## Author's Accepted Manuscript

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www.elsevier.com/locate/talanta

PII: S0039-9140(18)30549-6

DOI: https://doi.org/10.1016/j.talanta.2018.05.055

Reference: TAL18696

To appear in: *Talanta* 

Received date: 28 December 2017 Revised date: 10 May 2018 Accepted date: 16 May 2018

Cite this article as: Jintana Suwanrut, Nattapong Chantipmanee, Wichayaporn Kamsong, Supatana Buking, Thitirat Mantim, Phoonthawee Saetear and Duangjai Nacapricha, Temperature-dependent schlieren effect in liquid flow for chemical analysis, *Talanta*, https://doi.org/10.1016/j.talanta.2018.05.055

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#### **ACCEPTED MANUSCRIPT**

### Temperature-dependent schlieren effect in liquid flow for chemical analysis

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#### **Abstract**

In flow analysis, such as flow injection analysis, liquid lens is formed at the boundary between two adjacent liquid media which have different refractive indices. Light refraction at the liquid interface gives the so-called 'schlieren signal'. Schlieren effect is both concentration-dependent and temperature-dependent. In this work, the schlieren signal from

1

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