18th INTERNATIONAL CONFERENCE ON THE SCIENCE AND APPLICATION OF NANOTUBES AND LOW-DIMENSIONAL MATERIALS

In honor of Mildred S. Dresselhaus

BELO HORIZONTE, MG – BRAZIL
25 TO 30 JUNE 2017

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Welcome to the 18th International Conference on the Science and Application of Nanotubes and Low-Dimensional Materials

Since their conception in 1999, the NT International Conference Series attempts to provide an informal setting to exchange the most current information in the rapidly evolving research field of low-dimensional materials. The conference started addressing the one-dimensional nanotubes, and it naturally evolved to include two-dimensional systems.

The 18th Edition of the NT conference series will take place in Belo Horizonte, Brazil, from the 25th to the 30th June 2017. The venue is our University, the “Universidade Federal de Minas Gerais – UFMG”. Our scientific program will address the many different aspects of nanomaterials science, including synthesis and processing, toxicology and biomedicine, nanotube and graphene chemistry, biology and medicine, characterization and processing, theory and simulation, sensors and devices, composites, energy and environmental applications. Besides, we will offer social programs hopping that our visitors will have some flavor of our local culture.

We welcome you to Belo Horizonte and wish you a productive and memorable conference.

Sincerely,
Ado, Ariete and Marcos

COMMITTEES

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GENERAL INFORMATION

VENUE

SUNDAY, JUNE 25

Pampulha Art Museum
Address: Av. Otacílio Negrão de Lima, 16585 – Pampulha,
Belo Horizonte – MG, Brazil

2:00pm - 4:30pm	Registration
2:30pm - 4:30pm	Tutorials
4:30pm - 7:00pm	Welcome Reception

MONDAY TO THURSDAY, JUNE 26 TO 29:

CAD1 – Center for Academic Activities in Natural Sciences - UFMG
Address: Rua Prof. Baeta Viana, Belo Horizonte – MG
Federal University of Minas Gerais – UFMG
Address: Av. Pres. Antônio Carlos, 6627 - Pampulha, Belo Horizonte - MG, Brazil

TUESDAY, JUNE 27: CONFERENCE TOUR TO INHOTIM MUSEUM

11:30am - Departure from CAD1 – UFMG to Inhotim.

4:30pm – transfer from Inhotim to Xapuri Restaurant

6:30pm - Banquet: Xapuri Restaurant

10:30pm - Departure from Xapuri Restaurant to the hotels

FRIDAY, JUNE 30 - SATELLITE SYMPOSIA

The Engineering School, Federal University of Minas Gerais - UFMG
Address: Av. Presidente Antônio Carlos, 6627 - Pampulha, Belo Horizonte - MG, Brazil

LUNCH: Luch will be served in the restaurant at the UFMG Services square (*Praça de Serviços*).
The tickets you received with your badge must be presented at the Restaurant

SECRETARIAT:

Secretary will be open daily from 8 am to 7 pm for assistance and information.

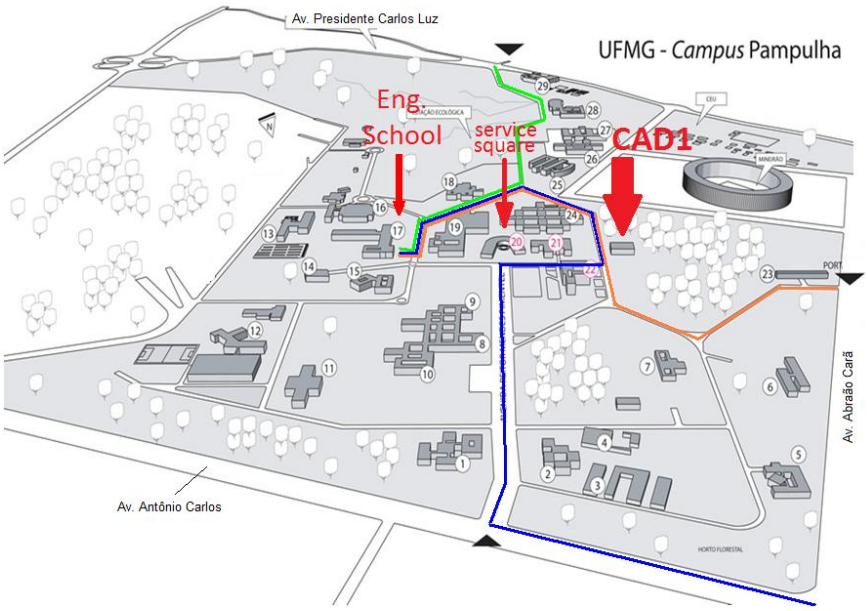
CERTIFICATES:

Certificates will be available online, through the *conftool* system, which can be accessed via our nt17.org web site after the 30th June 2017

WI-FI

Wi-Fi will be available inside the conference room.
Network name: nt17
Password: bheh10!

UFMG Map



Main NT17 conference: CAD1

Satellite symposia: Eng. School

Lunch: Service square

CONFERENCE ACTIVITIES SCHEDULE

	Sun 25/June	Mon 26/June	Tue 27 June	Wed 28/June	Thu 29/June	Fri 30/June
08:00 – 08:45		Registration				
08:45 – 09:00		Opening	Registration	Registration	Registration	
09:00 – 09:15		Keynote M.S.ARNOLD	Keynote A.SIRIA	Keynote S.K.DOORN	Keynote M.C.HERSAN	
09:15 – 09:30						
09:30 – 09:45						
09:45 – 10:00		Invited E.JOSELEVICH	Invited V.MEUNIER	Invited S.REICH	Invited Q.CAO	
10:00 – 10:15						
10:15 – 10:30		Invited K.SUENAGA	Invited B.YACOBSON	Invited L.G.CANÇADO	Invited K.MATSUDA	
10:30 – 10:45						
10:45 – 11:00		**Coffee Break & Exhibition**	A.Latgé	Poster Sum.B R.KRUPKE	Poster Sum.D E. KAUPPINEN	
11:00 – 11:15			N.T.Hung			
11:15 – 11:30		Invited R.KITAURA	**Coffee Break & Exhibition**	**Poster Session B** Characterization and Processing	**Poster Session D** Sensor/Device Composite Energy and Environ. Apps.	At the Engineering School
11:30 – 11:45						
11:45 – 12:00		A.Zarbin	**Lunch box & Conference Tour**			
12:00 – 12:15		L. Zhang				
12:15 – 12:30		Esconjauregui		**Coffee Break & Exhibition**	**Coffee Break & Exhibition**	
12:30 – 12:45		T.S. Gspann				
12:45 – 14:30		**Lunch**		**Lunch**	**Lunch**	**Satellite Meetings**
	14:00					
14:30 – 14:45	Tutorials at the Pampulha Art Museum	Keynote H-M. CHENG		Invited J.S.LAURET	Invited K.HATA	
14:45 – 15:00						
15:00 – 15:15				P.Venezuela	F.Pyatkov	
15:15 – 15:30		G. G. Silva	*For those who are not attending the conference tour, Horiba is offering the* ***Horiba Fluorescence School*** *(check our webpage)*	G.Argentero	Y. Ohno	
15:30 – 15:45		J.C.Chacon		B.R.Carvalho	V.Jourdain	
15:45 – 16:00		V. Carozo		Yan Li	Y.Zhang	
16:00 – 16:15		Poster Sum. A Yan Li		Poster Sum. C C.BICHARA	**Coffee Break & Exhibition**	
16:15 – 16:30						
16:30 – 16:45	Welcome reception at the Pampulha Art Museum (ending 7pm)	**Poster Session A** Synth/Process Toxicol/Biomed Nanot/Graph Chem/Bio/Med		**Poster Session C** Theory and Simulation	Invited Z.SUN	
16:45 – 17:00						
17:00 – 17:15					T.Livneh	
17:15 – 17:30					C.Zamora	
17:30 – 17:45		**Coffee Break & Exhibition**		**Coffee Break & Exhibition**	U.J.Kim	
17:45 – 18:00					Thanks Millie	
18:00 – 18:15		Enjoy the evening	Banquet	Enjoy the evening		
18:30 –					Poster Award, NT18, Closing	

