

## **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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#### **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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**RECYCLING OF CARBON FIBRE COMPOSITES**

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**EFFECT OF CARBON NANOTUBES ON THE ELECTRIC HEATING PERFORMANCE OF PERFLUOROALKOXY COMPOSITE FILMS**

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**SYNTHESIS OF A GRAPHENE/MOF COMPOSITE MATERIAL FOR IMPROVED HYDROGEN STORAGE PROPERTIES**

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**P3-47**

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

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**P3-48**

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

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**P3-49**

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

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**P3-50**

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

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**P3-51**

**NOVEL 3-DIMENSIONAL NANOCOMPOSITE OF COVALENTLY INTERCONNECTED MULTIWALLED CARBON NANOTUBES (MWCNTs) USING SILICON AS AN ATOMIC WELDER**

Lakshmy Pulickal Rajukumar<sup>1</sup>, Manuel Belmonte<sup>2</sup>, John Edward Slimak<sup>3</sup>, Ana Laura Elías<sup>4</sup>, Eduardo Cruz-Silva<sup>4</sup>, Nestor Perea-López<sup>4</sup>, Aaron Morelos Gómez<sup>5</sup>, Humberto Terrones<sup>6</sup>, Pilar Miranzo<sup>2</sup>, Morinobu Endo<sup>5</sup>, Mauricio Terrones<sup>1,4,5</sup>

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## **S8: Graphene – 1**

### **P3-52**

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

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### **P3-53**

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

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### **P3-54**

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

Barbara Berke<sup>1,2</sup>, László Sós<sup>1</sup>, Richárd Czippán<sup>1</sup>, Orsolya Czakkel<sup>2</sup> and Krisztina László<sup>1</sup>

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### **P3-55**

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### **P3-56**

#### **ELECTRON FIELD EMISSION FROM GRAPHENE/NANOCRYSTALLINE DIAMOND HYBRIDS**

Uladzislau Zubets<sup>1</sup>, Nuno Santos<sup>1</sup>, Alexandre Carvalho<sup>1</sup>, António Fernandes<sup>1</sup>, Luiz Pereira<sup>1</sup>, Tiago Holz<sup>1</sup>, Rui Silva<sup>2</sup>, Florinda Costa<sup>1</sup>

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### **P3-57**

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### **P3-58**

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

Jinhong Du<sup>1</sup>, Shuai Jia<sup>1</sup>, Hengda Sun<sup>2</sup>, Zhikun Zhang<sup>1</sup>, Dingdong Zhang<sup>1</sup>, Jiangshan Chen<sup>2</sup>, Dongge Ma<sup>2</sup>, Hui-Ming Cheng<sup>1</sup>, Wencai Ren<sup>1</sup>

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### **P3-59**

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

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**P3-60**

**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**

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**P3-63**

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

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**P3-64**

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

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**P3-65**

**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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(cancelled)

**P3-67**

**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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**P3-71**

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

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**P3-72**

**COMPARISON OF HEAVY METAL ADSORPTION PROPERTIES USING MAGNETITE-GRAPHENE OXIDE AND MAGNETITE-REDUCED GRAPHENE OXIDE**

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**P3-73**

**SYNTHESIS OF CARBON NANOMATERIALS IN ALTERNATIVE FLAME**

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**P3-74**

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

Huan Li<sup>1,2</sup>, Ying Tao<sup>1,2</sup>, Xiaoyu Zheng<sup>1,2</sup>, Jiayan Luo<sup>1,2</sup>, Feiyu Kang<sup>3</sup> and Quan-Hong Yang<sup>1,2,3</sup>

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**P3-75**

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

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**P3-78**

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

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**P3-79**

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

Ana M. Pérez-Mas<sup>1,2</sup>, Karwei So<sup>2</sup>, Seyyed Shayan Meysami<sup>2</sup>, Ricardo Santamaría<sup>1</sup>, Patricia Álvarez<sup>1</sup>, Rosa Menéndez<sup>1</sup>, and Nicole Grobert<sup>2</sup>

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## **S10: Porous Carbons - 2**

### **P3-80**

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

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### **P3-81**

#### **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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**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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**P3-91**

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

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**P3-92**

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

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**P3-93**

**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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