

Currenta as a reliable partner for your analytics.

CURRENTA Analytics

In order to provide you the full-service package, we are happy to support you with accompanying analytics during development and production of your new pharmaceutical product and of course the performance of stability studies or stress testing. Please find below a list of selected analytics which might be required for your project. In case you cannot find the requested analytics, do not hesitate to contact us! The list below should only give you a glimpse of our know-how and expertise as the analytic portfolio of the CURRENTA laboratories comprises far more procedures and techniques.

For further information please contact

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Chromatography:

(U)PLC analytics with various detectors such as

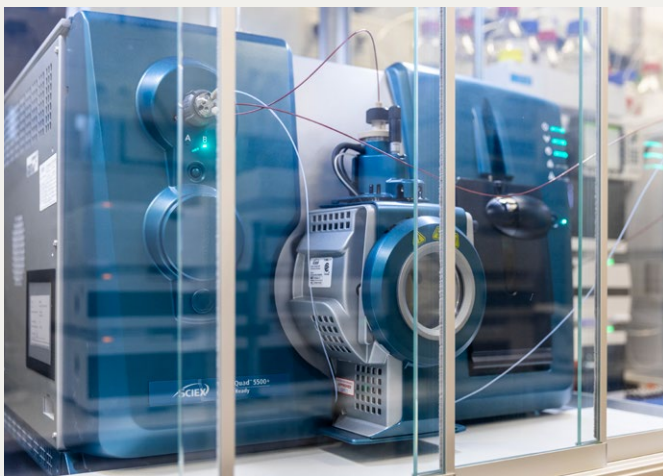
- UV-VIS, DAD, RID, CAD & FLD

GC (Headspace) analytics with various detectors such as

- FID, ECD & WLD

Key skills:

- Method development
- (Product specific) validation/verification
- Analytics according to **EP, USP & JP guidelines**
- Determination of residual solvents e.g. according to **ICH Q3C**



Mass spectrometry:

UPLC and GC **coupled MS(-MS)**

- Single Quad & Triple Quad
- Q-TOF
- HRMS

Key skills:

- Method development and validation/verifications in ultra-trace range
- **Nitrosamines** analytics
- Quantification of **critical secondary components** e.g. melamine, cyanuric acid, ammeline, ammelide and hydrazine
- **Structure determination**

Drug Product Experts:

Dissolution testing of various pharmaceutical forms e.g. tablets, capsules or granules via

- Paddle or rotating basket method

Determination of **specific drug product parameters** such as

- breaking strength, disintegration & friability

Key skills:

- Testing according to **EP and USP guidelines**
- **Subsequent quantification** with various techniques e.g. chromatographic techniques
- Product specific validations & verifications



Chemical Indicators:

Determination of anions, cations, organic carbon acids and halides via

- **IC, C-IC & ISE**

Determination of **coulometric** and **volumetric indicators** such as

- Water according to Karl-Fischer, fat parameters & oxidation stability

Determination of physical indicators such as

- Density, color index & appearance

Key skills:

- Analytics according to **EP, USP & JP guidelines**
- Experience in multiple wet chemical methods such as **Schöniger digestion** or **Kjeldahl method**



Element analysis:

Determination of elements via

- **ICP-MS & ICP-OES**
- **XRF**
- **AAS** (incl. sub-techniques)

Key skills:

- Determination of elements e.g. according to **ICH Q3D**
- Product specific method development, validation/verification
- Analytics according to **EP, USP & JP guidelines**

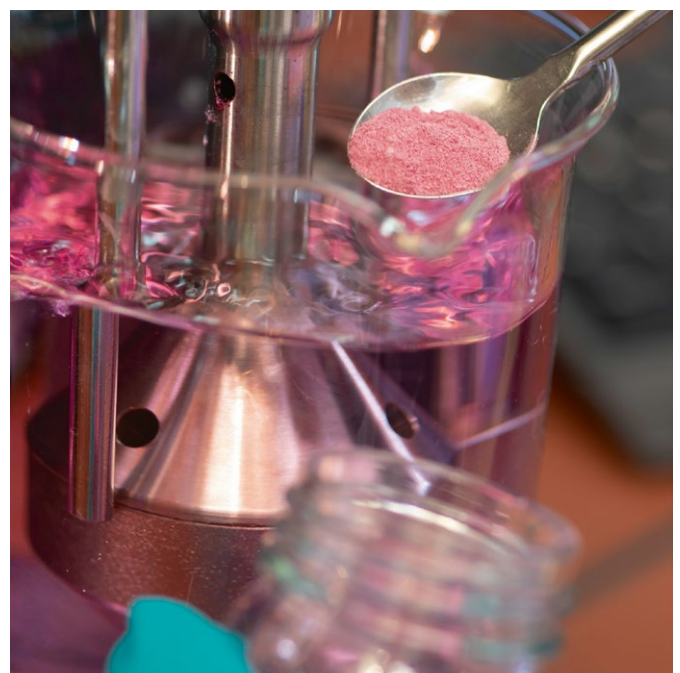
Particle Size Distribution:

Determination of the particle size distribution via laser diffraction

- Wide **dynamic measuring range** from 0.01–3500 μm
- Dispersion possible in water, organic solvents and air (dry Powder dispersion)

Key skills:

- **Method developments** and validations/verifications for a **wide range of matrices** such as dry samples, dispersions or suspensions
- Analytics according to **EP and USP guidelines**



X-ray analysis:

- X-ray powder diffraction

Key skills:

- Identification of **polymorphic forms** of a drug substance or drug product
- **Stability control** of polymorphic forms
- Analytics according to **EP & USP guidelines**



NMR spectroscopy:

Identification and structure elucidation via

- 400, 600 & 700 MHz magnetic field
- Based on given structures & comparison with reference spectra

(Semi-)quantitative determination of composite of multiple components

Key skills:

- **Absolute and relative quantification** of ^1H -, ^{31}P - and ^{19}F -NMR measurements (qNMR)
- Product specific method development, validation/verification
- Determination of reaction kinetics via **in-situ NMR**

Ecotoxicology and Microbiology:

Determination of **acute and chronic toxicity** via

- Freshwater alga, cyanobacteria, daphnia, and fish testing

Bio degradation testing

Bioburden testing

- e.g. nitrification and umu testing

Determination of **physicochemical parameters** such as

- water solubility, Log Know, Log Koc & hydrolysis

Key skills:

- Analytics according to **EP, DIN and OECD guidelines**



Feel free to contact us!

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