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## **S E M I N A R** **aus** **Halbleiterphysik und Nanotechnologie**

**Mo, 10.05.2021, 11:15 Uhr, (Seminar via Zoom)**

### **“From Black over Hybrid to Green Carbon Spherogels”**

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Monolithic *carbon spherogels*, obtained after carbonization of resorcinol-formaldehyde coated polystyrene spheres (templates) were discovered in 2019 as a new class of carbon aerogels. Their morphology consists solely out of interconnected and uniformly sized hollow spheres. Each sphere (250 nm in diameter) is enclosed by a microporous carbon wall whose thickness can be adjusted by the template concentration. Such highly porous, deliberately tailored carbons are of high interest for energy storage, drug delivery or separation applications. Furthermore, the hollow sphere geometry offers the possibility to encapsulate additional substances and thus yields additional functionalities – so called hybrid carbon spherogels. With respect to consider sustainable sources in the synthesis we recently applied mimosa tannin as carbon precursor to our templating approach to create „green“ carbon spherogels.