



KEMIJSKI INŠTITUT

Vabilo na Preglov kolokvij / Invitation to the Pregl colloquium

Prof. Dr. Robert Liska

Head of the Research Group Photopolymerization
Institute for Applied Synthetic Chemistry
TU Wien, Wien, Austria
E-mail: robert.liska@tuwien.ac.at

Četrtek / Thursday 12. 10. 2023, ob / at 13:00

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

**Advanced Applications of Photopolymerization:
From Frontal Polymerization
to new Monomers for 3D Printing**

UV curing of photopolymerizable formulations based on the (meth)acrylate chemistry has been used for more than a half century for protective and decorative coatings of paper, wood, metals or plastics. In the last decade, there has been a strong demand for the curing of thicker layers or even to print arbitrarily shaped 3D cellular structures out of these materials. Additive Manufacturing Technologies especially for biomaterials are such advanced applications, whereas Multiphoton Polymerization allows resolution in the sub micrometer range. Hot Lithography is the most recent technological trend allows the ionic and catalytic photopolymerization of a set of entirely new monomers in the field of 3D printing. Finally, frontal polymerization is a time and energy efficient polymerization method to cure epoxy based composite materials.

Info: Dr. Ema Žagar ema.zagar@ki.si



Vljudno vabljeni / Kindly invited