# 平成29年度
# 公益社団法人 応用物理学会
# 北陸・信越支部 講演会

**入場無料**

日時　平成29年7月10日（月）16：25～17：55

場所　新潟大学 総合研究棟（物質・生産系）

　　　161演習室　（新潟市西区五十嵐2の町8050）

演題　Electropolymerized-Molecularly Imprinted Polymer Sensors

講師　Prof. Rigoberto C. Advincula
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講演内容：

　The detection of analytes, nerve agents, pollutants is a challenge especially when present in very low quantities. There are a number of methods to improve sensitivity and selectivity but usually this requires more elaborate instrumentation methods The key is the use of high performance sensor elements and a highly efficient transducer element that can be put in a portable device to enable on-site usability. In this talk, we will focus on the development of electropolymerized molecularly imprinted polymer (E-MIP) sensor elements and its ability to utilized transduction methods such as surface plasmon resonance (SPR) spectroscopy or quartz crystal microbalance (QCM) to enable high sensitivity and selectivity. The monomer and molecular design for optimized analyte interaction enable effective templating protocols in a conducting polymer matrix with tunable oxidative states to enable high volume of analyte-cavity sites. Optimized electropolymerization methods is important for film deposition and surface characterization.

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