

ChemE Faculty Colloquium

Macromolecular crowding in living cells

by

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Rolls available from 12.40h.

Watermanzaal/Franklinzaal B58-A2

ABSTRACT

Physical chemical parameters inside the cell are markedly different than in dilute solution, and hence need to be taken into account when explaining the biology of the cell. Herein I present the first sensors that allow quantification of the ionic strength and macromolecular crowding inside living cells. I will show how these sensors open up the possibility to obtain a better understanding of the intracellular crowded environment. The probes allow quantification with high spatiotemporal precision during stress, revealing how the conditions inside a cell change, and how cells may respond.