



## Information and Announcements

---

### Prize for Innovation in Alternative Fuels for Transportation, 2013

George A Olah and G K Surya Prakash of the University of Southern California for their work on the methanol economy have been awarded the 2013 Eric and Sheila Samson Prime Minister's Prize for Innovation in Alternative Fuels for Transportation by the State of Israel. This is the first ever and the largest (US \$1 million) prize in the world in the field of alternative fuels.

In the present world scenario where energy is a critical component of our lifestyle and existence, any viable alternative source for the depleting oil reserves is a great idea and a practical need. G A Olah and his long-term (over 35 years) associate G K Surya Prakash have been tirelessly working for the last 30 years on the idea of using methanol in place of gasoline. On the basis of their research they have come up with a strong recommendation in its favour. Their work involves various aspects of 'methanol fuel economy' (G A Olah, *Angew. Chem. Int. Ed.*, Vol.44, pp.2636–2639, 2005; G A Olah, A Goeppert, G K Surya Prakash, *Beyond Oil and Gas: The Methanol Economy*, Wiley-VCH, 2009). Their most significant contribution has been the invention and development of direct methanol fuel cell (DMFC). DMFCs are being tested for use in transport vehicles. Their use in a big way as micro-DMFCs is envisaged in portable devices such as cellular phones, laptops, etc. Olah and Surya Prakash are quite aggressively advocating the use of methanol in internal combustion engines. They have shown that methanol burns more efficiently than gasoline in ICEs, though its heat output is less. Methanol has many advantages over hydrogen as fuel. Being a liquid, it is easier to store and transport at normal surrounding conditions and is convenient to handle while using. It can be used as a source of hydrogen and to manufacture hydrocarbons and related products. Methanol can be manufactured both from conventional fossil carbon sources (coal, natural gas, etc.) and renewable ones (biomass such as agricultural waste and wood; methanol is called wood alcohol).

*G Nagendrappa*