NT17 PROGRAM

SUNDAY, 25/JUN/2017	
Location: **Pampulha Art Museum**	
2:00pm - 4:30pm	Registration
2:30pm - 3:30pm	Tutorial – Theory, **R.B. Capaz**
3:30pm – 4:30pm	Tutorial – Characterization, **C. Fantini**
4:30pm - 7:00pm	Welcome reception
MONDAY, 26/JUN/2017	
Location: **CAD1 (UFMG) - Lobby**	
8:00am - 8:45am	Registration
Location: **CAD1 (UFMG) - Noble Auditorium** Chair: **M. Maruyama**	
8:45am - 9:00am	Opening
9:00am - 9:45am	KN 1: **Michael S. Arnold** SEMICONDUCTING CARBON NANOTUBE AND NANORIBBON ARRAYS FOR ELECTRONICS
9:45am - 10:15am	INV 1**: Ernesto Joselevich** COILING AND TWISTING NANOTUBES
10:15am - 10:45am	INV 2: **Kasutomo Suenaga** ATOMIC RESOLUTION ANALYSIS AND LOCAL PROPERTY MEASUREMENTS OF LOW-DIMENSIONAL STRUCTURES IN ELECTRON MICROSCOPE
Location: **CAD1 (UFMG) - Lobby**	
10:45am - 11:15am	Coffee Break & Exhibition
Location: **CAD1 (UFMG) - Noble Auditorium** Chair: **M. Terrones**	
11:15am - 11:45am	INV 3: **Ryo Kitaura** TRANSITION METAL DICHALCOGENIDES BASED VAN DER WAALS HETEROSTACKS: FABRICATION AND PROPERTIES
11:45am - 12:00pm	ORAL 1: ARBON NANOSTRUCTURES (NANOTUBES AND GRAPHENE)-BASED NANOCOMPOSITE THIN FILMS FOR ADVANCED MULTIPURPOSE APPLICATIONS Authors: **Aldo J.G. Zarbin**, Samantha Husmann, Marcela M. Oliveira, Leandro Hostert1mailto, Elisa S. Orth
12:00pm - 12:15pm	ORAL 2: IN-SITU ETEM STUDY OF NUCLEATION AND GROWTH TERMINATION MECHANISM OF SINGLE-WALL CARBON NANOTUBES Authors: **Lili Zhang**, Jens Kling, Maoshuai He, Thomas W. Hansen, Hua Jiang, Esko I. Kauppinen, Jakob B. Wagner
12:15pm - 12:30pm	ORAL 3: LOW TEMPERATURE GROWTH OF CARBON NANOTUBE FORESTS WITH ENRICHED CHIRALITY Author: **Santiago Esconjauregui**

12:30pm -12:45pm	ORAL 4: ULTRA-HIGH LONG GAUGE LENGTH THERMAL CONDUCTIVITIES OF CARBON NANOTUBE FIBRES AND THEIR DEPENDENCE ON MORPHOLOGY Authors: **Thurid S. Gspann**, Stefan Juckes, John Niven, Michael Johnson, James Elliott, Mary Anne White Alan H. Windle
Location: **Service square (UFMG)**	
12:45pm - 2:30pm	Lunch
Location: **CAD1 (UFMG) - Noble Auditorium** Chair: **A. Zarbin**	
2:30pm - 3:15pm	KN 2: **Hui-Ming Cheng** GROWTH OF HIGH-QUALITY GRAPHENE AND OTHER 2D MATERIALS BY CVD
3:15pm - 3:30pm	ORAL 5: THREE-DIMENSIONAL HYBRIDS BASED ON CARBON NANOTUBE AND 2D-LAYERED MATERIALS FOR ELECTRODES OF SUPERCAPACITORS Authors: Ryota Koizumi, Ana Paula P. Alves, Yang Yang, Chandra S. Tiwary, Robert Vajtai, Sehmus Ozden, Pulickel M. Ajayan, **Glaura G. Silva**
3:30pm - 3:45pm	ORAL 6: FUNCTIONALIZATION, AND SELECTIVE DIAMETER DOPING OF SINGLE-WALLED CARBON NANOTUBES Authors: **Julio Cesar Chacón Torres**, Claudia Kröckel, Stephanie Reich, Frank Hauke, Thomas Pichler, Andreas Hirsh
3:45pm - 4:00pm	ORAL 7: OPTICAL IDENTIFICATION OF SULFUR VACANCIES Authors: **Victor Carozo**, Yuanxi Wang, Kazunori Fujisawa, Bruno Carvalho, Vincent Crespi, Mauricio Terrones
4:00pm - 4:30pm	POSTER SUMMARY A: **Yan Li** SYNTHESIS AND PROCESSING - TOXICOLOGY AND BIOMEDICAL APPLICATIONS - NANOTUBE/ GRAPHENE CHEMISTRY & BIOLOGY & MEDICINE
Location: **CAD1 (UFMG) - Lobby**	
4:30pm - 6:00pm	Coffee Break & Exhibition POSTER SESSION A - SYNTHESIS AND PROCESSING - TOXICOLOGY AND BIOMEDICAL APPLICATIONS - NANOTUBE/ GRAPHENE CHEMISTRY & BIOLOGY & MEDICINE
TUESDAY, 27/JUN/2017	
Location: **CAD1 (UFMG) - Lobby**	
8:45am - 9:00am	Registration
Location: **CAD1 (UFMG) - Noble Auditorium** Chair: **R.W. Nunes**	
9:00am - 9:45am	KN 3: **Alessandro Siria** FLUIDICS AND MECHANICS WITH INDIVIDUAL NANOTUBES

9:45am - 10:15am	INV 4: **Vincent Meunier** PROPERTIES OF FUNCTIONAL 3D GYROIDAL CARBON NANOSTRUCTURES
110:15am - 10:45am	INV 5**: Boris Yakobson** LOW-DIMENSIONAL CARBON, THEORY OF GROWTH: NANOTUBES, CARBYNE
10:45am - 11:00am	ORAL 8: ENHANCEMENT OF THE RASHBA SPIN-POLARIZED CURRENTS IN CARBON NANOTUBES BY LOCALIZED DEFECTS Authors: **Andrea Latge**, Hernan Santos, Jose Alvarellos, Leonor Chico
11:00am - 11:15am	ORAL 9: SIZE EFFECT IN THERMOELECTRIC PERFORMANCE OF CARBON NANOTUBES AND OTHER LOW-DIMENSIONAL SEMICONDUCTORS Authors: **Nguyen T.Hung**, Ahmad R.T. Nugraha, Riichiro Saito
Location: **CAD1 (UFMG) - Lobby**	
11:15am - 11:45am	Coffee Break & Exhibition
Location: **Inhotim**	
11:45am - 6:00pm	Lunch box & Conference Tour
6:30pm - 10:30pm	Banquet
WEDNESDAY, 28/JUN/2017	
Location: **CAD1 (UFMG) - Lobby**	
8:45am - 9:00am	Registration
Location: **CAD1 (UFMG) - Noble Auditorium** Chair: **L.M. Malard**	
9:00am - 9:45am	KN 4: **Stephen K. Doorn** COVALENT DEFECT STATES IN CARBON NANOTUBES: PHOTOPHYSICS AND EMERGING FUNCTIONALITY
9:45am - 10:15am	INV 6: **Stephanie Reich** PRESERVING PI-CONJUGATION IN COVALENTLY FUNCTIONALIZED SINGLE-WALLED CARBON NANOTUBES Authors: Antonio Setaro, Mohsen Adeli, Mareen Glaeske, Daniel Przyrembel, Timo Bisswanger, Georgy Gordeev, Frederica Maschietto, Abbas Faghani, Beate Paulus, Martin Weinelt, Raul Arenal, Rainer Haag, **Stephanie Reich**
10:15am - 10:45am	INV 7: **Luiz Gustavo Cançado** PRESSURE-INDUCED FORMATION OF TWO-DIMENSIONAL DIAMOND FROM GRAPHENE LAYERS: A RAMAN SPECTROSCOPY EVIDENCE FOR THE DIAMONDENE
10:45am - 11:15am	POSTER SUMMARY B: **Ralph Krupke** CHARACTERIZATION AND PROCESSING
Location: **CAD1 (UFMG) - Lobby**	
11:15am - 12:45pm	Coffee Break & Exhibition POSTER SESSION B**:**CHARACTERIZATION AND PROCESSING

