MATERIALS CHEMISTRY IN THE ENERGY AND RAW MATERIAL CHANGE

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New materials are to be searched for to solve the problems of novel energy cycles and modern energy management. Examples for that are new polymer membrane materials for the mobile fuel cell, porous polymers and carbons for hydrogen- and gas storage, catalytic active hybrid materials for novel reaction schemes, or carbon electrodes for the lithium battery and supercapacitors. I will report in this talk on some simply approaches and concepts to extent the profile of current polymer and soft material chemistry to successfully solve these problems in a nearby future. I intend to discuss that nanoscience and hybrid materials long have left the playground of aesthetics and turned into powerful, society-relevant tools.