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v Ljubljani

Fakulteta *za kemijo*
in kemijsko tehnologijo

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**VABILO NA PREDAVANJE
V OKVIRU DOKTORSKEGA ŠTUDIJA
KEMIJSKE ZNANOSTI**

Prof. Giorgio Carta

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z naslovom:

**Advances in Mechanistic Understanding
and Modeling of Protein Process
Chromatography**

v sredo, 22. maja 2019 ob 15:00 uri
v predavalnici 1 v 1. nadstropju Fakultete
za kemijo in kemijsko tehnologijo, Večna pot 113

Vljudno vabljeni!

Abstract:

Understanding and modeling protein chromatography is critical to the design and optimization of biopharmaceutical manufacturing processes. The critical factors are competition for binding sites and the mass transfer kinetics that determine the rate at which protein-surface interactions take place. Using industrially relevant antibodies, we demonstrate how high-throughput screening methods, confocal microscopy, and bilayer interferometry can be used to successfully predict chromatographic separation performance and define a robust parameter space. Both detailed mechanistic models, based on extensive biomolecular-level information, and hybrid models, that leverage large empirical datasets, are discussed and compared as to their virtues in the practical context of biologics manufacturing.