

Laserové centrum Hilase Vás zve na seminář

## Presentation of the CMS

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The CMS (Center of Molecular Structure) of the Institute of Biotechnology is a technology platform part of CIISB (the Czech Infrastructure for Integrative Structural Biology, which is also the Czech affiliate of the European Network Instruct-Eric).

The platform provides access to specialized equipment and technologies, and associated services, to researchers (both public and private sector) in the Czech Republic and abroad.

The platform was mostly designed to help solve research problems in Biology. However, there is no limitation to Biological Sciences since the equipment available can also be used by chemists, by researchers in material science etc.

The CMS is divided in three "Core Facilities" with a scientist in charge of each. These are:

 Biophysical techniques, providing access to the following devices
<u>Circular dichroism spectrometer</u>; <u>differential scanning</u> plus isothermal <u>calorimeter</u>s; micro differential scanning fluorimeter; dynamic (and static) light scattering; microscale thermophoresis (including label-free); surface plasmon resonance; UV/Visible precision spectrophotometer

- Crystallisation and diffraction techniques, providing access to

<u>crystallisation robot</u>, <u>crystallisation hotel</u> (including web-based access for the visualization of crystallisation plates), dedicated <u>cold and warm rooms for crystallisation</u>; in-drop dynamic light scattering; glove-box for <u>crystallisation in inert (O2-free) atmospheres</u>; cryo-bench; <u>D8Venture diffractometer</u> with high flux liquid Gallium alloy jet X-ray source. The core facility will soon be

project supported by:







expanded with a <u>laboratory Small Angle X-ray Scattering (SAXS) line</u> (with an independent liquid Gallium alloy jet X-ray source).

- Structural Mass Spectrometry, with

Bruker Daltonics <u>15T-SolariX FT-ICR mass spectrometer</u> (electrospray and MALDI ion sources) coupled to an HPLC system, and a <u>MALDI-TOF mass spectrometer</u> (Bruker Daltonics) and <u>excimer</u> <u>laser</u> for fast photochemical oxidation of proteins (FPOP).

The pieces of equipment underlined in this list are also well suited for studies in areas other than Biological Sciences (material sciences, gels, polymers...).

Access to the facility is granted through the CIISB (<u>http://www.ciisb.org</u>), through Instruct-Eric (<u>https://www.structuralbiology.eu</u>). It may also be arranged by contacting members of the

## který se bude konat v pondělí 6. 11. 2017 od 11:00 v seminární místnosti HiLASE



