

SCOPE

Carbons have always been the friendliest of materials. Over several millennia they have generously supported the activities of humankind. The importance of carbon materials increases day by day owing to their increased number of applications including the aerospace, automotive, rubber, steel, construction, chemical, aluminum and many other industries.

The aim of Carbon Materials for Today and Future Turkish-Japanese Joint Carbon Symposium is to bring Japanese and Turkish scientists, researchers and students from various institutions together. The symposium will cover the state of the art in carbon science and technology and will provide an outlook for the future. It will provide a platform for exchanging ideas and making discussions over joint projects.

Conference Topics

1. Industrial Applications
2. Adsorption, Surface and Porous Materials
3. Electrochemistry, Batteries and Capacitors
4. Carbon Fibers and Composites
5. Carbon Grown or Deposited from Gas Phase or Plasmas (nanocarbons, templated carbons...)
6. Carbon from Soft Precursors (pitch and polymers)
7. Electronic, Optical Properties and Applications
8. Characterisation and Modelling
9. Chemical and Physical modifications
10. Environment and Energy
11. Biomass
12. Carbon Related to Biology, Toxicology, and Health

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Kyushu University

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Istanbul Technical University

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University of Hyogo

Yasushi Soneda
Advanced Industrial
Science and Technology

Tatsuya Nishida
Hitachi Chemical

Katsuhiko Nagayama
JFE Chemical

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Fukuoka Institute of Health and
Environmental Science

Can Erkey
Koc university

Jun Maruyama
Osaka Municipal Technical Research
Institute

TECHNICAL PROGRAM

Thursday, March 18th, 2010

8.30-9.00	<i>OPENING REMARKS</i>	
9.00-9.45	PLENARY LECTURE Isao Mochida Introduction to Industrial Carbon	12
9.45-10.15	M. Ferhat Yardim Carbon Foams; Precursors, Properties and Applications	14
10.15-10.45	Yoshiaki Matsuo Chemical Modification of Graphene Oxide	16
10.45-11.15	<i>Coffee break</i>	
11.15-11.45	Yasushi Soneda Nanocarbons as Electrode Materials for Electrochemical Capacitor	18
11.45-12.15	Tatsuya Nishida Investigation of Anode Material for High Power Lithium Ion Battery	20
12.15-12.45	Katsuhiro Nagayama Introduction of KMFC and KMFC Graphite Powder Using for High Density Carbon Block and Anode Material of Lithium Ion Secondary Battery	22
12.45-14.45	<i>Poster Section and Lunch</i>	
14.45-15:15	Seong-Ho Yoon Carbon Nanofiber Composite as an Effective Route for Developing Novel Functional Materials	24
15.15--15.45	Burhanettin Çiçek Exploring the Kinetics Mechanism of Carbon Nanotube Formation	26
15.45-16.15	<i>Coffee break</i>	
16.15-16.45	Ekrem Ekinci Turkish Asphaltites an Indigenous Pitch for Carbon Materials	28
16.45-	Fulya Aktaş	30

17.15	Next Step for Composite Industry	
17.15-17.45	Seiichi Uemura Pitch Based Carbon Fiber Production Process and Properties	32
17.45-18.15	Masahiro Toyoda Miniaturization of Carbon Fibers and its Applications	34

