

## Program

— The 5<sup>th</sup> meeting of NASEMS —

Sunday 15 March 16:00 – 18:00 (Room : Iizuna at 3F)

Monday 16 March 8:30 – 11:30 (Room : Asama at 3F)

— CBNM-4 —

Monday 16 March (Room : Asama at 3F)

### Registration of CBNM

11:00 –

### Welcome Address

13:00 – 13:10 Katsumi Kaneko

*Shinshu University, Japan*

### Oral session 16-1 Chair : Dr. M. Thommes

13:10 – 13:50 Ljubisa R. Radovic

*The Pennsylvania State University, USA*

and *University of Concepcion, Chile*

“Quantum chemistry of graphene interactions with oxygen,  
nitric oxide and alkali metals”

13:50 – 14:10 Shin R. Mukai

*Hokkaido University, Japan*

“Synthesis of Nanoporous Carbon Monoliths Using Carbon  
Nanofibers Synthesized Using the Liquid Pulse Injection  
Technique”

14:10 – 14:50 Joaquin Silvestre-Albero

*University of Alicante, Spain*

(Francisco Rodriguez-Reinoso)

“Nano-confinement effects for methane storage”

(14:50 – 15:20 Break)

### Oral session 16-2 Chair : Prof. M. Miyahara

15:20 – 16:00 Alexander V. Neimark

*Rutgers, The State University  
of New Jersey, USA*

“Adsorption Deformation of Microporous Carbons”

16:00-16:20 Ryotaro Matsuda *Kyoto University, Japan*  
“Recognition and Separation of Carbon Monoxide in the  
Nanospace of a Porous Coordination Polymer”

16:20 – 17:00 Morinobu Endo *Shinshu University, Japan*  
“Responsible Production and Applications of Carbon  
Nanotubes ~promise for the future~”

**Poster session**

17:30 – 19:00 (Room : Asama at 3F)

**Reception**

19:10 – 21:10 (Room : Uranosu at 12F)

**Tuesday 17 March (Room : Asama at 3F)**

**Oral session 17-1 Chair : Prof. A. Neimark**

8:30 – 9:10 Milton W. Cole *The Pennsylvania State University, USA*  
“Wetting transitions of classical and quantum gases:  
Implications for adsorption in porous materials”

9:10 – 9:50 Hiroshi Fukuyama *The University of Tokyo, Japan*  
“Two-Dimensional Quantum Materials Physisorbed on  
Graphite”

9:50 – 10:30 Silvina Gatica *Howard University, USA*  
“Properties of molecules adsorbed on graphene, carbon  
nanotubes and carbon nanohorns: theory and simulations.”

(10:30 – 11:00 Break)

**Oral session 17-2 Chair : Prof. A. Fuchs**

11:00 – 11:40 Susumu Kitagawa *Kyoto University, Japan*  
“Soft Porous Coordination Polymers”

11:40 – 12:00 Jacek Jagiello *Micromeritics Instrument Corporation,*  
USA

“Comprehensive Characterization of Carbon Pore Structure  
Using Combined Adsorption Data of N<sub>2</sub>, Ar and CO<sub>2</sub>  
Analyzed by 2D-NLDFT Models”

12:00 – 12:40 Hideki Tanaka *Okayama University, Japan*

“Thermodynamic Stability and Melting Dynamics of  
Clathrate Hydrates”

(12:40 – 14:00 Lunch)

**Oral session 17-3 Chair : Prof. L. Carlucci**

14:00 – 14:40 Alain Fuchs *CNRS and Chimie ParisTech, France*

“On the Impact of Adsorption in Compliant Nanoporous  
Materials”

14:40 – 15:00 Tomoki Ogoshi *Kanazawa University, Japan*

“Porous Carbon Fibers Containing Angstrom-level Controlled  
Pores from Pillar[6]arene Cavity Size”

15:00 – 15:20 Sayaka Uchida *The university of Tokyo, Japan*

“Redox-Induced Reversible Uptake-Release of Cations  
in Porous Ionic Crystal based on Polyoxometalate”

15:20 – 16:00 Tohru Setoyama *Mitsubishi Chemical Group Science and  
Technology Research Center, Japan*

“What are the practical innovations and the strategies  
to mitigate the climate change in 21st century?”

(16:00 – 16:20 Break)

**Oral session 17-4 Chair : Prof. K. Laszlo**

16:20 – 17:00 Roland J.-M. Pelleng *Massachusetts Institute of Technology,*  
USA

“Adsorption and Transport Properties of Alkanes in Shale-  
Rocks from the Bottom-Up Approach”

17:00 – 17:20 Lars Borchardt *Dresden University of Technology,*  
Germany

“Model Carbons with Well-Defined Porosity: Synthesis and  
Advanced Characterization Techniques”

17:20 – 18:00 Teresa J. Bandosz *The City College of New York, USA*

“Solar Energy Harvesting on S- and N-doped Nanoporous  
Carbons”

### **Banquet**

18:30 – 20:30 at Tomizushi (outside the hotel)

## **Wednesday 18 March (Room : Shiga at 3F)**

### **Oral session 18-1 Chair : Prof R. Pellenq**

8:30 – 9:10 Minoru T. Miyahara *Kyoto University, Japan*

“Modeling and Visualization of Layer-Structured MOF with  
Guest Molecules”

9:10 – 9:50 Lucia Carlucci *The University of Milano, Italy*

“Coordination Networks: Structures, Entanglements and  
Properties”

9:50 – 10:10 Francois-Xavier Coudert *CNRS and*  
*Chimie ParisTech, France*

“Polymorphism, Flexibility and Disorder in Nanoporous  
Molecular Frameworks”

(10:10 – 10:40 Break)

### **Oral session 18-2 Chair : Prof. L. Radovic**

10:40 – 11:20 Matthias Thommes *Quantachrome Instruments, USA*

“Adsorption and Phase Behavior of Water in Ordered  
Nanoporous Carbons”

11:20—11:40 Hirotomoto Nishihara *Tohoku University, Japan*  
“Porous Graphene Shell with High Surface Area and High Oxidation Resistance”

11:40 – 12:20 Krisztina Laszlo *Budapest University of Technology and Economics, Hungary*  
“Adsorption and contrast variation assisted SANS to study confinement effects in nanoporous carbon”

(12:20 – 13:50 Lunch)

**Oral session 18-3 Chair : Prof. T. Bandosz**

13:50 – 14:10 Rodolfo Cruz-Silva *Shinshu University, Japan*  
“Preparation of films, fibers and composites using 2-D nanocarbons.”

14:10 – 14:30 Zheng-Ming Wang *National Institute of Advanced Industrial Science and Technology, Japan*  
“Graphene-Periodic Mesoporous Silica Nanocomposite Sandwiches with Vertically Aligned and Size Tunable Mesochannels”

14:30 – 14:50 Hideki Tanaka *Kyoto University, Japan*  
“Hydrogen Isotope Separation by Carbon Nanopores”

14:50 – 15:10 Takahiro Ohkubo *Okayama University, Japan*  
“A Novel Synthetic Route to Cu(I) Oxide Nanoparticles from Nano-Confined Copper Complex in Carbon Micropore”

15:10 – 15:30 Taku Iiyama *Shinshu University, Japan*  
“Applying the Diffraction Techniques and Reverse Monte Carlo Method to the Phase Transition of Water in Carbon Nanospaces”

***Adjourn***

**Farewell party**

18:00 -