

## **S5: Electrochemical Carbons – 2**

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#### **EFFECT OF LOW TEMPERATURE PRE-HEAT TREATMENT ON THE ELECTROCHEMICAL ANODIC PERFORMANCES OF BIOMASS-DERIVED HARD CARBONS IN SODIUM ION BATTERIES**

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## **S6: Fibers and Composites – 2**

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#### **EFFECT OF FLUORINATION ON MECHANICAL PROPERTIES OF CARBON NANOTUBES AND GRAPHENE NANOPATELETS REINFORCED EPOXY COMPOSITES**

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**EFFECT OF PAN-BASED CARBON FIBER LENGTH AFTER OXIDATION ON CRYSTALLITE SIZE CHANGES**

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**HIGH FLUX GRAPHENE OXIDE MEMBRANE: THE ROLE OF SURFACTANT**

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**INFLUENCE OF “SIZE EFFECT” ON THE OXIDATIVE STABILIZATION PROCESS AND THE TENSILE STRENGTH OF PAN-BASED CARBON FIBERS**

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#### **PLASMA-BASED CARBONIZATION OF PAN FIBRES WITH SCALABLE LINEAR MICROWAVE PLASMA SOURCE**

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#### **PREPARATION AND PERFORMANCE OF GRAPHENE/POLYIMIDE COMPOSITE CARBON FIBER**

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**CHOPPED CARBON FIBER-REINFORCED PARTIALLY RENEWABLE THERMOPLASTIC COMPOSITES FOR AUTOMOTIVE APPLICATIONS**

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**INFLUENCE OF AIR FLOW CONDITIONS ON THE EVOLUTION OF RADIAL HETEROGENEITY IN THERMAL STABILIZATION OF PAN PRECURSOR FIBRES**

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**EXPERIMENTAL OBSERVATION ON FLOW-INDUCED “TUMBLING” STRUCTURE OF MOLTEN MESOPHASE PITCH**

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**ROBUST POROUS ELECTRICALLY CONDUCTIVE COMPOSITE BY SELF-ASSEMBLY OF 2D GRAPHENE SURFACTANTS**

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**ELECTRICAL AND MECHANICAL PROPERTIES OF POLYMER-GRAPHENE COMPOSITES AS RELATED TO DENSITY**

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**PERSPECTIVE APPLICATION OF GRAPHENE STRUCTURES OBTAINED USING AROMATIC HYDROCARBONS**

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**EFFECT OF SURFACE CHEMISTRY OF GRAPHENE OXIDE ON ITS COMPATIBILITY WITH ORGANIC MATRIX**

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**INTERFACIAL-FRICTION-DERIVED VISCOUS BEHAVIOR OF EXFOLIATED GRAPHITE, AS SUPPORTED BY THEORY AND EXPERIMENTS**

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**COORDINATION AND ELECTROSTATIC INTERACTION TO CONTROL THE ASSEMBLY OF GRAPHENE OXIDE AND TiO<sub>2</sub> NANOPARTICLE MULTILAYERS**

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**KINETIC TRAPPING OF UNSTABLE TWO-PHASE LIQUID SYSTEMS USING SELF-ASSEMBLED GRAPHENE MOLECULAR BARRIERS**

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**GRAPHENE OXIDE/GRAPHENE STACKING TRANSPARENT CONDUCTIVE ELECTRODES FOR HIGHLY EFFICIENT ORGANIC LIGHT EMITTING DIODES**

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**POROUS Co-AI LDH-GRAPHENE FOR ULTRA HIGH RATE SUPERCAPACITORS**

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**SYNTHESIS AND CHARACTERIZATION OF CVD-GROWN MULTILAYER GRAPHENE NANORIBBONS**

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### **P3-61**

#### **MOLECULAR SELECTIVITY OF GRAPHENE-ENHANCED RAMAN SCATTERING**

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### **P3-62**

#### **GRAPHENE OXIDE AS AN EFFECTIVE FILLER IN ANION EXCHANGE ALKALINE POLYMER MEMBRANES**

Leticia García-Cruz<sup>1</sup>, Clara Casado-Coterillo<sup>2</sup>, Vicente Montiel<sup>1</sup>, Ángel Irabien<sup>2</sup> and Jesus Iniesta<sup>1</sup>

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#### **A MULTI-LAYER GRAPHENE ATOMIC GATE FOR HIGHLY FOCUSED ELECTRON SOURCES FROM CARBON NANOTUBE FIELD EMITTERS**

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#### **THREE-DIMENSIONAL Fe<sub>3</sub>O<sub>4</sub>/GRAPHENE AEROGEL AS ANODE FOR LITHIUM ION BATTERIES**

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#### **NITROGEN-DOPED GRAPHENE STUDIED BY SCANNING TUNNELING MICROSCOPY/SPECTROSCOPY AND ANGLE-RESOLVED PHOTOEMISSION SPECTROSCOPY**

Frédéric Joucken<sup>1</sup>, Yann Tison<sup>2</sup>, Patrick Le Fèvre<sup>3</sup>, Antonio Tejada<sup>3</sup>, Amina Tale-Ibrahimi<sup>3</sup>, Edward Conrad<sup>4</sup>, Vincent Repain<sup>2</sup>, Cyril Chacon<sup>2</sup>, Amandine Bellec<sup>2</sup>, Yann Girard<sup>2</sup>, Sylvie Rousset<sup>2</sup>, Jacques Ghijsen<sup>1</sup>, Robert Sporken<sup>1</sup>, Hakim Amara<sup>5</sup>, François Ducastelle<sup>5</sup> and Jérôme Lagoute<sup>2</sup>

