～講演会のご案内～

演 題: **Mobile Electronics as Quantitative Point-of-care Diagnostic Tools: from Disc Player to Smartphone**

講 師: **Professor Hua-Zhong Yu**

Department of Chemistry,
Simon Fraser University,Canada

日 時: **2019 年 7 月 31 日（水）16:30～18:00**

場 所: **北海道大学 理学部本館 N-308 室**

共 催: 北海道大学大学院総合化学院，フロンティア化学教育研究センター，
北海道大学物質科学フロンティアを開拓する Ambitious リーダープログラム

要 旨: Current guidelines for healthcare emphasize rapid testing and reporting, which can be better satisfied by point-of-care (POC) diagnostic tools rather than centralized medical laboratories using automated multi-analyte analyzers by trained professionals. With POC testing, the turn-around time is significantly reduced, leading to earlier decision making and more efficient medical treatment. At present, POC protocols are predominantly based on rapid-test immunoassay strips/cassettes that combine gold nanoparticles for colorimetric (mostly qualitative) detection and flow-through systems for sample delivery. Mobile electronics provides a promising alternative to today's POC testing protocol; we have established both the chemistry and signal readout methodology for running assays with disc players, and recently explored the feasibility of using smartphones as the detection platform for quantitative colorimetric analysis.

本講演は、大学院総合化学院『化学研究先端講義（修士課程選択科目）／
総合化学特別研究第二（博士後期課程選択科目）』の一部として認定されています。

連絡先：北海道大学大学院理学研究院化学部門　村越　敬
（Tel: 011-706-2704, Mail: kei@sci.hokudai.ac.jp）