

Oral Program of The First AACG Carbon Symposium

June 26, 2025 Thursday	
9:00 – 9:15	Opening Session
9:15 – 9:45	Keynote: Graphene Oxide: From Fabrication to Applications Hui-Ming Cheng, Shenzhen Institute of Advanced Technology, China
9:45 – 10:05	Advances in Carbon-Based Cathodes for High-Performance Li-O₂ Batteries Hiroto Nishihara, Tohoku University, Japan
10:05 – 10:25	From Graphite to Graphene-Production and Application Feiyu Kang, Tsinghua Shenzhen International Graduate School, China
10:25 – 10:55	Coffee Break
10:55 – 11:25	Keynote: New Approaches to Control Porosity and Surface Property of Porous Carbons Jin Miyawaki, Kyushu University, Japan
11:25 – 11:45	Converting CO₂ and Biomass Wastes into Carbon Materials and Applications in Electric Double-Layer Capacitors (EDLC) Jarrn-Horng Lin, National University of Tainan, Taiwan
11:45 – 12:05	Design and Transport Properties of Novel Field-Effect Transistors Based On Carbon Nanomaterials Dong-Ming Sun, Shenyang National Laboratory for Materials Science, China
12:05 – 12:25	The irradiation damage of graphite Ke Shen, Hunan University, China
12:25 – 14:00	Lunch
14:00 – 14:30	Keynote: Carbon Nanotubes as Superior Conductive Additives: Enhancing Performance of Lithium Ion Batteries Yoong Ahm Kim, Chonnam National University, Republic of Korea
14:30 – 14:50	Single-Wall Carbon Nanotube Films and Their Hybrids Chang Liu, Institute of Metal Research, China
14:50 – 15:10	Carbon-Based Anodes for Na-Ion Batteries: A Comparative Study of Electrochemical Performance and Enhanced Ion Storage Gamzenur Özsin, Bilecik Şeyh Edebali University, Türkiye
15:10 – 15:30	Probing the Interfaces Between 2D Materials and Liquid Metals Yu Lei, Tsinghua Shenzhen International Graduate School, China
15:30 – 16:00	Coffee Break
16:00 – 17:30	Poster Session

June 27, 2025 Friday	
9:00 – 9:30	Keynote: Carbon Aerogels: Revolutionizing Material Science Can Erkey, Koç University, Türkiye
9:30 – 9:50	Sonicated carbon nanotube catalysts for efficient point-of-use water treatment Xin Yang, The University of Sydney, Australia
9:50 – 10:10	Harnessing Graphene's Potential for Polymer Electrolyte Membrane Fuel Cells: Challenges and Future Horizons Selmiye Alkan Gürsel, Sabancı University, Türkiye
10:10 – 10:30	Photocatalytic Estrogen Degradation by the Composite of Tin Oxide Fine Particle and Graphene-Like Carbon Nitride Shinji Kawasaki, Nagoya Institute of Technology, Japan
10:30 – 11:00	Coffee Break
11:00 – 11:30	Keynote: Sustainable Carbon Materials for Catalytic Applications Yuan Chen, The University of Sydney, Australia
11:30 – 11:50	Synthesis of Graphite Aggregates in Nonequilibrium Methane Plasma İbrahim Burak Şen, Middle East Technical University, Türkiye
11:50 – 12:10	Closing Remarks
12:10 – 13:10	Lunch

Poster List of the First AACG Carbon Symposium

P1	Chaehun Lim Chungnam National University, Republic of Korea High performance LIB anode from NF ₃ plasma treated needle cokes
P2	Seongjae Myeong Chungnam National University, Republic of Korea Capacitive deionization performance of N/F doped hierarchical porous carbons prepared by spontaneous silica etching
P3	Xiazhe Zhai Kyushu University, Japan Improvement of Strength of Activated Coke by Oxidative Stabilization
P4	Xiazhe Zhai Kyushu University, Japan Production of High-Strength Porous Carbon Pellet without Activation Utilizing Dual Function of Marine Biomass Components
P5	Shiyong Zheng University of Shanghai for Science and Technology, China Spatial confinement for constructing high performance carbon/sulfur composite electrode materials
P6	Shu-Huei Hsieh National Formosa University, Taiwan Effect of Carbon Cloth Composite Insertion on Lead-Acid Batteries: Characterization and High-Rate Cycling Performance
P7	Jiaxiang Chen The University of Sydney, Australia Carbon Nanotube-Supported ZnPc Electrocatalysts for Selective Furfural Reduction: A Promising Strategy for Sustainable Biomass Conversion
P8	Justin Prabowo The University of Sydney, Australia Dual-functional graphitic carbon materials from methane pyrolysis for lithium-ion batteries
P9	Hüseyin Öztürk Middle East Technical University, Türkiye Design of a 2-D Plasma Reactor for Carbon Production through Methane Pyrolysis

P10	Mert Ada Kayışlı Istanbul Technical University, Türkiye Development And Characterization Of Tin Oxide-Reduced Graphene Oxide Composite As A High-Performance Anode Material For Lithium-Ion Batteries
P11	Hossein Mahdavi Koç University, Türkiye Graphene Oxide Reduction via Pulsed Laser and High-Energy Ball Milling with NiCoFeMoW High-Entropy Alloy for Superior Electrocatalytic Oxygen Evolution Reaction
P12	Züleyha Kudaş Sabancı University, Türkiye Electrochemical Applications of Hybrid Organic Supercapacitors Based on Perilen Monoimide Diester Homodimer
P13	Pınar Acar Bozkurt Ankara University, Türkiye Development of Carbon-Based Materials from Lignocellulosic Biomass using Thermal Conversion Method
P14	Zeynep Bilge Elçi Ankara University, Türkiye Green hydrothermal synthesis of carbon dots from nettle (Urtica dioica) leaf
P15	Agah Yıldız Eskişehir Technical University, Türkiye Hydrogen storage performance of activated and non-activated hydrochar
P16	Agah Yıldız Eskişehir Technical University, Türkiye Preparation and hydrogen adsorption performance of metal and boron doped biochar
P17	Ala Alsuhi Koç University, Türkiye Biopolymer Based Carbon Aerogel Supported Pt Electrocatalysts Via Supercritical Deposition for Hydrogen Evolution Reaction
P18	Ayça Şevval Akalın Eskişehir Technical University, Türkiye Microwave-Assisted Production of Nano Biocarbon from Beechwood Sawdust
P19	Naeimeh Rajabalizadeh Mojarrah Sabancı University, Türkiye Advanced Pt loaded Carbon-Based Electrospun Electrodes for PEM Fuel Cell Applications

P20	Yasemin Çelik Eskişehir Technical University, Türkiye A Comparative Analysis of Microstructural Evolution and Mechanical Properties of Al ₂ O ₃ Composites Reinforced with Multilayer Graphene and Boron Nitride Nanosheets
P21	Büşra Çetiner Sabancı University, Türkiye Innovative Deposition Strategies for Carbon-Supported Pt Catalysts in Electrochemical Hydrodeoxygenation of Biomass-Derived Oxygenate
P22	Rafał J. Wróbel West Pomeranian University of Technology in Szczecin, Poland Ultrapure activated carbons made from furfuryl alcohol for CO ₂ and C ₂ H ₄ sorption applications