Location: **Service square (UFMG)**	
12:45pm - 2:30pm	Lunch
Location: **CAD1 (UFMG) - Noble Auditorium** Chair: **E. Anglaret**	
2:30pm - 3:00pm	INV 8: **Jean-Sebastien Lauret** OPTICAL INVESTIGATION OF CARBON NANOTUBES/ CHROMOPHORES HYBRIDS Authors: Geraud Delport, Fabien Vialla, Lucile Orcin-Chaix, Stéphane Campidelli, Christophe Voisin, **Jean-Sebastien Lauret**
3:00pm - 3:15pm	ORAL 10: THE DOUBLE-RESONANCE RAMAN SPECTRA IN SINGLE-CHIRALITY (N, M) CARBON NANOTUBES Authors: Luciano G Moura, Marcus V O Moutinho, **Pedro Venezuela**, Francesco Mauri, Ariete Righi, Michael S Strano, Cristiano Fantini, Marcos A Pimenta
3:15pm - 3:30pm	ORAL 11: SYNTHESIS AND CHARACTERIZATION OF TWO-DIMENSIONAL AMORPHOUS CARBON FILMS Authors: **Giacomo Argentero**, Franz Eder, Viera Skakalova, Bernhard Bayer, Jani Kotakoski, Jannik Meyer
3:30pm - 3:45pm	ORAL 12: RESONANCE RAMAN SCATTERING IN 2D MOS2: UNVEILING THE INTERVALLEY SCATTERING BY ACOUSTIC PHONONS Authors: **Bruno R. Carvalho**, Yuanxi Wang, Sandro Mignuzzi, Debdulal Roy, Mauricio Terrones, Cristiano Fantini, Vincent H. Crespi, Leandro M. Malard, Marcos A. Pimenta
3:45pm - 4:00pm	ORAL 13: CHIRALITY ASSIGNMENT AND QUANTIFICATION FOR SELECTIVE GROWTH OF SINGLE-WALLED CARBON NANOTUBES Author: **Yan Li**
4:00pm - 4:30pm	POSTER SUMMARY C: **Christophe Bichara** THEORY AND SIMULATION - VAN DER WAALS HETEROSTRUCTURES - NON-CARBON MATERIALS
Location: **CAD1 (UFMG) - Lobby**	
4:30pm - 6:00pm	Coffee Break & Exhibition POSTER SESSION C: THEORY AND SIMULATION - VAN DER WAALS HETEROSTRUCTURES - NON-CARBON MATERIALS
THURSDAY, 29/JUN/2017	
Location: **CAD1 (UFMG) - Lobby**	
8:45am - 9:00am	Registration
Location: **CAD1 (UFMG) - Noble Auditorium** Chair: **T. Pichler**	
9:00am - 9:45am	KN 5: **Mark C. Hersam** EMERGING SECURITY APPLICATIONS FOR CARBON NANOTUBE THIN-FILM COMPLEMENTARY CIRCUITS

9:45am - 10:15am	INV 9: **Qing Cao** CARBON NANOTUBE FOR EXTREMELY SCALED LOGIC TRANSISTORS TO THE END OF THE TECHNOLOGY ROADMAP
10:15am-10:45am	INV10: **Kazunari Matsuda** NOVEL OPTICAL PHENOMENA OF NANO-CARBON AND ATOMICALLY THIN TWO-DIMENSIONAL MATERIALS
10:45am-11:15am	POSTER SUMMARY D **- Esko Kauppinen** SENSORS AND DEVICES - COMPOSITES - ENERGY AND ENVIRONMENTAL APPLICATIONS
Location: **CAD1 (UFMG) - Lobby**	
11:15am-12:45pm	Coffee Break & Exhibition POSTER SESSION D: SENSORS AND DEVICES - COMPOSITES - ENERGY AND ENVIRONMENTAL APPLICATIONS
Location: **Service square (UFMG)**	
12:45pm - 2:30pm	Lunch
Location: **CAD1 (UFMG) – Noble Auditorium** Chair: **R.G. Lacerda**	
2:30pm - 3:00pm	INV 11: **Kenji Hata**
3:00pm - 3:15pm	ORAL 14**:** WAVEGUIDE INTEGRATED ELECTRICALLY DRIVEN CARBON NANOTUBE LIGHT SOURCES Authors: **Felix Pyatkov**, Ralph Krupke
3:15pm - 3:30pm	ORAL 15: SELECTIVE DETECTION OF NEUROTRANSMITTERS BY ADSORPTION VOLTAMMETRY WITH CARBON NANOTUBE THIN FILM Authors: Takuya Ushiyama, Shigeru Kishimoto, **Yutaka Ohno**
3:30pm - 3:45pm	ORAL 16: VOLTAGE-ACTIVATED IONIC TRANSPORT THROUGH SINGLE-WALLED CARBON NANOTUBES Authors: Khadija Yazda, Saïd Tahir, Thierry Michel, Bastien Loubet, Manoel Manghi, Jeremy Bentin, Fabien Picaud, John Palmeri, François Henn, **Vincent Jourdain**
3:45pm - 4:00pm	ORAL 17: CARBON MATERIALS FOR WEARABLE ELECTRONICS Author: **Yingying Zhang**
Location: **CAD1 (UFMG) - Lobby**	
4:00pm - 4:30pm	Coffee Break & Exhibition
Location: **CAD1 (UFMG) – Noble Auditorium** Chair: **O. Yaffe**	
4:30pm - 5:00pm	INV 12: **Zhipei Sun** NANOSCALE NONLINEAR OPTICS WITH NANOTUBES AND LOW-DIMENSIONAL MATERIALS
5:00pm - 5:15pm	ORAL 18: HIGH PRESSURE AND LOW TEMPERATURE RAMAN SCATTERING IN INORGANIC FULLERENES OF MOS2 Authors: **Tsachi Livneh**, Eran Sterer, Rita Rosentsveig

