A compatible system for microscale HTS RAMAN and XRPD

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The need of quick methods for polymorphism and salt programs in pharmaceutical development conduct to develop HTS systems. For a proper solid state characterization one analytical technique is not sufficient and combinations of different detection techniques such as X-ray powder diffraction (information on the crystalline form) and RAMAN spectroscopy (information on the chemical structure) increase the amount of information. The solid samples dispensed in 96 wells can be detected automatically by XRPD in reflection mode (BRUKER) or in transmission mode (STOE)

The objective of our laboratory was to adapt the RAMAN microscope system of BRUKER in order to have a compatible HTS which can be used for the both XRPD HTS plates of BRUKER and STOE. Adaptation of the position of the microscope to the 2 different well plates was done. An example of salt screening is given.