Friday, March 19th, 2010

8.30-9.15	PLENARY LECTURE Takashi Kyotani Template synthesis of nano-structured carbons	36
9.15-9.45	Salim Çıracı From Two Dimensional Graphene to Monoatomic Carbon Chains: New Opportunities for Nanoelectronics	38
9.45-10.15	Toshiaki Enoki Unconventional Electronic and Magnetic Properties of Nanographene and its Host-Guest Systems	40
10.15-10.45	Yuda Yürüm Graphene Manufacture and Utilization	42
10.45-11.15	<i>Coffee break</i>	
11.15-11.45	Jin Miyawaki Adsorption Properties of Porous Carbons	44
11.45-12.15	Ersan Putun Carbonaceous Products from Different Biomass Samples: A General Review	46
12.15-12.45	Masashi Kijima Pyrolytic Conversion of Structured Polymeric Materials to Porous Carbons	48
12.45-14.15	<i>Lunch</i>	
14.15-14.45	Noriko Yoshizawa Progress in Fine Structure Characterization of Carbon Materials with TEM	50
14.45-15.15	Yutaka Kaburagi Raman Spectroscopy as a Tool for Characterizing the Structure Order of Carbon Materials	52
15.15-15.45	Noboru Akuzawa	54

	Application of Alkali Metal-Doped Carbons for Recovery and Isotope Separation of Hydrogen Gas	
15.45-16.15	<i>Coffee break</i>	
16.15-16.45	Masaaki Yoshikawa Air Pollution Reduction Technology by Activated Carbon Fibers	56
16.45-17.15	Takaaki Shimohara Characteristics of Activated Carbon Fiber on NO _x Purification and Concept of Wide-area NO _x Purification Technology	58
17.15-17.45	Can Erkey Carbon Supported Metallic Nanoparticle Architectures as Electrocatalysts for PEM Fuel Cells	60
17.45-18.15	Jun Maruyama Development of Carbon-Based Noble-Metal-Free Fuel Cell Catalyst	62
18.15-18.45	<i>CLOSING REMARKS</i>	

POSTER PROGRAM

Poster Session
Thursday – March 18, 2010
13:30 -14:30

POSTER SESSION

1-Water Treatment by Activated Carbons Produced from Agricultural Wastes-Temenuzhka Budinova, Bilyana Petrova, Boyko Tsyntsarski, Nartzislav Petrov (Bulgaria)

2-Production of Activated Carbon from Different Biomass and Wastes-Yunus Önal, Canan Akmil-Başar, Çiğdem Sarici-Özdemir, Fatma Bilin, Tolga Depci, Didem Eren-Sarici (Turkey)

3-Preparation and Surface Area Characterization of Activated Carbon From Sewage Sludge-Sinem Abalı, Murat Doğru, Fatma Tümsek, Hürriyet Erşahan (Turkey)

4-Removal of Naproxen Sodium from Solution by Activated Carbon-Çiğdem Sarici-Özdemir, Yunus Önal (Turkey)

5-Adsorption Mechanism of Arsenite on Fe⁺³ Impregnated Activated Carbon-Z. Ozlem Kocabas, Yuda Yürüm (Turkey)

6-Determination of Some Phthalic Acid Esters in Saliva Simulant by Gas Chromatography Mass Spectrometry after Activated Carbon Enrichment-Elif Tümay Özer, Şeref Güçer (Turkey)

7-Preparation of Fibers from Phenolated Wheat Straw-M. Hakkı Alma (Turkey)

8-Synthesis and Characterization of Polypyrrole Coated Graphene Nanosheets with Enhanced Electrical Properties-Burcu Saner, Neylan Görgülü, Selmiye Alkan, Gürsel, Yuda Yürüm (Turkey)

9-Metal Oxide-Carbon Composites for Durable Proton Exchange Membrane Fuel Cells-Taro Kinumoto, Keita Nagano, Tomoki Tsumura, Masahiro Toyoda (Japan)

10-Preparation of Carbon-Coated Stainless Steel as Bipolar Plates for Polymer Electrolyte Fuel Cell-Shin-ichi Miyano, Yoshiaki Matsuo, Yosohiro Sugie, Tomokazu Fukutsuka (Japan)

11-Synthesis of π -Conjugated Conducting Polymers, Electrochemical Impedance Spectroscopy, Circuit Modelling And Sensor Applications-Murat Ates.(Turkey)

12-Low Temperature Reduction of Silylated Graphite Oxide Thin Films by UV Light Irridation-Kenshiro Iwasa, Yoshiaki Matsuo, Yosohiro Sugie (Japan)

