

Third International Seminar on Aerogels 2016 – Sophia Antipolis, France

The third International Seminar on Aerogels took place in September 2016 in Sophia Antipolis (France) at MINES ParisTech. Researchers from more than 25 countries and representatives of industry used two days to exchange views and ideas on the production, processing, and applications of aerogels from inorganic and organic materials.

Aerogels from different precursors like silica, metal oxides, polyurethanes, urea, proteins, polysaccharides and their composites were presented to auditorium. Structure and properties of new aerogels produced with common and new gelation and drying processes were shown. Aerogels were functionalized regarding their hydrophilicity, mechanical stability, and drug release properties via embedding of elements or fibres or coating.

Modelling of gelation and drying of aerogels for scale up and transfer of processes to new products were presented. Scale-up strategies for existing processes were discussed to enable the next step to industrial production of aerogels.

Besides improved aerogels for insulation applications and encapsulation of drugs or bioactive components for foods, new possible inorganic and organic aerogel applications, like electrical applications (capacitors, batteries), aerogels for catalysis, foods and packaging, as well as membranes for pumps were pointed out.

150 oral and poster research communications were accomplished with the presentations of the latest industrial achievements allowing learning from the “first hand” about the new aerogel materials and prospects in their applications. The conference ended with aerogel art show.

The seminar was possible thanks to the sponsoring of several European, American and Japanese industrial companies (Aerogel technologies, ASPEN, BASF, ENERSENS, NATEX, PAREX Group, TIEM Factory) and the local community (CASA), and to the strong support of MINES-ParisTech.

Next International Seminar on Aerogels will be held in October 2018 in Hamburg at Technische Universität Hamburg-Harburg.