

## Details

### Center for Molecular and Structural Analytics at the Heinrich Heine University Düsseldorf (CeMSA@HHU)

CeMSA@HHU (Center for Molecular and Structural Analytics at Heinrich Heine University Düsseldorf) is a service center at the faculty for mathematics and natural sciences at Heinrich-Heine-Universität, which offers service to all researchers of Heinrich Heine University. The service center consists of two divisions, a division for mass spectrometry and a division for NMR spectroscopy. In 2020 there were more than 250 users from more than 20 research groups from biology, chemistry, pharmacy, physics and the university hospital. Mass Spectrometry: Currently, we provide service using five different mass spectrometers, utilizing different ionization methods (e.g. MALDI, ESI, EI). The separation of the ions is carried out by (triple-) quadrupol, ion trap, or by time-of-flight (TOF/TOF and qTOF). The injection of the samples is either direct (solid or as solution via syringe pump) or via GC or HPLC. NMR Spectroscopy: Currently, we provide service using three different NMR spectrometer (300 MHz, 500 MHz and 600 MHz). The service includes automatic measurements from routine NMR as well as several special experiments (high- and low temperature, DOSY, HOESY, selective experiments, several special nucleus, ...) and support interpretation of the obtained data.

**Address:** Universitätstr. 1  
40225 Düsseldorf  
Nordrhein-Westfalen  
Deutschland  
[To website](#)

## Host Institution

**Heinrich-Heine-Universität Düsseldorf**  
Universitätsstr. 1  
40225 Düsseldorf  
Nordrhein-Westfalen  
Deutschland  
<https://www.hhu.de/>

## Scientific Domain

### Primary Subjects:

- Chemistry

### Secondary Subjects:

- Biology
- Medicine
- Physics

## Category

Analytical Facilities

## Scientific Services

MS: 1) Standard-MS-Experiments (MS, MS/MS, GC/MS, LC/MS). 2) Further experiments can be provided on demand. 3) Support with the interpretation of NMR-Data. Further details you will find on our web-page: <https://www.ms.chemie.hhu.de/> NMR: 1) Standard-NMR-Experiments in automation (1D and 2D). 2) Special NMR-Experiments with selective pulses. 3) Special hetero nucleus. 4) Temperature depending NMR-spectroscopy. 5) Kinetic investigations in solution. 6) Diffusion in solution. 7) Further experiments can be provided on demand. 8) Support with the interpretation of NMR-Data. Further details you will find on our web-page: <https://www.nmr.chemie.hhu.de/>

## Scientific Equipment

- Bruker Avance III - 300
- Bruker Avance DRX - 500
- Bruker Avance III - 600
- GC/MS-System Finnigan Trace DSQ
- UHR-QTOF maXis 4G (Bruker Daltonik)
- MALDI-TOF/TOF UltrafleXtreme (Bruker Daltonik)
- Finnigan LCQ Deca (Thermo Quest)
- Triple-Quadrupol-mass-spectrometer TSQ 7000 (Finnigan MAT)

## Keywords

- NMR
- DOSY
- NOESY
- HOESY
- MALDI
- ESI
- EI

## Networks

### Users per annum

**Internal Users:** 250 Nutzer aus mehr als 20 Abteilungen

**External Users in total:** 2 aus 2 Abteilungen

**External Users:** 2

**External Users in the EU:** 0

**External Users outside of EU:** 0