



Pozývame Vás na

SEMINÁR ÚI SAV,

**ktorý sa bude konať v piatok 22.6.2018 o 14:00 hod
v zasadačke ÚI SAV**

Program:

Prof. Hung-Yin Tsai

Distinguished Professor and Chairman

Department of Power Mechanical Engineering, National Tsing Hua University, Taiwan

v spolupráci s Oddelením elektrónovej litografie ÚI SAV

Study on field emission characteristics of carbon based structures fabricated by CVD method

Abstrakt:

The field emission theory was proposed by Fowler and Nordheim. It states that when the material is applied an electric field, the barrier at the surface of an electron conductor becomes rounded triangular, and individual electrons can escape from the material in various circumstances. In recent years, a lot of field emission studies used carbon nanotubes (CNTs), graphene, diamond and other carbon materials as cathodes. Although CNTs have good field emission effect, the lifespan of the CNTs and the screening effect limits its applications.

In this talk, the screening effects by different patterned carbon based structures are introduced. A special diamond structure can slightly lower the screening effect. In addition, different kinds of carbon based structures developed in Prof. Tsai's lab, such as micro-crystal diamond/CNTs double-layered pyramid arrays, bristling few-layer graphite/diamond, and carbon nano-flake ball/CNT hybrid material, will be discussed.

Tešíme sa na stretnutie s Vami pri šálke kávy alebo čaju.

Ing. Ivana Budinská, PhD.
riaditeľka ÚI SAV