

## **Efficient and sensitive profiling of nucleotides in low numbers of mammalian cells**

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More and more biomedical and clinical questions are dealing with minute sample amounts. In this lecture, the utility of CESI-MS, a microscale electro driven-based separation technique, will be shown for the highly efficient and sensitive profiling of nucleotides in low numbers of mammalian cells. An injection volume of about 6.5 nL resulted in sub-nanomolar detection limits for nucleotides, corresponding to 0.4 to 8.6 attomoles. Endogenous nucleotides could be efficiently analysed in extracts from 50 000 down to 500 HepG2 cells only, thereby clearly illustrating the utility of this approach for metabolic profiling of low amounts of biological material.