inc. (later Freeport McMoRan, Inc.) and was in Joiliet, Illinois, 50 years ago to oversee receipt of the first ever liquid sulphur shipment. And a few years later, he was aboard ship with the first trans-Atlantic liquid sulphur cargo to Europe.

"Needless to say, I have witnessed a lot of changes within the sulphur industry during my career," Pickren remarked upon receipt of his certificate of appreciation from Herman Wittje, TSI chair and director, raw materials for The Mosaic Company. Catherine Randazzo, TSI president and CEO, stated, "Roy's experience within the sulphur industry is impressive and we are thankful for his TSI service." Randazzo noted that Pickren had: served as president of Freeport Sulphur Company; was a part of a successful sulphur exploration program in the Sinai desert; contributed to the engineering and construction of the massive offshore platform and facilities of the Main Pass 299 sulphur mine; worked to construct and install a submerged combustion sulphur purification unit in Iraq; and led a sulphur-driven venture designing and engineering for planned sulphur processing, terminal and export facilities in southern Russia and the Ukraine.

Pickren's recognition was the result of a polling of delegates registered for TSI's recent Sulphur World Symposium. His more than 50 years of service exceeded that of an additional 21 individuals honoured there for their numerous years of contribution to the industry. His resume includes education at Georgia Institute of Technology, Louisiana State University and the University of Virginia. In 1993, Pickren co-founded Crescent Technology, Inc., which provides consulting services in engineering, environmental management, safety and laboratory analyses to an international client base, including the sulphur industry.

Roy Pickren

TKK celebrates 65th anniversary of Dr Tofik K Khanmamedov

Dr. Khanmamedov was born in 1945 in Baku, in the former Soviet Republic of Azerbaijan to Prof. of wood science K. M. Khanmamedov and Maria Shikhgaibovna, a teacher. He graduated from Azerbaijan Institute of Oil and Chemistry in Baku with a technology diploma in 1967, and in 1968 he began work on his Ph.D. thesis at the A. V. Topchiev Institute of Petrochemical Synthesis, Academy of Sciences of the USSR in Moscow. In 1971 he completed research in the field of asymmetric catalysis and his dissertation "Asymmetric migration polymerisation of β-phenyl vinyl ketones by the Michael reaction", under the supervision of Lenin Prize laureate, Prof. B. A. Krentsel.

He spent 12 years of successful and increasingly challenging work in the Academy of Sciences of Azerbaijan, including original research in the fields of special monomers and polymers, chemistry and catalysis of heterocyclic compounds, resulting in his obtaining numerous inventors' certificates. While in the Academy of Sciences of Azerbaijan, Dr. Khanmamedov travelled to England where he was a post-doctorate fellow at Manchester University.

In 1983 he earned the position of Manager of Sulphur Recovery Technology in the All-Union Research and Project Design Institute for Natural Gas Treatment (VNIPIGaz) of Gazprom in Baku, where he was engaged in the development of new technologies and processes for the natural gas industry. In collaboration with Boreskov Institute of Catalysis he developed new catalysts and related technologies for the incineration of sulphur recovery unit (SRU) tail gases and titanium dioxide-based catalysts for Claus units and H_2S oxidation to sulphur. He managed pilot tests for new catalysts and technologies at the Ryzan plant (Russia) and commercialised the catalytic incineration process in two gas plants – Orenburg (Russia) and Mubarek (Uzbekistan). He also successfully tested a new titanium dioxide-based catalyst in the commercial reactor of the Orenburg gas plant's Claus unit. In the sulphur production field he proposed new paths of formation of S6 and S8 on the surface of the catalysts of hydrogen sulphide oxidation to sulphur and developed new kinetic models. He was the first to demonstrate a 3D thermodynamic model of the Claus process. He has also worked in R&D involving the development of promoted and flameless catalytic combustion of acid gas and technologies and environmental emission abatement processes for oil, gas and petrochemical industries, heterogeneous catalysis, new monomers and polymers development, for photoactive applications and CH_4-H_2S-CO_2 gas separation membranes. Dr. Khanmamedov defended his Doctor of Science dissertation at the I. M. Gubkin Institute of Oil and Gas in Moscow and was the first chemical engineer in the former Soviet Union to graduate with the highest D.Sc. degree in the field of sulphur recovery technology. He gained an international reputation in the field of acid gas removal, sulphur recovery and tail gas treatment processes technology, and was a member of the Scientific Council at the State Committee of Science and Technique in Moscow.

Dr Tofik K Khanmamedov

After presenting his paper at Sulphur 1990 in Cancun, Dr. Khanmamedov was invited to work for an engineering Company in the USA that specialised in sulphur-related technologies. As a result, he emigrated from Azerbaijan to settle in the United States with his family in 1991. Since that time he has worked for and consulted with several prominent companies in the USA, and developed and patented several new technologies for acid gas removal, tail gas treatment and sulphur recovery. He founded the TKK Technology Company, incorporated in Houston, Texas, and markets his patented technologies as the family of *Highsulf*™ processes, for desulphurisation of natural gas, acid gas enrichment, tail gas treatment and *Shift-Claus*® and *TC*™ processes for sulphur recovery, for which he holds US and Canadian patents. He has published numerous articles in international journals and has been a frequent presenter at industry events.