Press Release

Solvay's Dr. D.R. Nagaraj inducted into Mining Technology Hall of Fame

Woodland Park, N.J., Feb. 20, 2017 --- Solvay, a leading global supplier of advanced chemical and material technologies, announced that metallurgical pioneer Dr. D.R. Nagaraj was selected as the 2016 inductee for Concentration into the International Mining Technology Hall of Fame. The awards recognize technical innovators within the mining industry. Dr. Nagaraj, a principal research fellow at Solvay's R&I center in Stamford, Connecticut, will receive the award on February 20 at the International Mining Technology's Hall of Fame gala in Denver, Colorado.

Through Dr. Nagaraj's work, Solvay's customers have overcome challenges posed by ore quality decline, improving their productivity and reducing operating costs while meeting economic, environmental and metallurgical challenges. Dr. Nagaraj holds over 30 patents on organic and polymeric chemicals and processes, and has written 95 publications.

Dr. Nagaraj formalized and advanced the donor-acceptor model for mineral systems, setting the stage for rational, targeted reagent design based on his understanding of organic, polymer and coordination chemistry, and specific chemical interactions between reagents and minerals. His use of Secondary Ion Mass Spectrometry, a surface analysis technique for characterizing adsorbed chemical species and inadvertent metal ion activation, shaped the industry's understanding of reagent behavior on mineral surfaces.

Dr. Nagaraj applied donor-acceptor concepts in the development of water-soluble, synthetic polymeric modifiers with targeted molecular architecture and mineral-specific functional groups capable of targeting specific sites on minerals. These polymers offered unique features and advantages as depressants in sulfide flotation operations, enabling mining operations to significantly reduce their cost and use of hazardous reagents such as NaSH and Na_2S.

Elsewhere, Dr. Nagaraj helped customers rethink their lime and pH requirements for flotation, developing chemistries that produced substantial energy savings and reagent footprint reductions. He also developed a holistic approach for reagent selection and optimization, FLOTATION MATRIX 100™, which accounts for complex interactions in ore flotation systems. In addition, his research on salt (saline) water flotation has supported reductions in fresh water demands for mining.

"I am honored that my 35-plus-year contributions have been recognized by my peers and International Mining magazine," Dr. Nagaraj commented. *"I am fortunate to have had a fulfilling career, working in metallurgy and chemistry, and for a company dedicated to the mining industry for more than 100 years."*

Dr. Nagaraj started his career at American Cyanamid Company in 1979, after receiving his doctorate from Columbia University, and holds degrees in chemistry and metallurgy. He received awards in the mineral industry and within Solvay, and was inducted into the National Academy of Engineering in 2006. He is also a distinguished member of SME – the professional society for mining, metallurgy and exploration.

"Much of the best-in-class applications expertise Solvay provides to the mining industry stems from Dr. Nagaraj's contributions," said Technology Manager Violina Griffin. *"The Solvay R&I community is truly inspired by Dr. Nagaraj and his commitment to the mining industry."*

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About Solvay Technology Solutions

A global business unit of Solvay, Technology Solutions incorporates the Mining Solutions, Phosphorus Specialties, and Additive Technologies business lines. The combination of these businesses affords an opportunity for each business to maintain its unique leadership role while creating a strong, synergistic organization built with a team of experienced professionals focused on customer collaboration and intelligent innovation.

About Solvay

An international chemical and advanced materials company, Solvay assists its customers in innovating, developing and delivering high-value, sustainable products and solutions which consume less energy and reduce CO_2 emissions, optimize the use of resources and improve the quality of life. Solvay serves diversified global end markets, including automotive and aerospace, consumer goods and healthcare, energy and environment, electricity and electronics, building and construction as well as industrial applications. Solvay is headquartered in Brussels with about 30,900 employees spread across 53 countries. It generated pro forma net sales of € 12.4 bn in 2015, with 90% made from activities where it ranks among the world's top 3 players. Solvay SA (**SOLB.BE**) is listed on Euronext in Brussels and Paris (Bloomberg: **SOLB.BB** - Reuters: **SOLB.BR**).

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