



SESSION CLPL 4

TITLE	Photoluminescence detection with nanosensing systems		
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ABSTRACT	<p>Nanomaterials (NMs) based sensing systems have become popular for the analysis of biological and environmental samples. Various NMs conjugated with DNA, proteins, peptides, and antibodies have been popular for quantitation of analytes of interest. For example, DNA functionalized gold NMs have shown sensitive and selective for quantitation of analytes, including small ions, small molecules, and biopolymers. Having high stability against salt and photo-irradiation, many functional NMs such as protein-templated gold nanoclusters and carbon dots have been used in cell imaging. Many NMs have been further functionalized to possess multiple functions such as photoluminescence, drug delivery, and activity of anti-cancer cells. This session covers strategies for preparation of functional NMs, advanced sensing systems, photoluminescent and scattering cell imaging, and theranostic NMs. In addition, self-powered sensing systems and paper based point-of-care (POC) sensing systems are also focus in this session.</p>		
KEYWORDS	Photoluminescence, nanomaterials, sensing systems, cell imaging		