5:15pm - 5:30pm	ORAL 19: LARGE SCALE CONDUCTIVE FILMS AND PATTERNS BASED ON CARBON NANOTUBES AND GRAPHENE LIQUID CRYSTALS Authros: **Camilo ZAMORA-LEDEZMA**, Fernando TORRES-CANAS, Cécile ZAKRI, Christophe BLANC, Eric ANGLARET, Philippe POULIN
5:30pm - 5:45pm	ORAL 20: OPTICAL GAIN IN MOS2 VIA COUPLING WITH NANOSTRUCTURED SUBSTRATE: FABRY-PEROT INTERFERENCE AND PLASMONIC EXCITATIONS Authors: **Un Jeong Kim**, Hye Yun Jeong, Yeonsang Park, Young Hee Lee, Young-Geun Roh, Sung Woo Hwang, Gang Hee Han, Hyun Kim, Youngjo Jin
5:45pm - 6:15pm	*Thanks Millie!*
6:15pm - 7:00pm	Poster Award, NT18 Announcement & Closing Ceremony

Poster Session A

SYNTHESIS AND PROCESSING - TOXICOLOGY AND BIOMEDICAL APPLICATIONS - NANOTUBE/GRAPHENE CHEMISTRY, BIOLOGY & MEDICINE

MONDAY, 26/JUN/2017

Location: **CAD 1(UFMG) – Lobby**
Time: **4:30pm - 6:00pm**

Poster number	Presentation
A.1	BEHAVIOR OF MONO- AND BI-METALLIC CATALYST IN CVD SYNTHESIS OF SWNTS REVEALED BY IN-PLANE TEM - Rong Xiang, Shigeo Maruyama the University of Tokyo, Japan; xiangrong@photon.t.u-tokyo.ac.jp
A.2	CARBON NANOMATERIALS FUNCTIONALIZED VIA UGI 4-COMPONENT REACTION (UGI-4CR) - Cristiano Rodrigo Bohn Rhoden[1], Ivana Zanella da Silva[2], Solange Binotto Fagan[3], Sergio Roberto mortari[4] [1]Centro Universitário Franciscano, Brazil; [2]Centro Universitário Franciscano, Brazil; [3]Centro Universitário Franciscano, Brazil; [4]Centro Universitário Franciscano, Brazil; cristianorbr@gmail.com
A.3	CVD GRAPHENE TRANSFER BY A COMBINATION OF ELECTROCHEMICAL ETCH AND DRY TRANSFER TECHNIQUE - Tiago Barros Cardoso,Leonel Muniz Meireles,Rodrigo Gribel Lacerda,Thiago Cunha UFMG, Brazil; tadbc@hotmail.com
A.4	EASY AND DIRECT GENERATION OF MAGNETIC GRAPHENE OXIDE - Cristiano Rodrigo Bohn Rhoden[1], Luis Otavio de Souza Bulhoes[2], Sergio Roberto Mortari[3] [1]Centro Universitário Franciscano, Brazil; [2]Centro Universitário Franciscano, Brazil; [3]Centro Universitário Franciscano, Brazil; cristianorbr@gmail.com
A.5	EVALUATION OF THERMOPHYSICAL AND RHEOLOGICAL PROPERTIES OF CARBON NANOTUBE BASED NANOFLUIDS - Leonardo Mitre[1,2], Paula Rocha Lima Costa[1], Thaís Las Casas Ferreira Araújo[1], Denise das Mercês Camarano[1], Vinícius Mateó e Melo[2], Clascídia Aparecida Furtado[1], Adelina Pinheiro Santos[1] [1]CDTN, Brazil;[2]PUCMinas-Chemical Eng.Department; leomitre@gmail.com
A.6	GAS-PHASE ETCHING OF CARBON NANOTUBES: KINETICS, THERMODYNAMICS AND BEYOND - Qiuchen Zhao[1], Zequn Wang[1], Fengrui Yao[2], Kaihui Liu[2], Jin Zhang[1] [1]Center for Nanochemistry, College of Chemistry and MolecularEngineering, Peking University, Beijing, 100871,P.R. China.; [2]School of Physics, Peking University, Beijing, 100871,P.R. China.; zhaoqc-cnc@pku.edu.cn
A.7	GROWTH OF ALIGNED BUNDLES OF CARBON NANOTUBES ON ALUMINUM FLAKES - Thiago Henrique R. da Cunha[1,2], Ícaro Leandro Martins[1,2], Sérgio Oliveira[1,2], Rodrigo Gribe l Lacerda[1,2], Luís Orlando Ladeira[1,2], André Santarosa Ferlauto[1,2] [1]CTNanotubos, Brazil; [2]UFMG, Brazil; thiagocunha@ctnanotubos.com.br
A.8	HEXAVALENT CHROMIUM ADSORPTION ON GRAPHENE OXIDE DECORATED WITH NIFE2O4 - Bibiana Culao Lopes, Luis Otávio Bulhões, Sergio Roberto Mortari Ciências Tecnológicas, UNIFRA, Brazil; mortari@unifra.br

A.9	MECHANISM OF GROWTH OF SINGLE-WALLED CARBON NANOTUBES WITH SPECIFIC CHIRALITY ON DESIGNED SOLID CATALYSTS - Shuchen Zhang, Jin Zhang Center for Nanochemistry, College of Chemistry and MolecularEngineering, Peking University, China, People's Republic of; zhangsc-cnc@pku.edu.cn
A.10	NEW ONE-STEP IN SITU TECHNIQUE OF THE NANOTUBE AEROGEL PRODUCTION - Dmitry V. Krasnikov[1,2], Vladimir L. Kuznetsov[1,2], Maria A. Kazakova[1,2], Sergei I. Moseenkov[2], Anatoly I. Romanenko[3], Valentin I. Suslyaev[4], Igor O. Dorofeev[4], Galina A. Kovalenko[1,2] [1]Novosibirsk State University, Novosibirsk, Russia; [2]Boreskov Institute of Catalysis, Novosibirsk, Russia; [3]Nikolaev Institute of Inorganic Chemistry, Novosibirsk, Russia; [4]National Tomsk State University, Tomsk, Russia; dk@catalysis.ru
A.11	NITROGEN DOPED CARBON NANOTUBE SPONGE-TYPE SYNTHESIZED WITH ISOPROPANOL SOLUTIONS IN THE AACVD METHOD - Alejandro Javier Cortés-López, Florentino López-Urías, Emilio Muñoz-Sandoval Instituto Potosino de Investigación Científica y Tecnológica, A.C., México; alejandro.cortes@ipicyt.edu.mx
A.12	NOPO HIPCO SWCNT PROCESS DEVELOPMENT - Gadhadar Changalaraya Reddy, Dr.Robert Kelley Bradley NoPo Nanotechnologies (I) Private Limited, India; gadhadar@nopo.in
A.13	NOVEL TERNARY NANOCOMPOSITES BASED IN GRAPHENE, POLYTHIOPHENE AND MANGANESE DIOXIDE TO ENERGY STORAGE - Josue Marciano de Oliveira Cremonezzi, Sergio Humberto Domingues Mackgraphe - Graphene and Nanomaterials Research Center - Mackenzie Presbyterian University; josuecremonezzi@hotmail.com
A.14	PEPTOID-MODIFIED FULLERENES AND THEIR APPLICATIONS - Bruno Brisolla Ravanello[1], Oscar Endrigo Dorneles Rodrigues[2], Marco Antonio Villetti[2], Bernhard Westermann[1] [1]Leibniz-Institut für Pflanzenbiochemie, Halle (Saale), Germany; [2]Universidade Federal de Santa Maria, Santa Maria, Rio Grande do Sul, Brazil; bruno.brisollaravanello@ipb-halle.de
A.15	PLASMA ASSISTED CHEMICAL VAPOR DEPOSITION OF GRAPHENE ON COPPER SUBSTRATES - Ramon R Leite[1,2], Thiago H R da Cunha[1,2], Andre S Ferlauto[1,2] [1]Physics Departament, UFMG, Brazil; [2]CTNanotubos, UFMG, Brazil; ramon.rleite@hotmail.com
A.16	PROPERTIES OF CONFINED CNTS IN MESOPOROUS ALUMINA - Julieta Carballo[1], Federico Ribetto[1], Maximiliano Merlo[2], Marcos Daniel Vozer Felisberto[3], Cesar Barbero[4], Noelia Bajales[2] [1]Grupo de Nanomateriales - Nanomat, Departamento de Física, FCEFQyN, Universidad Nacional de Río Cuarto, Río Cuarto, Córdoba, Argentina; [2]Instituto de Física Enrique Gaviola - IFEG - CONICET, FaMAF, Universidad Nacional de Córdoba, Córdoba, Argentina; [3]CTNano - Centro de Tecnologia em Nanomateriais,Belo Horizonte, Minas Gerais, Brazil; [4]Departamento de Química, FCEFQyN, Universidad Nacional de Río Cuarto, Río Cuarto, Córdoba, Argentina; felisberto@ctnanotubos.com.br

