Mahado Ismail is a PhD researcher in Chemistry at the University of Surrey. She obtained her BSc in Chemistry from the Rotterdam University of Applied Sciences (Netherlands) in 2013. Mahado has previously worked with the Netherlands Forensic Institute on the chemical analysis of fingerprints using liquid chromatography – mass spectrometry for amino acid profiling of individuals [1].

Mahado has also been involved in the use of surface mass spectrometry techniques for forensic document examination to determine the deposition order of overlapping fingerprints and inks using secondary ion mass spectrometry (SIMS) [2]. This work also included the use of SIMS for enhanced imaging of weak fingerprints in collaboration with the Home Office Centre for Applied Science and Technology [3]. This resulted in the addition of SIMS to the Home Office Fingerprint Development Handbook.

Her current work involves the analysis of fingerprints for drugs of abuse in collaboration with Surrey and Borders NHS Foundation Trust [4]. Most recent work published in Analytical Methods (2016) involves the use of a new portable system based on mass spectrometry for the analysis of cocaine in oral fluid and urine [5]. This method offers a portable and low cost system to test of cocaine in saliva.

[1] De Puit *et al*., LCMS analysis of fingerprints, the amino acid profile of twenty donors.Journal of Forensic Sciences, 2013. 364-70.

[2] Bailey *et al.*, Enhanced imaging of developed fingerprints using mass spectrometry imaging. Analyst, 2013. 6246-50.

[3] Attard-Montalto *et al*., Determining the chronology of deposition of natural fingermarks and inks on paper using secondary ion mass spectrometry. Analyst, 2014. 4641-53.

[4] Bailey et al, Rapid detection of cocaine, benzoylecgonine and methylecgonine in fingerprints using surface mass spectrometry. Analyst, 2016. 6254-59.

[5] Ismail *et al*., A diagnostic test for cocaine and benzoylecgonine in urine and oral fluid using portable mass spectrometry. Analytical Methods, 2016. DIO: 10.1039/c6ay02006b