

# Energy and Power Group

## Weekly Seminar Series

Friday, November 1<sup>th</sup>, 2019, 9:10 a.m. – 10:10 a.m., ETB 1020

### **Motor Protection in the Petroleum and Chemical Industry**



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#### **Abstract**

In the petroleum and chemical industry, most loads consist of motors to operate pumps and compressors. All motors are a key element to make process operation stable, although the impact of an accident is different depending on capacity.

Preventing all motor related accidents is nearly impossible, despite excellent maintenance. Therefore, the motors should be tripped as soon as possible with appropriate protection functions when they are under abnormal conditions. If not, the extremely high temperature caused by high current leads to catastrophic incidents such as explosions, chemical leaks, and severe damage to facilities.

As a result, well-prepared motor protection is necessary to maintain high productivity, as well as prevent additional accidents. This seminar will not only cover the motor protection principle, but also real experience based on the petroleum and chemical industry.

#### **Biography**

Youngsu Kim has worked as an electrical engineer for SK energy, the largest refining and petrochemical company in South Korea, since 2005. Presently he is a senior electrical engineer and a MS student at Texas A&M Department of Electrical and Computer Engineering under the supervision of Prof. Mladen Kezunovic. Youngsu has been in charge of numerous projects including maintenance, troubleshooting, power system analysis, protection relays, and technical support for international subsidiary factories. Currently Youngsu is an APFM (American Fuel & Petrochemical Manufacturers) international member