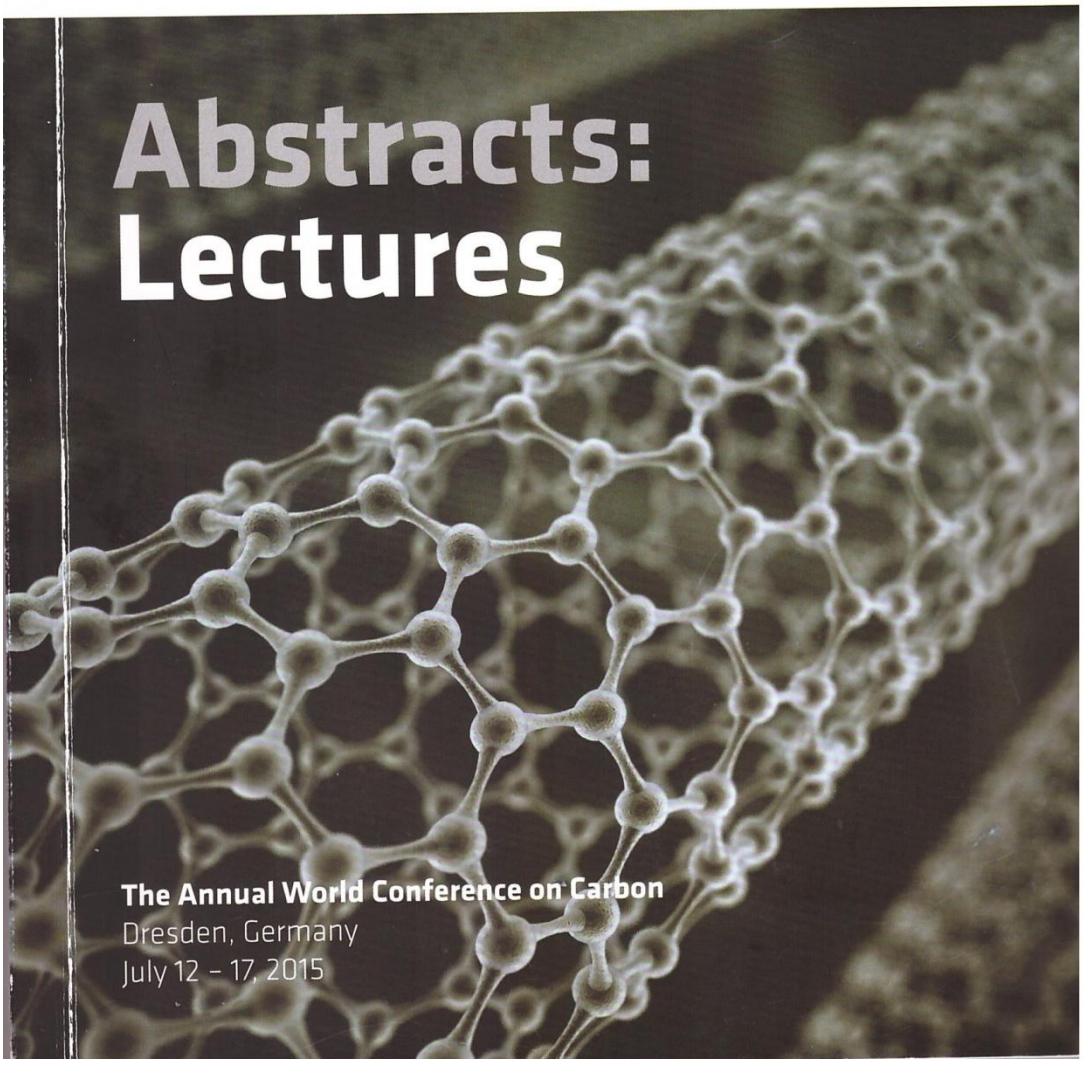
CARBON 2015

INNOVATION WITH CARBON MATERIALS

Abstracts: Lectures



The Annual World Conference on Carbon
Dresden, Germany
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Creating of catalytic systems from oil sludge and soot for the synthesis of nanotubes

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Promising and economically viable method for the synthesis of nanotubes in large quantities is CVD-method based on thermal decomposition of carbonaceous compounds in the presence nanoparticles of metals. For the properties and morphology of the carbon nanostructure which determining value having the structure and composition of the catalyst system - the catalyst / carrier. For obtaining CNT with maximum same structural characteristics necessary to create a catalyst system with a narrow size distribution of the metal nanoparticles. Therefore, it is urgent to develop new methods of producing porous carbon materials with the desired set of properties from cheap natural raw materials. In this work we present the results of research on creating the porous material from soot and oil sludge. Studies have shown that the sooting carbon is a good reducing agent of metal nanoparticles from metal salts during heat treatment. Using the resulting material, by CVD method (C_2H_2 / Ar) were synthesized carbon nanotubes.