October 16, 2013

Los Angeles Times

Israel awards USC professors $1-million prize for energy research

George A. Olah speaks to students during a luncheon at UC Irvine. (*Los Angeles Times* / October 5, 1996)

By Batsheva Sobelman

JERUSALEM -- Two Southern California scientists have won a $1-million prize for their work in the field of alternative fuels, Israeli Prime Minister Benjamin Netanyahu's office has announced.

The 2013 Eric and Sheila Samson Prime Minister's Prize for Innovation in Alternative Fuels for Transportation will be awarded to USC professors George A. Olah, a 1994 winner of the Nobel Prize in chemistry, and G.K. Surya Prakash for their work on methanol markets, an envisioned future economy in which methanol could replace fossil fuels for various purposes, including ground transportation.

The prize is to handed out next month at the Bloomberg Fuel Choices Summit in Israel, Netanyahu's office said Tuesday.

The Israeli government two years ago launched a national program to encourage scientific innovation in the field of alternative fuels for transportation, aimed at reducing global oil dependence.

Israel has a goal of reducing the use of fossil fuels in transportation by 60% by the year 2025, according to Eyal Rosner, who directs the country's alternative fuels program.

It also aims to reduce greenhouse gas emissions by 20% and produce 10% of its energy from renewable, clean sources.

USC's Olah and Prakash Receive $1 Million Award for Innovative Research

State of Israel recognizes chemistry professors' alternative fuel research as part of initiative to reduce dependence on foreign oil

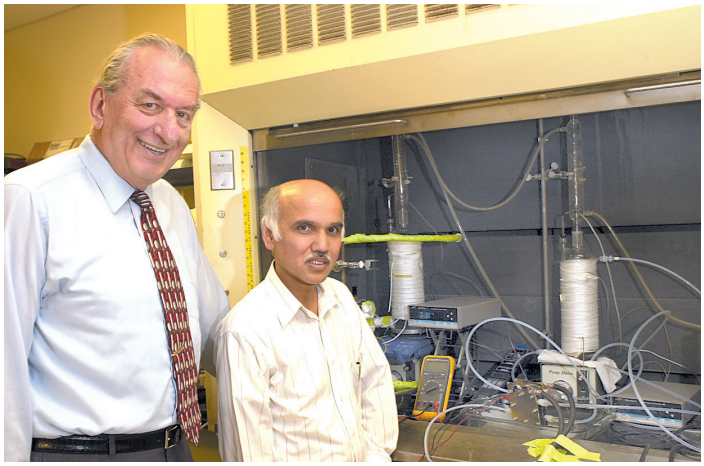

PHOTO COURTESY USC

By Robert Perkins

George Olah and G. K. Surya Prakash, pillars of USC's chemistry department, have received a first-ever $1 million prize from the State of Israel for their innovative research on alternative fuels.

Olah, distinguished professor of chemistry at the USC Dornsife College of Letters, Arts and Sciences, and Nobel laureate; and Prakash, professor of chemistry at USC Dornsife and director of the USC Loker Hydrocarbon Research Institute, will receive the Eric and Sheila Samson Prime Minister's Prize for Innovation in Alternative Fuels for Transportation, it was announced today.

"The pioneering and exceptional work of Distinguished Professor Olah and Professor Prakash has brought tremendous honor to USC," said USC President C. L. Max Nikias. "Their longstanding research has significantly advanced methanol markets, and has helped the world develop viable alternatives to fossil fuels, which has important applications for transportation and other areas. This prestigious award also speaks to USC's longstanding commitment to supporting consequential research, particularly in the areas of science and technology."

The award is given in recognition of their work on the methanol economy, a proposal to use methanol to replace fossil fuels and petroleum based feed-stocks. Though methanol can be produced from fossil fuels, it can also be produced from renewable resources, such as agricultural waste products. It also has the potential to be generated by recycling atmospheric carbon dioxide – setting up the possibility of a carbon-neutral fuel source.

"Basically, it should be able to replace oil," Olah said. "With my friend and colleague, Dr. Prakash, we've worked very hard on this research … I never thought to live long enough to see it gaining practical acceptance."

Olah has described his work on developing an anthropogenic carbon cycle – that is a way to recycle carbon dioxide into fuel – as the most important work of his career, eclipsing even his work on superacids and his observations of carbocations that earned him a Nobel Prize in Chemistry in 1994.

"Methanol is the fuel of the future," Prakash said. "Dr. Olah and I are honored and humbled by this award. We have been working on this for 30 years – and for a scientist, it's always 'we,' never 'I.' There have been countless grad students and postdocs who have contributed to this work along the way."

Olah became the founding director of the USC Loker Hydrocarbon Research Institute in 1977, and guided the facility as it became a powerhouse of technological advancements. The institute has trained more than 600 doctoral and postdoctoral fellows and has produced more than 1,600 citations in technical journals, monographs and books. More than 100 patents have been issued based on discoveries from the institute, many of which have been licensed and commercialized, particularly in the areas of fuel cells, gas production and the methanol economy.

Prakash, who arrived at USC in 1977 as one of Olah's graduate students, now runs the Loker Institute and is an award-winning pioneer in the fields of hydrocarbon, mechanistic, and synthetic organic chemistry.

Olah and Prakash are the first ever to receive the award, which was created by the Israeli Prime Minister's Office, together with the Israeli Ministry of Science and Technology and Keren Hayesod-UIA (United Israel Appeal).

The award is intended to support an initiative launched by Prime Minister Benjamin Netanyahu in 2011 to reduce Israel's dependence on foreign oil.

Olah and Prakash will be presented by the prime minister during the Bloomberg Fuel Choices Summit in Tel Aviv in November.

Eric and Sheila Samson, the namesake of the award, are philanthropists and permanent residents of Israel.