F-5 SEMINAR



Friday, August 26, 2022 at 10:30 AM

in the seminar room of physics (room 106) Condensed Matter Physics, Jožef Stefan Institute

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Polymer-Based Aerogels and their Potential Use in Food Systems

Aerogels are obtained by drying hydrogels in a supercritical carbon dioxide system. After the solvent in the hydrogels is replaced with ethanol, the ethanol is removed from the gel structure with the help of carbon dioxide under supercritical conditions, and thus, dry, low density, ultralight, large surface area, and highly porous durable aerogels are obtained. Aerogels are used effectively as adsorbents, carrier systems, or catalysts in many areas such as isolation, filtration, controlled drug release, and wastewater treatment due to their large porous structures and high adsorbent properties. Also, aerogels, which have almost no use in the field of food, could be used in different food processes as an adsorbent as well. They could be used as clarification agents in different processes or enzyme carriers in different food systems.

You are cordially invited to attend.