A.17	SCALABLE SYNTHESIS OF CHIRALITY-CONSISTENT ULTRALONG CARBON NANOTUBE TANGLES - Zhenxing Zhu[1], Nan Wei[2], Huanhuan Xie[1], Yunxiang Bai[1], Lianmao Peng[2], Fei Wei[1] [1]Beijing Key Laboratory of Green Chemical Reaction Engineering and Technology, Department of Chemical Engineering, Tsinghua University, Beijing 100084, China; [2]Key Laboratory for the Physics and Chemistry of Nanodevices, Peking University, Beijing 100871, China; zhenxing1013hg@163.com
A.18	SELF-ASSEMBLY OF COMPLEX CARBON NANOFIBERS INTO NITROGEN DOPED CARBON MICROBELTS VIA CHEMICAL VAPOR DEPOSITION - Juan Luis Fajardo Diaz, Alejandro Cortés López, Florentino López Urías, Emilio Muñoz Sandoval Instituto Potosino de Investigación Científica y Tecnológica, Mexico; juan.fajardo@ipicyt.edu.mx
A.19	SWNTS GROWTH FROM VARIOUS BI-METALLIC CATALYST NANOPARTICLES - Salome Forel[1], Alice Castan[2,3], Laure Catala[2], Ileana Florea[1], Frederic Fossard[3], Fatima Bouanis[1], Amandine Andrieux[3], Tallal Mallah[2], Vincent Huc[2], Annick Loiseau[3], Costel-Sorin Cojocaru[1] [1]Ecole Polytechnique, France; [2]Univ. Paris Sud, France; [3]Onera, France; salome.forel@polytechnique.edu
A.20	SYNTHESIS AND CHARACTERIZATION OF CARBON NANOTUBES SYNTHETIZED BY CVD METHOD AND SUPPORTED IN NANOSTRUCTURED SOL-GEL SIO2 TO BE APPLIED IN CEMENTITIOUS MATERIALS - Tarcizo Cruz Souza[1], Amanda Brasil[2], José Marcio Calixto[1,2], Luiz Orlando Ladeira[1,3], Manuel houmard[2] [1]CTNano, Brazil; [2]Engineering School - UFMG, Brazil; [3]Physics - ICEX, Brazil; tarcizocruz@ctnanotubos.com.br
A.21	SYNTHESIS AND CHARACTERIZATION OF TIO2/CARBON NANOSPHERE COMPOSITES - Raira Cunha[1], Patricia B. Martelli[1], Clascidia A. Furtato[2], Adelina P. Santos[2], H. F. Gorgulho[1] [1]Departamento de Ciências Naturais - UFSJ; [2]Centro de Desenvolvimento da Tecnologia Nuclear - CDTN; rahcunha@hotmail.com
A.22	SYNTHESIS AND TRIBOLOGICAL EVALUATION OF CARBON NANOMATERIALS DISPERSIONS IN VEGETABLE OIL - Flávia Gonçalves Pacheco[1], Henara Lillian Costa[2], José Daniel Biasolli Mello[2], Márcia Marie Maru[3], Adelina Pinheiro Santos[1], Clascídia Aparecida Furtado[1] [1]Centro de Desenvolvimento da Tecnologia Nuclear, Brazil; [2]Laboratório de Tribologia e Materiais, Universidade Federal de Uberlândia, Uberlândia, Brazil; [3]Materials Metrology Division, INMETRO, Duque de Caxias, Brazil; flavia_pac@yahoo.com.br
A.23	UNVEILING THE EVOLUTIONS OF NANOTUBE DIAMETER DISTRIBUTION DURING THE GROWTH OF SINGLE-WALLED CARBON NANOTUBES - Hugo Navas[1], Matthieu Picher[1], Amandine Andrieux-Ledier[2], Frédéric Fossard[2], Thierry Michel[1], Akinari Kozawa[3], Takahiro Maruyama[3], Eric Anglaret[1], Annick Loiseau[2], Vincent Jourdain[1] [1]Université de Montpellier, Montpellier, France; [2]Laboratoire d'étude des microstructures, CNRS-ONERA, Châtillon, France; [3]Meijo University, Nagoya, Japan; vincent.jourdain@umontpellier.fr

A.24	EVALUATION OF BIOLOGICAL EFFECTS OF OXIDIZED MULTI-WALLED CARBON NANOTUBES/CHITOSAN HYBRIDS - Estefânia Mara do Nascimento Martins[1], Patrícia Baptista Ramos[2], Thayanna Furtado Teixeira[1], José Maria Monserrat[2], Ester Figueiredo de Oliveira[1], Clascídia Aparecida Furtado[1], Adelina Pinheiro Santos[1] [1]Centro de Desenvolvimento da Tecnologia Nuclear – CDTN/CNEN, Belo Horizonte, MG, Brazil; [2]Programa de Pós-graduação em Fisiologia Animal Comparada, Instituto de Ciências Biológicas, Universidade Federal do Rio Grande – FURG, Rio Grande, RS, Brazil; estefaniamartinsbio@gmail.com
A.25	PEGYLATED SINGLE-WALLED CARBON NANOTUBES IN CENTRAL NERVOUS SYSTEM - Gisele Eva Bruch[1], Lidiane Dal Bosco[2], Arthur Poester Cordeiro[1], Sangram Sahoo[3], Marcos Cordeiro[1], Cristiano Fantini[3], Adelina Pinheiro Santos[4], Daniela Martí Barros[1] [1]Universidade Federal do Rio Grande, Brazil; [2]Universidade Federal do Pampa (UNIPAMPA), Brazil; [3]Universidade Federal de Minas Gerais, Brazil; [4]Centro de Desenvolvimento da Tecnologia Nuclear (CDTN), Brazil; giseleweber@zebrafish.com.br
A.26	TOXIC EFFECTS OF THE EXPOSURE OF SINGLE-WALLED CARBON NANOTUBES FUNCTIONALIZED WITH POLYETHYLENE GLYCOL TO ZEBRAFISH EMBRYOS - Marcos Freitas Cordeiro[1], Felipe Antonio Girardi[2], Gisele Eva Bruch[1], Carolina da Silva Peixoto[1], Lidiane Dal Bosco[3], Sangram Keshari Sahoo[4], Carla Onara Ferreira Gonçalves[4], Adelina Pinheiro Santos[4], Clascídia Aparecida Furtado[5], Cristiano Leite Fantini[4], Daniela Martí Barros[1] [1]Programa de Pós Graduação em Ciências Fisiológicas (PPGCF), Universidade Federal do Rio Grande (FURG), Rio Grande, RS, Brazil; [2]Programa de Residência Multiprofissional em Atenção ao Câncer, Universidade de Passo Fundo (UPF), Passo Fundo, RS, Brazil; [3]Universidade Federal do Pampa (UNIPAMPA), Uruguaiana, RS, Brazil; [4]Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, MG, Brazil; [5]Centro de Desenvolvimento de Tecnologia Nuclear (CDTN), Belo Horizonte, MG, Brazil; mfcordeiro@furg.br
A.27	BLACK PHOSPHORENE AND PHOSPHORUS NANORIBBON INTERACTING WITH AMINO ACIDS: AN AB INITIO APPROACH - Ivi Valentini Lara[1,2,3], Antônio Gomes Souza Filho[2], Solange Binotto Fagan[3] [1]PUCRS, Brazil; [2]UFC, Brazil; [3]UNIFRA, Brazil; ivilara@gmail.com
A.28	COMPOSITE BASED IN GRAPHENE OXIDE AND HYDROXYAPATITE FOR USE IN BONE AND DENTAL TISSUES ENGINEERING - Erick de Souza Ávila[1,2], Reká Barabás[2], Vania Raquel de Souza Ker[1], Luiz Orlando Ladeira[1], Loudiana Mosqueira Antônio[1], Lídia Maria de Andrade[1] [1]UFMG, Brazil; [2]University of Babes-Bolyai, Romania; erickavila@gmail.com
A.29	DEVELOPMENT OF A GRAPHENE BIOSESENSOR BASED ON FIELD-EFFECT TRANSISTOR FOR MOLECULAR MARKERS AND ENZYMATIC REACTIONS - Paulo Alexandre Alves de Almeida Neves[1], Leonel Muniz Meireles[2], Leonardo Campos[2], Rodrigo Gribel Lacerda[2], Eliane Novato Silva[1], Paulo Sérgio Lacerda Beirão[1] [1]Departamento de Bioquímica e Imunologia, UFMG; [2]Departamento de Física, UFMG; pauloalmeidaneves@gmail.com
A.30	EFFECT OF VACANCIES ON THE ELECTRONIC AND OPTICAL PROPERTIES ON TWISTED BILAYER GRAPHEME - Francisco Culchac, Rodrigo Capaz Universidade Federal do Rio de Janeiro, Brazil; culchac@if.ufrj.br

