Dr. Hiroyasu Furukawa's research on the development of a promising material for adsorption-driven heat pump applications published in Chemistry of Material ACS Journal.

Research work by Dr. Hiroyasu Furukawa, a Chair Professor at the Center of Excellence in Nanotechnology (CENT), King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia, and colleagues had led to an article published in Chemistry of Materials ACS Journal and featured in ChemViews Magazine. The article titled "High Methanol Uptake Capacity in Two New Series of Metal–Organic Frameworks: Promising Materials for Adsorption-Driven Heat Pump Applications" involves the design of two new types of metal-organic frameworks (MOFs) with polar amide functionalities to boost the methanol uptake capacities of this class of materials.

SUMMER INTERNSHIP AT CENT.

Mr. Mjed Hashem, Mr. Mohamed Alobaisi and Mr. Rakan Almadi, Students of University of Manchester, United Kingdom had successfully completed four months summer internship program at the Center of Excellence in Nanotechnology (CENT) between June to September 2016. They were trained on research techniques in the field of SiAlON, Natural Zeolite and Electrochemistry respectively.
CENT welcomes new colleagues and wish them success in their new roles

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CENT congratulates Dr. Ahsan, Dr. Oki and Dr. Yusuf for their promotion and wished them more success in future.

Dr. Oki Muraza
Promoted to Associate Professor

Dr. Ahsan-Ul-Haq Qurashi
Promoted to Associate Professor

Dr. Mohd Yusuf Khan
Promoted to Research Scientist III

For comments, contact Mr. Mohammed Sanhoob +966 13 8601048, sanhoob@kfupm.edu.sa
The 4th Saudi International Nanotechnology Conference (SINC 2016)
October 25 - 27, 2016

WORKSHOP

Nanomaterials development for petro-catalytic applications

Description:
The Center of Research Excellence in Nanotechnology (CENT) at KFUPM is a leading research center that develops nanomaterials for petroleum and petrochemical applications. CENT will offer a 1-Day workshop that introduces the development of nano-catalytic materials for petro-catalytic applications. It will include the synthesis, characterization, and performance evaluation of zeolite catalysts.

Graduate and undergraduate students are the main target audience, and will be given priority for the limited seats available.

Accepted applicants will be given reading material to prepare ahead of the workshop. The venue will at CENT labs at KFUPM, on 26th Muharram, 1438 (October 27th, 2016).

Schedule:

<table>
<thead>
<tr>
<th>Time</th>
<th>CENT workshop - October 27, 2016</th>
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<tr>
<td>9:00-10:30</td>
<td>Fundamental lecture on &quot;Nanomaterials development for petro-catalytic applications&quot;</td>
</tr>
</tbody>
</table>
| 10:30-12:00   | Synthesis of Zeolite
   - Methods of synthesis
   - Post-treatment of zeolite
   - In-situ treatment of zeolite |
|               | Textural properties and sample testing
   - Determination of textural properties by BET analyzer
   - Catalytic evaluation in a fixed bed reactor |
| Break for Prayer and Lunch |
| 13:00-14:30   | Zeolite characterization
   - XRD and SEM
   - Characterization by FTIR and Pyridine-FTIR |
|               | Synthesis of Zeolite
   - Methods of synthesis
   - Post-treatment of zeolite
   - In-situ treatment of zeolite |
| 14:30-16:00   | Textural properties and sample testing
   - Determination of textural properties by BET analyzer
   - Sample preparation for reaction and Catalytic evaluation in a fixed bed reactor |
|               | Zeolite characterization
   - XRD and SEM
   - Characterization by FTIR and Pyridine-FTIR |

Scan here to download registration form. fill and send the form to sanhoob@kfupm.edu.sa

For more information, contact sanhoob@kfupm.edu.sa
RECENT CENT AFFILIATED PUBLICATIONS


- Core-Shell Vanadium Modified Titania@beta-In2S3 Hybrid Nanorod Arrays for Superior Interface Stability and Photochemical Activity," A. Mumtaz, N. M. Mohamed, M. Mazhar, M. A. Ehsan and M. S. M. Saheed, Acs Applied Materials & Interfaces, Vol. 8, issue 14, 2016, pp 9037-9049.