

## 2017 Korean American Day Honorees



### Dr. Kook-Wha Koh

Founder of Chrysan Industries, Inc.

Dr. Kook-Wha Koh and her husband Dr. Kwang Koh immigrated to the United States from South Korea in 1965. After both earned their BS degrees in chemical engineering from the Seoul National University, they decided to continue their engineering studies in the United States and pursue their doctorate in chemical engineering at the University of Iowa. They became the first husband-wife inductees to the University of Iowa Distinguished Engineering Alumni Academy.

After earning their PhD degrees, the Kohs moved to Baytown, TX, where Kwang joined Esso (the international affiliate of ExxonMobil), where he worked in the synthetic fuel program for coal gasification. Kook-Wha held a postdoctoral fellowship at Rice University where she joined the renowned artificial heart program led by Michael DeBakey, MD. In 1976, the Kohs moved to Detroit where Kwang began working for American Natural Resources (now Coastal Corp in Houston, TX) as an administrator in coal technology. The couple moved to Detroit in 1976 when Kwang Koh took a job with Michcon. Dr. Kook-Wha Koh began working as a chemical engineer for a local firm, but she soon got the urge to open her own business.

In 1977, Dr. Kook-wha Koh founded the Chrysan Industries, Inc. headquartered in Plymouth, Michigan. Since then the company has become a leading global supplier of automotive lubricants and specialty chemicals. Chrysan (the name means “chrysanthemum” in Korean) owns several patents in metalworking fluid technology, formulated cutting oils, and synthetic coolants, and has repeatedly been recognized for product and supplier excellence by major manufacturers such as General Motors and Ford. The company now has facilities and partners globally including locations in the U.S., China, and Mexico.

The Michigan Minority Business Development Council named Chrysan the Minority Supplier of the Year in 2001, and a group of several Michigan small-business organizations named the company Family-Owned Small Business of the Year in 2005. In 2006, the company also received Asia Pacific American Chamber of Commerce Salute to Excellence Award. Two years ago, the company established a manufacturing facility in South Korea to supply the Asia Pacific region.

While Dr. Kook-Wha officially retired in 2006, she continues to work as a consultant when she is not traveling.



## Dr. David Oh

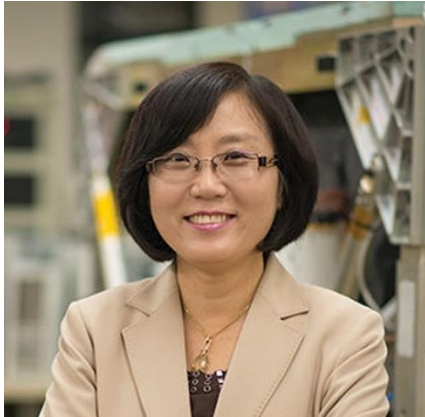
**NASA Project Systems Engineer and System Architect for Psyche;  
Former Lead Flight Director for Mars Science Laboratory (MSL)**

Dr. David Oh was born in Nashville, Tennessee, grew up in Alabama, and attended the Massachusetts Institute of Technology (MIT) for college, where he received bachelor's degrees in both Aerospace engineering and Music in 1991. Dr. Oh also earned his Master's degree in Aerospace engineering from MIT in 1993 and his Sc.D. in Aerospace engineering from MIT in 1997. After graduating from MIT, Dr. Oh joined spacecraft manufacturer Space Systems/Loral, where he worked on multiple communications satellites, initially as an electrical systems engineer and finally as principle systems engineer for electric propulsion systems.

In 2003, Dr. Oh joined NASA's Jet Propulsion Laboratory (JPL), where he has worked on missions to explore the Moon, Mars, and Asteroid Belt. In 2006, Dr. Oh joined the engineering team for NASA's Curiosity Mars rover. As Cross-Cutting Domain lead, he led the multidisciplinary team of systems engineers and analysts that designed, tested, and delivered the core avionics, thermal, power, and communications systems for the rover. As Lead Flight Director, Dr. Oh supervised the rover's cruise and surface operations teams through all stages of operations including launch operations, in-flight maneuvers, approach to Mars, and surface operations. After the rover successfully landed on Mars in 2012, Dr. Oh and his family had the unique experience of living together in Mars time for a month which was featured in news outlets worldwide including NPR and CNN. From 2013 to 2015, Dr. Oh managed the study and development of new deep space science mission proposals for JPL's Discovery and New Frontiers mission portfolios. Dr. Oh was the "capture lead" for two successful proposals, and is now the Project Systems Engineer for NASA's newest Discovery mission: "Psyche: Journey to a Metal World."

Dr. Oh has experience in all phases of spacecraft development from conceptual design to deep space operations. He has worked on both Earth Orbiting and Interplanetary missions and has led teams of over 20 engineers in spacecraft design, testing, and operations. Dr. Oh's expertise includes avionics, electric propulsion, low thrust trajectories, power systems, and spacecraft environmental interactions.

When not at work, Dr. Oh enjoys spending time with his family, including his three kids, who think he has the coolest job in the world.



## Dr. Eun-Suk Seo

**Professor, University of Maryland, College Park  
Principal Investigator for ISS-CREAM**

Dr. Eun-Suk Seo is Professor of Physics in the University of Maryland's Department of Physics and Institute for Physical Science and Technology. She is an elected Fellow of the American Physical Society. She received her Ph.D. in 1991 from Louisiana State University, including two years as a visiting graduate student at NASA's Goddard Space Flight Center. She has been leading cosmic ray investigations, especially as Principal Investigator of the Cosmic Ray Energetics And Mass (CREAM) balloon-borne experiment, and CREAM for the International Space Station (ISS-CREAM), the highest energy frontier of cosmic ray direct measurements. Her research includes searches for exotic matter, such as antimatter and dark matter, and direct measurements of galactic cosmic rays to investigate their origin, acceleration, and propagation. Her publications include more than 140 refereed journal papers and 230 proceedings publications (with more than 10,000 citations). She has given more than 120 invited talks. She received numerous awards, including the 1997 Presidential Early Career Award for Scientists and Engineers, 2006 and 2011 NASA Group Achievement Awards, 2008 Antarctica Service Medal, and the 2015 Scientist of the Year Award. In recognition of her accomplishments, she has been featured in mass media, notably on the cover of the *Washington Post* magazine in 2014.

She has served on numerous committees at national and international levels including the Astro2010 Science Frontier Panel on Cosmology and Fundamental Physics for the Astronomy and Astrophysics Decadal survey conducted by the National Research Council of the National Academy of Sciences. She currently serves on the Physics of the Cosmos Program Analysis Group Executive Committee for NASA and as the U.S. representative on the International Union of Pure and Applied Physics (IUPAP) Commission C4, Astroparticle Physics. She is very active in serving the Korean-American community. She is the President-elect of the Korean-American Scientists and Engineers Association (KSEA) and will be the first female to serve in this capacity. She served as 29th President of the Association of Korean Physicists in America (AKPA), and 4th President of the Korean-American Women in Science and Engineering (KWise).