13-Carbon Foam from Modified Commercial Coal Tar Pitch for Use as Catalyst Support and Construction Material-B.Tsyntsarski, B.Petrova, T.Budinova, N.Petrov (Bulgaria)

14-The Effect of Carbon Nanofiber Addition on the Structure of Carbon Foam-Ayşenur Gül, Ekrem Ekinci, M.Ferhat Yardım (Turkey)

15-Carbon Aerogels – Mesoporous Nanostructured Materials with Tunable Properties-Selmi Erim Bozbağ, Can Erkey (Turkey)

16-The Effect of Sulfur on the Structure of Carbon Nanomaterials Synthesized by Liquid-Phase Deposition Method-Chiharu Arai, Hidenori Gamo, Takeshi Shibasaki, Toshihiro, Mikka Nishitani-Gamo (Japan)

17-Preparation of Conductive Polymeric Nanocomposites Based on HDPE and Expanded Graphite-I.Tavman, A.Turgut, K.Sever, I.Ozdemir, I.Krupa, M.Omastova, I.Novak (Turkey-Slovakia)

18-Screen-Printed Patterning of Diamond-Carbon Nanofilaments Composite-Shouhei Kaneko, Keishirou Komatsu, Hidenori Gamo, Kiyoharu Nakagawa, Toshihiro Ando, Mikka Nishitani-Gamo (Japan)

19-Mechanical and Electrical Properties of Polyacrylamide (PAAm)-Multiwalled Carbon Nanotube (MWNT) Composite-Gulsen Akin Evingur, Önder Pekcan (Turkey)

20-Thermodynamic Analysis and Synthesis of Carbon Nanotubes by Chemical Vapor Deposition Using NiO Catalyst and Methane-M.C. Altay, S. Eroglu (Turkey)

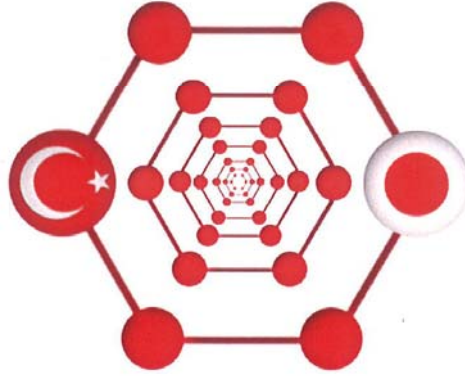
21-Effect of Transition Metal Based Catalysts on Carbon Nanotube and Nanofiber Production- Sinem Taş, Firuze Okyay, Yuda Yürüm (Turkey)

22-Separation of Metal Ions from Aqueous Solutions with Adsorption Method Using Single Walled Carbon Nanotubes-Özge Nurhayat Arslanoğlu, İsmail İnci, Şahika Sena Bayazit.(Turkey)

23-Purification of Biotechnological Carboxylic Acids with Adsorption Method Using Single Walled Carbon Nanotubes-Özge Nurhayat Arslanoğlu, İsmail İnci, Şahika Sena Bayazit (Turkey)

24-Numerical Analysis of Producing SWNT from Graphite by Heating Processes-Yakup Hundur, Manoj Warriar Ralf Schneider (Turkey-India-Germany)

25-Developing Aqueous Phase Reforming Catalysts via Doping Platinum on Various Carbon Materials for Hydrogen Gas Production from Lignocellulosic Hydrolysates-Burcak Kaya, Bahar Meryemoglu, Arif Hesenov, Sibel Irmak, Can Erkey, Oktay Erbatur (Turkey)



Carbon Materials for Today and Future Turkish-Japanese Joint Carbon Symposium

Editors:

M. Ferhat Yardım - Yoshiaki Matsuo

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Book of Abstracts

Organizing Institutions:

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The Carbon Society of Japan
The Carbon Society of Turkey
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