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#### **SYNTHESIS OF HETEROATOM-DOPED GRAPHENE QUANTUM DOTS VIA ONE-POT REACTION INCLUDING SIMULTANEOUS EXFOLIATING AND DOPING**

Gil-Seong Kang<sup>1,2</sup>, Eun-Su Choi<sup>3</sup>, Cheol-Ho Lee<sup>1,2</sup>, Sungho Lee<sup>1</sup>, Doh C. Lee<sup>2</sup>, Seok-In Na<sup>3</sup> and Han-Ik Joh<sup>1</sup>

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#### **HEATING-ASSOCIATED STRUCTURAL CHANGE OF GRAPHENE NANORIBBONS OBTAINED BY UNZIPPING DOUBLE-WALLED CARBON NANOTUBES**

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### **P3-68**

#### **FLUORINATION OF GRAPHENE OXIDE FOR DETECTING NH<sub>3</sub> GAS**

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### **P3-69**

#### **FRACTIONATION OF GRAPHENE OXIDE ON THE BASIS OF OXIDATION, SHEET SIZE, AND SHEET STACKING**

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### **P3-70**

#### **MULTILAYER GRAPHENE-BASED TRANSPARENT ELECTRODES FOR ENHANCED LIGHT EXTRACTION IN III-NITRIDE LIGHT-EMITTING DIODES**

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#### **TOWARDS AN EFFICIENT SYNTHESIS OF Ni/HETEROATOM (N, S or B)-DOPED GRAPHENE NANOMATERIALS**

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**SYNTHESIS OF CARBON NANOMATERIALS IN ALTERNATIVE FLAME**

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**ENHANCING VOLUMETRIC PERFORMANCE OF ENERGY STORAGE DEVICES BY GRAPHENE**

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**MOLECULAR WELDED GRAPHENE FILM WITH HIGH THERMAL CONDUCTIVITY AND FLEXIBILITY**

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**GRAPHENE SYNTHESIS VIA ELECTROCHEMICAL EXFOLIATION OF GRAPHITE NANOPATELETS IN AQUEOUS SULFURIC ACID**

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**ULTRASENSITIVE MOLECULE DETECTION OF LARGE-AREA DOPED GRAPHENE**

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**INFLUENCE OF THE ELECTROPHORETIC DEPOSITION PARAMETERS ON THE FORMATION OF GRAPHENE-BASED FILMS**

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**CONTROLLING THE STRUCTURE AND PROPERTIES OF CARBON NANOTUBES/GRAPHENE OXIDE BUCKYPAPERS**

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#### **ADSORPTION OF CARBOFURAN AND CYMOXANIL OVER WASTE TIRE ACTIVATED CARBONS**

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#### **ACTIVATED CARBON MONOLITHS FROM LIGNOCELLULOSICS-DERIVED MATERIAL: LIQUID AND GAS PHASE ADSORPTION**

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### **P3-82**

#### **SELECTIVE NITROGEN FUNCTIONALIZATION OF P-CONTAINING CARBONS**

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### **P3-83**

#### **ASSESSMENT OF HIGH ELECTRIC FIELD MICROWAVE SYSTEM IN THE PREPARATION OF CARBON ADSORBENTS**

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### **P3-84**

#### **A HIERARCHICAL POROUS CARBON (HPC) SPECIFICALLY STRUCTURED FOR A COMBINATION OF HIGH SURFACE AREA AND PORE VOLUME**

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### **P3-85**

#### **EXPERIMENTAL SETUP AND MEASUREMENT OF GAS DIFFUSION IN POROUS CARBONS**

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### **P3-86**

#### **BIOMASS-DERIVED ADSORBENTS AS SUPPORT FOR THE CONTROLLED RELEASE OF UREA**

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### **P3-87**

#### **PERFORMANCE AND CYCLEABILITY OF CHEMICALLY MODIFIED CARBONS FOR CO<sub>2</sub>**

## **REMOVAL IN INDOOR AIR ENVIRONMENTS IN MOISTURE CONDITIONS**

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### **P3-88**

#### **SYNTHESIS OF ACTIVATED CARBON FROM PYROLYSIS OF *BABASSU* COCONUT: IMPROVING THE SURFACE AREA WITH CHEMICAL ACTIVATION**

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### **P3-89**

#### **GRANULAR ACTIVATED CARBON ANCHORED WITH POLYIONIC LIQUIDS FOR SULFATE REMOVAL**

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### **P3-90**

#### **POROUS STRUCTURED LIGNIN/POLYACRYLONITRILE CARBON FIBER ELECTRODES FOR SUPERCAPACITORS**

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#### **EFFECT OF FLUORINATION ON THE TOLUENE GAS ADSORPTION PROPERTIES OF ACTIVATED CARBON**

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#### **WHEN FOOD WASTE IS NOT WASTED: NANOCARBON APPLICATIONS**

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#### **DESULFURIZATION ORIENTED SURFACE MOLECULARLY IMPRINTED POLYMERS BASED ON ORDERED MESOPOROUS CARBON NANOSPHERES**

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**MECHANICALLY IMPROVED CARBON FOAM DERIVED FROM MELAMINE FOAM AND ITS APPLICATIONS AS FLEXIBLE ELECTRODE**

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**NEW INSIGHTS ON THE IMMOBILIZATION MECHANISM OF *ESCHERICHIA COLI* ONTO ACTIVATED CARBONS**

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**POROSITY AND MORPHOLOGY TRANSFORMATIONS OF PITTSBURGH No. 8 COAL CHAR IN CO<sub>2</sub> GASIFICATION UNDER PORE DIFFUSION LIMITATION**

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**TAILORED DESIGN OF 3D HIERARCHICALLY POROUS CARBON FROM METAL-OXOCARBON ANION COORDINATION COMPLEXES**

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