The Centre of Molecular Structure (CMS) is functional since 2015 at the Institute of Biotechnology, CAS, in the BIOCEV research centre in Vestec (Prague area). It represents a complex of core facilities specialized in structural biology and interaction studies. The CMS consists of facilities for crystallization, X-ray diffraction and scattering, physicochemical characterization of biomolecules, advanced mass spectrometry analysis, and protein expression and purification. As a part of the Czech Infrastructure for Integrative Structural Biology (CIISB) and the European infrastructure for structural biology Instruct-ERIC, the CMS provides a comprehensive service and consultation for researchers from BIOCEV, and for other Czech or foreign researchers. CMS was also active during the covid epidemic and was actively involved in structural analysis of the SARS-CoV-2 methyltransferase complex involved in RNA cap creation bound to sinefungin. Previously published in: Krafcikova P et al. (2020) Nat Commun 11, 3717.

The CMS mainly relies on 15 T Solarix XR FT-ICR mass spectrometer, D8 Venture single-crystal diffractometer with an Excillum MetalJet X-ray source, SAXSPoint 2.0 equipped with an Excillum MetalJet X-ray source for small angle X-ray scattering studies and Formulatrix RI1000 crystallization hotel equipped with the SONICC detection of nanocrystals.

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