



KEMIJSKI INŠTITUT

Vabilo na Forum40 / Invitation to the Forum40

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D01, Theory department

Četrtek / Thursday, 11.1.2018 ob / at 13:00

Velika predavalnica Kemijskega inštituta / Great Lecture Hall, National Institute of Chemistry; Hajdrihova 19, Ljubljana

## Protein folding and aggregation monitored by vibrational spectroscopy

The structural study of short alanine peptides in argon and krypton matrices revealed the  $C_7$  conformation as the most favorable one in homomeric systems. To a lesser extent the presence of the  $PP_{II}$ ,  $\beta$  and  $\alpha$ -conformations was monitored.

Structural changes observed during hydration of the Concanavalin A, Chymotrypsinogen A, Pepsin and Stefin B protein films reveal that hydration stimulates the formation of  $\beta$ -structures.

Knowing that vibrational spectroscopy is capable of monitoring small structural changes that occur during the hydration processes, we applied this technique to follow up conformational changes during the aggregation processes of Concanavalin A and Stefin B.



Vljudno vabljeni / Kindly invited