



**KONFERENZ ZUR NACHT
9.-11. NOV 2017, BERLIN**

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Drug Checking 3.0

DONNERSTAG 09.11.2017 14:00-15:30

Abstract Ruben Vrolijk

Since 2015, DIMS has been developing and validating FT-IR methods for drug sample analysis. DIMS is a national drug monitor, financed by the government to monitor and report street drug content. The samples are gained through test-centers where users hand in their drugs, and later get the results of the laboratory tests in return. While the system works perfectly as a monitor, much more samples are handed in at the testing facilities than DIMS has the finances to test via standard laboratory methods. To prevent user from not getting any information in return for their sample, DIMS is looking towards other, less expensive, methods for sample analysis to deal with the surplus of samples. The FT-IR method is currently used to give qualitative and semi-quantitative results for Speed (amphetamine), MDMA, Ketamine, and GHB samples. While cost efficient and user friendly, FT-IR analysis has several drawbacks and limitations compared to standard laboratory techniques, and should always be used with great care. The Limit of detection (LOD) of most substances will be around 10%, and the accuracy of PLS based quantification methods ranges from 5-15% max deviation from actual concentration. Despite its limitations, FT-IR is a valuable asset for low-cost drug checking.