

SESSION CLPL3

TITLE	Nanochemiluminescence:nanoluminophores,nanocatalysts,nanoquenchers, and their applications in bioassays		
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ABSTRACT	Chemiluminescence (CL) is a simple but powerful detection technique. Nanomaterials exhibit favourable CL features. Nanoluminophores with high CL efficiency have attracted much attention. And the emission wavelengths of nanoluminophores (e.g. quantum dots) are readily tunable by changing their sizes and compositions. Nanocatalysts have been used in CL reactions and enable intense CL. Some nanomaterials can effectively quench CL independent on the emission wavelength. Nanomaterials are easy to assemble with ions, molecules, and nanomaterials, such as CL reagents, catalysts and biological recognition elements. For example, CL reagent/catalyst bifuntionalized nanomaterials exhibited unique CL features. Such nanoluminophores, nanocatalysts and nanoquenchers have been widely used for bioassays with high sensitivity. To date, nanochemiluminescence has been extensively studied and received increasing interests in bioassays. Thus, a session of nanochemiluminescence will be very attractive to attendees.		
KEYWORDS	Nanochemiluminescence, Nanoluminophores, Nanocatalysts, Nanoquenchers, Bioassays		