A.31	EFFECT ON THE FUNCTIONALITIES OF POROUS N-DOPED MWCNTS EXPOSED AT LOW-TEMPERATURE AND LONG-TIME ANNEALING - Maria-Luisa Garcia-Betancourt[1], Florentino López-Urías[2], Emilio Muñoz Sandoval[2] [1]Universidad Autónoma del Estado de Morelos, Mexico; [2]Instituto Potosino de Investigación Científica y Tecnológica, Mexico; mluisa.garcia@uaem.mx
A.32	GRAPHENE-BASED NANOCOMPOSITE ANODE MATERIALS FOR LITHIUM ION BATTERY - Ningzhong Bao Nanjing Tech University, China, People's Republic of China; nzhbao@njtech.edu.cn
A.33	GRAPHENE-BASED SYSTEMS FOR BIOLOGICAL DELIVERY - Julio C. Silva, Raigna A. S. Z. Armond, Tome M. Schmidt Universidade Federal de Uberlandia, Brazil; juliofisi@gmail.com
A.34	NON-COVALENT FUNCTIONALIZED CARBON NANOTUBES WITH POLYETHYLENE GLYCOL AS A PLATFORM FOR BIOLOGICAL APPLICATIONS - Lívia Santos Gomides[1], Júlia Barros Gomes[1], Clascídia Aparecida Furtado[1], Rosemeire Brondi Alves[2], Adelina Pinheiro Santos[1] [1]Nuclear Technology Development Center; [2]Federal University of Minas Gerais; liviagomides@gmail.com
A.35	PROMOTION AND INVESTIGATION OF NON-COVALENT FUNCTIONALIZATION OF CARBON NANOTUBES WITH ANTITUMORAL APTAMER: PLATFORM WITH POTENTIAL FOR DIAGNOSIS OF COLORECTAL CANCER - Mariana Botelho Barbosa[1], Estefânia Mara do Nascimento Martins[1], Thayana Furtado Teixeira[1], Ester Figueiredo Oliveira[1], Clascídia Aparecida Furtado[1], Alexandre Alberto Chaves Cotta[2], Rodrigo Ribeiro Resende[3], Adelina Pinheiro Santos[1] [1]Centro de Desenvolvimento da Tecnologia Nuclear, Brazil; [2]Universidade Federal de Lavras; [3]Universidade Federal > de Minas Gerais; mary.eubotelho@gmail.com
A.36	RARE-EARTH DOPED BORON NITRIDE NANOTUBES: SYNTHESIS AND CHARACTERIZATION - Wellington Marcos da Silva, Edésia Martins Barros Sousa Centro de Desenvolvimento da Tecnologia Nuclear - CDTN, Brazil; wmarcos@ufmg.br
A.37	SPIN WAVES IN ZIGZAG NANORIBBON GRAPHENE: STRAIN AND SPIN-ORBIT EFFECT - Jorge Correa Universidade Federal Fluminense, Brazil; jorgehuamani90@gmail.com
A.38	STUDY OF METAL NANOPARTICLES ENCAPSULATED IN GRAPHITE CARBON NANORIBBONS - Oscar Morales Cruz[1], Samuel Tehuacanero Cuapa[2], Florentino López Urías[3], Emilio Muñoz Sandoval[3], Maria-Luisa Garcia-Betancourt[1] [1]CIQ-IICBA, Universidad Autónoma del Estado de Morelos, Mexico; [2]Instituto de Física, Universidad Nacional Autónoma de México, Mexico; [3]Instituto Potosino de Investigación Científica y Tecnológica, México; mluisa.garcia@uaem.mx
A.39	SYNTHESIS AND CHARACTERIZATION OF HYBRID CARBON NANOTUBE/CONDUCTING POLYMER FOR USE IN THE ACTIVE LAYER OF ORGANIC SOLAR CELLS - Hállen Daniel Rezende Calado, Luiza De L. Ferreira, Glenda R. B. S. Lacerda, Marcus H. de Araújo UFMG, Brazil; hallendaniel@yahoo.com.br

