**A 200 Amp Current Source with 12 V Input for Automotive Applications**

The Lehigh Valley IEEE Chapter

**Solid State Circuits Society**

is proud to present

**Dr. Luke Turgeon, President, Turgeon Engineering, Inc.**

on **Tuesday April 22, 2014**

**Lehigh University, Packard Lab room 416**

**6:00 pm: Packard Lab room 324. Social interaction with refreshments**

**7:00 pm: PL room 416. Short Business Meeting and Introduction**

**7:15 pm: Lecture: 200 Amp Current Source with 12 V Input for Automotive Applications**

**Abstract: I designed a high amperage current source to power a hydrogen gas generator (HHO generator). The HHO generator electrically behaves a lot like an LED but requires a lot of amps for production. The high amperage current source will be presented first and then its implementation in the HHO generator. The key concerns of the design are size and weight. The final converter uses two 150 amp coils (for up to 300 amps peak) and weighs less than 1 lb. Efficiency under 100 amps is over 90%.**

**Bio: Luke Turgeon founded “Scientific and Engineering Tools Inc.” in 1988. Its UNIX-based software product “Engineering and Scientific Processor” (ESPro) works well and is still in use. He founded a service company “Turgeon Engineering, Inc.” around 1991, which is primarily involved in the design and testing of integrated circuits. Since 2007 he has been working on a product for improvement of automobile fuel efficiency and emission reduction.**

Lecture and refreshments are free and open to the public.

Reservations are strictly required to take part in the free refreshments, including pizza, cookies, soft drinks and coffee. For reservations, send an email to

Robert Peruzzi: Peruzzi@RPeruzzi.com f