The Third Symposium on Future Challenges for Carbon-based Nanoporous Materials: Adsorption and Energy

3^{ird} CBNM2012-NAGANO

May 26 Saturday and 29 Tuesday, 2012

We organized the first and second symposia on **Future Challenges for Carbon-base NanoporousMaterials** in 2007 and 2010. The researches on carbon-based materials are increasing year by year. Graphene has joined in new nanocarbon families, promoting worldwide researches with the relevance to energy and environmental technologies. Energy situation is rapidly changing; nuclear energy



to natural gas shift is now remarkable. We need to have a fruitful time for the discussion on the related area for promotion of green innovation. We would like to offer an intensified science platform on Energy related topics at a representative resort area: Nagano (Winter Olympic Game was held) This symposium has a role of Spain(Alicante Univ.)-Japan(Shinsh Univ.) joint meeting.



Togakushi, May

Also this has a role of post conference of **PBAST-6** in Taiwan. Well-known scientists will be invited to this symposium and attendance of young scientist will be encouraged. The scientific program consist of oral papers (invited papers (30 min) and general papers (10-15 min)) and poster papers.

Conference Site: May 26(Saturday) and 27(Sunday)

SUSTEC Building, Wakasato Campus, Shinshu University, Nagano Walking distance from the east exit of Nagano Station of Shinkansen (15 min) May 28(Monday) and 29(Teusday) Hakuba Highland Hotel in Hakuba village We will move from Nagano to Hakuba by a chartered bus

Accomodation for the nights of 25-27 May and Banquet place

Mielparuque Nagano (Hotel), 5 min from Higashi-guchi Nagano station 20 min for Wakasato Campus Shishu University

http://www.mielparque.jp/nagano/en/

for the night of 28 May Hakuba Highland Hotel

http://www.hakuba-highland.net/index.html

Tentative program

26 Saturday Registration at 9:00 am

10:30am- Invited and general papers, Poster session Reception

27 Saturday Invited and general papers Banquet

28 Monday Invited and general papers

Moving to Hakuba area with express bus(1hr) in the early morning Staying at hotel with "onsen" in Hakuba area (we will determine soon)

29 Tuesday Adjourn We will move to Nagano station by a chartered bus

(The acceptable participant number in Hakuba is limited due to the meeting room capacity and we must hesitate to ask you not to join the Hakuba branch symposium in such a case)
This symposium will be supported by JST(Japan) and MICINN(Spain) and by JST Exotic Nanocarbon Project.

Homepage on information on abstract submission and symposium details will open soon.

Registration:

Registration fee 10,000 Japanese Yen including party fees 7,000 Japanese Yen without party fees 3,000 Japanese Yen for a student

We ask participants kindly to pay the registration fee at the conference desk **Accommodation**: Participants are asked to book your accommodation by yourselves. May in Nagano is very popular for tourists and early booking is recommended.

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Electrolytic Organic Molecular-Structure in Carbon Nanopores

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New adsorption behaviors of the nanoporous carbons have been actively studied¹. Still we do not sufficiently understand nanosolution in carbon pores², although the relationship between capacitance characteristics and pore width using activated carbon fibers (ACFs) of different pore width has been shown. We need to elucidate the structure of organic molecules associating with supercapacitors in well-characterized nanoporous carbons for better materials-designing.

The structure analysis of organic electrolytic nanosolutions in carbon nanopores of ACFs and carbide derived carbons (CDCs) having different pore width with the aid of X-ray diffraction and reverse Monte Carlo simulation will be presented.

References

- (1) a) Y. Tao et al, J. Am. Chem. Soc. **2010**, 132, 1214. b) D. Noguchi, et al, J. Phys.: Condens. Matter **2010**, 22, 33420. c) Y. Tao et al, J. Mater. Chem. **2011**, 21, 313.
- (2) A. Tanaka et al, J. Am. Chem. Soc. 2010, 132, 2112.

Keywords

Carbon nanopore, supercapacitor, nanoconfinement, X-ray diffraction analysis, adsorption

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Monochrome figures