Poster Session B

CHARACTERIZATION AND PROCESSING

WEDNESDAY, 28/JUN/2017

Location: **CAD 1(UFMG) – Lobby**
Time: **11:15am - 12:45pm**

Poster number	Presentation
B.1	ABERRATION-CORRECTED TEM/ETEM-BASED RESEARCH ON SINGLE-WALLED CARBON NANOTUBES - Hua Jiang, Y. Tian, M. He, E. I. Kauppinen Aalto University School of Science, Finland; hua.jiang@aalto.fi
B.2	ANALYSIS OF CARBON NANOSTRUCTURES FOUND IN RIO NEGRO DEPOSIT AND TERRA PRETA DE INDIO - Sugandha Dogra Pandey[1], Camila Deschamps[1], Newton Falcão[2], André Prous[3], Ado Jorio[1] [1]Federal University of Minas gerais, Brazil; [2]Instituto Nacional de Pesquisas da Amazônia; [3]Seto de Arqueologia Pré-histórica, Museu de história Natural e jardim botanico da UFMG; sugandha@ufmg.br
B.3	ANISOTROPIC OPTICAL RESPONSE IN GROUP IV CHALCOGENIDE GeSe - DIEGO SILVA SANTOS[1], RAPHAEL LONGUINHOS[1], LEANDRO MALARD MOREIRA[2], THALES FERNANDES[2], BERNARDO NEVES[2], ADO JORIO VASCONCELOS[2], JENAINA RIBEIRO-SOARES[1] [1]UNIVERSIDADE FEDERAL DE LAVRAS, Brazil; [2]UNIVERSIDADE FEDERAL DE MINAS GERAIS, Brazil; diego_13824@hotmail.com
B.4	CHARACTERIZATION OF SINGLE WALLED CARBON NANOTUBE ENANTIOMERS BY RAMAN OPTICAL ACTIVITY - Martin Magg, Thomas Bürgi Universite de Geneve, Département de Chemie physique Quai Ernest-Ansermet 30, CH-1211 Genève, Switzerland; Martin.Magg@unige.ch
B.5	CHARACTERIZATION OF THE CHIRAL STRUCTURE OF SINGLE-WALLED CARBON NANOTUBES ON SUBSTRATES - Feng Yang, Daqi Zhang, Juan Yang, Yan Li Peking University, Beijing, China; fengyang@pku.edu.cn
B.6	COMPARING TEM AND RESONANT RAMAN SPECTROSCOPY FOR DIAMETER DISTRIBUTION ASSESSMENT OF A SWCNT GROWTH SAMPLE - Alice Castan[1,2], Salome Forel[2], Frédéric Fossard[3], Amandine Andrieux-Ledier[3], Costel Sorin Cojocaru[2], Vincent Huc[1], Annick Loiseau[3] [1]Institut de Chimie Moléculaire et des Matériaux d'Orsay, Orsay, France; [2]Laboratoire de Physique des Interfaces et des Couches Minces, Ecole Polytechnique, Palaiseau, France; [3]Laboratoire d'Etude des Microstructures, ONERA, Châtillon, France; alice.castan@u-psud.fr
B.7	DEVELOPMENT OF COMPOSITE ELECTROLYTE USING GO AND TRIETHYLSULFONIUM BIS (TRIFLUOROMETHYLSULFONYL) IMIDE (SET3TFSI) - Neuma das Mercês Pereira, Izabella de Freitas Monteiro, João Paulo Campos Trigueiro, Luciano Andrey Montoro, Glaura Goulart Silva Federal University of Minas Gerais, Brazil; neumampereira@gmail.com
B.8	DIAMETER-DEPENDENT EXCITATION ENERGY TRANSFER IN DYE-FILLED SINGLE-WALLED CARBON NANOTUBES - Stein Van Bezouw[1], Rachelle Ihly[2], Dylan Arias[2], Sofie Cambré[1], Jochen Campo[1], Wim Wenseleers[1], Jeffrey L. Blackburn[2] [1]University of Antwerp, Belgium; [2]National Renewable Energy Laboratory, Golden, Colorado 80401, United States; sofie.cambre@uantwerpen.be

B.9	EFFECT OF THE ORIENTATIONAL ORDER OF CNT SHEET ON THE OPTICAL PROPERTIES AND ON THE ALIGNMENT OF LIQUID CRYSTAL - MD Asiqur Rahman[1], Hakam Agha[1], Truong Thuy Kieu[2], Ji Hyun Park[1], DONGSEOK SUH[2], Giusy SCALIA[1] [1]University of Luxembourg, Luxembourg; [2]Sungkyunkwan University, South Korea; mdasiqur.rahman@uni.lu
B.10	ELECTRODEPOSITION OF DIAMOND LIKE CARBON FILMS WITH NANOCRYSTALLINE DIAMOND - Jaqueline S. Soares[1], M. A. Araújo[1], D. Nicomedes[1], T. M. O. Santos[2], S. L. Ramos[3], M. A. Pimenta[3], A. P. Barboza[1], K. R. C. Juste[2], T. M. Manhabosco[1], R. J. C. Batista[1] [1]Departamento de Física, Universidade Federal de Ouro Preto, MG, Brasil; [2]Centro de Inovação e Tecnologia SENAI FIEMG, MG, Brasil; [3]Departamento de Física, Universidade Federal de Minas Gerais, MG, Brasil; jssoares@iceb.ufop.br
B.11	EPITAXIAL GRAPHENE GROWN ON SIC(0001): ELECTRONIC AND STRUCTURAL CHARACTERIZATION - Igor de Souza Lana Antoniazzi[1], Tháis Chagas Peixoto Silva[1], Alisson Ronieri Cadore[1], Rogério Magalhães Paniago[1], João Marcelo J. Lopes[2], Myriano Henriques de Oliveira[1] [1]UFMG - Universidade Federal de Minas Gerais, Brazil; [2]Paul Drude Institute for Solid State Electronics, Germany; igorsouzalanaantoniazzi@gmail.com
B.12	EXCITON DYNAMICS IN DOPED CARBON NANOTUBES - Tobias Hertel[1], Melanie Achsnich[1], Klaus Eckstein[1], Pascal Kunkel[1], Friedrich Schoeppler[1], Larry Luer[2] [1]Julius-Maximilians University of Wuerzburg, Wuerzburg, Germany; [2]IMDEA, Madrid, Spain; tobias.hertel@uni-wuerzburg.de
B.13	HELIX STRUCTURE IN THE PHOTOELECTRON INTENSITY FROM THE DIRAC CONE OF GRAPHEME - Shin-ichiro Tanaka[1], Eike Schwier[2], Kenya Shimada[2] [1]The institute of Scientific and Industrial Research, Osaka University, Japan; [2]Hiroshima Synchrotron Radiation Center, Hiroshima University, Japan; stanaka@sanken.osaka-u.ac.jp
B.14	HIGH AMPACITY OF CVD-SPUN CARBON NANOTUBE YARNS AND THEIR FAILURE MECHANISMS - Jeronimo Terrones, Thurid S. Gspann, Adarsh Kaniyoor, James A. Elliott Department of Materials Science and Metallurgy, University of Cambridge, United Kingdom; jt451@cam.ac.uk
B.15	HOME-MADE DESIGN OF A SYRINGE PUMP FOR LIQUID FLOW IN GRAPHENE DEVICES INTEGRATED WITH MICROFLUIDIC CHANNELS - Vinícius O. DA SILVA, Leonel M. Meireles, Paulo A. A. Neves, Rodrigo G. LACERDA Physics Department, Federal University of Minas Gerais, UFMG, Belo Horizonte, MG, Brasil; v.ornelas@gmail.com
B.16	IN SITU ANALYSIS OF SP2 CARBONS UNDER EXTREME CONDITIONS USING RAMAN SPECTROSCOPY - Mohamed Ramzi ammar[1], Aurélien Canizarès[1], Thibault Labbaye[2], Shahzad Hussain[2], Eva Kovacevic[2], Chantal Boulmer-Leborgne[2], Guillaume Guimbretière[1], Nicole Raimboux[1], Jacques Poirier[1], Patrick Simon[1] [1]CEMHTI, France; [2]GREMI; mohamed-ramzi.ammar@cnrs-orleans.fr

