



## SESSION BIOS 5

<b>TITLE</b>	Luminescence-based miniaturized devices for point-of-care applications		
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<b>ABSTRACT</b>	<p>The session will deal with the development of miniaturized analytical systems and devices exploiting luminescence-based detection for point-of-care testing, or more in general point-of-use testing. Lab-on-chip, paper-based analytical devices (<math>\mu</math>PAD), lateral-flow assays, microfluidics devices, micro flow injection and microchip capillary electrophoresis systems integrating different luminescence detection principles (i.e., fluorescence, chemiluminescence, electrogenerated chemiluminescence, bioluminescence and thermochemiluminescence) will be considered.</p> <p>Contributions dealing with recent advancements concerning technological challenges, (e.g., new devices, on-chip integration of all the analytical steps and device components, high throughput analysis devices, smartphone-based devices, bipolar electrochemiluminescent devices, 3D printing devices, optical fiber sensors) and analytical approaches for improving assay performance (e.g., luminescence resonance energy transfer-based detection, assays exploiting multifunctional (nano)materials, innovative labelling strategies and biospecific recognition elements) will be particularly encouraged.</p>		
<b>KEYWORDS</b>	Biosensor, Point-of-care, Microfluidics, Lab-on-chip, Luminescence		