B.17	INNER TUBE PHOTOLUMINESCENCE OF ISOLATED INDIVIDUAL FREE-STANDING INDEX-IDENTIFIED DOUBLE-WALLED CARBON NANOTUBES - Dmitry Levshov[1,2], Romain Parret[1], Huy-Nam Tran[1], Thierry Michel[1], Thi Thanh Cao[3], Van Chuc Nguyen[3], Raul Arenal[4], Valentin Popov[5], Sergei Rochal[2], Jean-Louis Sauvajol[1], Ahmed-Azmi Zahab[1], Matthieu Paillet[1] [1]Laboratoire Charles Coulomb, University of Montpellier, Place Eugène Bataillon - CC069, Montpellier, F-34095 France; [2]Southern Federal University, Rostov-on-Don, Russia; [3]Institute of Materials Science, Vietnam Academy of Science and Technology, 18 Hoang Quoc Viet, Hanoi, Vietnam; [4]Instituto de Nanociencia de Aragón, Campus Río Ebro. Edificio I+D. C/ Mariano Esquillo, CP 50.018 Zaragoza – Spain; [5]University of Sofia, Faculty of Physics, 5 James Bourchier Blvd., 1164, Sofia, Bulgaria; thierry.michel@umontpellier.fr
B.18	LARGE SCALE AUTOMATIC DATA ANALYSIS TOOLS FOR SP2 CARBON - Hudson Luiz Silva de Miranda[1], Cassiano Rabelo[1], Joao Luiz Elias Campos[2], Ado Jorio[1,2] [1]Programa de Pós-Graduação em Engenharia Elétrica, Univ. Federal de Minas Gerais; [2]Departamento de Física, Univ. Federal de Minas Gerais; hudsonmiranda291@gmail.com
B.19	LASER-ASSISTED OXIDATION OF IRON NANOPARTICLES IN SINGLE WALL CARBON NANOTUBES AND CHANGES OF OPTICAL PROPERTIES OF SWCNTS FILMS - Vsevolod Iakovlev[1], Konstantin Mikheev[2], Gennady Mikheev[2], Faat Gilmutdinov[3], Albert Nasibulin[1,4] [1]Skolkovo Institute of Science and Technology, 143026, Skolkovo, Russia; [2]Institute of Mechanics, Ural Branch of the Russian Academy of Sciences, 426067, Izhevsk, Russia; [3]Physical-Technical Institute, Ural Branch of the Russian Academy of Sciences, 426000, Izhevsk, Russia; [4]Aalto University, Department of Applide Physics, 00076 Aalto, Finland; vsevolod.iakovlev@skolkovotech.ru
B.20	MECHANICAL STUDY OF THE GRAPHENE WATER INTERACTION - Gustavo Arrighi Ferrari, Leonel Muniz Meirelez, Thales F. Damasceno Fernandes, Ive Silvestre, Bernardo R. A. Neves, Rodrigo Gribel Lacerda UFMG, Brazil; gu.fisica@gmail.com
B.21	MULTIWALL CARBON NANOTUBES FILLED WITH AL4C3: SPECTROSCOPIC SIGNATURES FOR ELECTRON-PHONON COUPLING DUE TO DOPING PROCESS - Newton Barbosa[1], Mario Edson Souza[1], Rômulo Angélica[1], Sónia Simões[2], Manuel Vieira[2], Marcos Allan Reis[1], Mildred Dresselhaus[3], Paulo Araujo[4] [1]Universidade Federal do Pará, Brazil; [2]Universidade do Porto, Portugal; [3]Massachusetts Institute of Technology, USA; [4]The University of Alabama, USA; newtonfisico@gmail.com
B.22	NANOSCALE INFRARED SPECTROSCOPY MAPPING OF CHEMICAL FUNCTIONAL GROUPS ON TWO-DIMENSIONAL SURFACES - Aravind Vijayaraghavan The University of Manchester, United Kingdom; aravind@manchester.ac.uk
B.23	ONSET OF SIZE-DEPENDENT FLEXURAL HARDENING OF 2D MATERIALS - Ana Paula Barboza[1], Helio Chacham[2], Alan Oliveira[1], Camilla Oliveira[3], Ronaldo Batista[1], Bernardo Neves[2] [1]Universidade Federal de Ouro Preto (UFOP), Brazil; [2]Universidade Federal de Minas Gerais (UFMG), Brazil; [3]Universidade Federal do Paraná (UFPR), Brazil; ana.paula@iceb.ufop.br

B.24	OPTICAL CHARACTERIZATION OF SWCNTS WITH TAILORED FUNCTIONAL SITES - Claudia Berkmann[1], Lei Shi[1], Philip Rohringer[1], Carlos Reinoso[1], Kazuhiro Yanagi[2], Thomas Pichler[1], Paola Ayala[1,3] [1]University of Vienna, Austria; [2]Tokyo Metropolitan University, Japan; [3]Yachay Tech University, Ecuador; claudia.berkmann@univie.ac.at
B.25	OPTICAL PROPERTIES OF ALPHA-SEXITHIOPHENE DYES AGGREGATED INSIDE CARBON AND BORON NITRIDE NANOTUBES - Etienne Gaufrès[1], Charlotte Allard[2], Nathalie Tang[3], Frédéric Fossard[1], Léonard Schué[1], Julien Barjon[4], Richard Martel[3], Annick Loiseau[1] [1]Laboratoire d'Etude des Microstructures UMR 104 CNRS, Onera; [2]Regroupement québécois sur les matériaux de pointe (RQMP) and Département de Physique, Université de Montréal; [3]RQMP, Département de Chimie Université de Montréal; [4]Groupe d'Etude de la Matière Condensée UMR 8635 CNRS-UVSQ; etienne.gaufres@onera.fr
B.26	PRESSURE-INDUCED AN IRREVERSIBLE CROSS-LINKING BETWEEN LINEAR CARBON CHAIN AND INNER TUBE OF DWCNT: A COMBINED EXPERIMENTAL RAMAN AND THEORETICAL STUDY - Wellington de Queiroz Neves[1,2], Rafael Silva Alencar[2], Abraão Cefas Torres Dias[2], Nádia Ferreira de Andrade[3], Yoong Ahm Kim[5], Morinobu Endo[6], D Kim[5], Acrisio Lins de Aguiar[4], Antonio Gomes Souza Filho[2] [1]Instituto Federal de Educação, Ciência e Tecnologia do Ceará – IFCE, Caucaia, Ceará, 61609-090 Brazil; [2]Departamento de Física, Universidade Federal do Ceará, Fortaleza, Ceará, 60455-900, Brazil; [3]Instituto Federal de Educação, Ciência e Tecnologia do Ceará – IFCE, Tianguá, Ceará, 62320-000 Brazil; [4]Departamento de Física, Universidade Federal do Piauí, Teresina, Piauí 64049550 Brasil; [5]School of Polymer Science and Engineering, Chonnam National University, 77 Yongbongro, Gwangju, 500-757, Korea; [6]Faculty of Engineering, Shinshu University, 4-17-1 Wakasato, Nagano-shi 380-8553, Japan; rafael_alencar@fisica.ufc.br
B.27	PRESSURE-INDUCED RADIAL COLLAPSE IN DOUBLE-WALL CARBON NANOTUBES: A COMBINED EXPERIMENTAL AND THEORETICAL STUDY - Rafael Silva Alencar[1,2], Wenwen Cui[1], Abraão Cefas Torres Dias[1,2], Tiago Frederico Teixeira Cerqueira[1,3],Silvana Botti[3,1,4],Miguel Alexandre Lopes Marques[5,1,4], Odair Pastor Ferreira[2],Christophe Laurent.[6],Alicia Weibel[6],Denis Machon[1], David J Dunstan[7],Antonio Gomes de Souza Filho[2],Alfonso San-Miguel[1] [1]Université de Lyon, F-69000 Lyon, France and Institut Lumière Matière, CNRS, UMR 5306, Université Lyon 1, F-69622 Villeurbanne; [2]Departamento de Física, Universidade Federal do Ceará, Fortaleza, Ceará, 60455-900 Brazil; [3]Institut für Festköpertheorie und optik Friedrich-Schiller, University of Jena, Max-Wien-Platz 1, 07743 Jena, Germany; [4]European Theoretical Spectroscopy Facility; [5]Institut für Physik Martin-Luther-Universität Halle-Wittenberg, D-06099 Halle, Germany; [6]CIRIMAT, Université Paul Sabatier et CNRS, Toulouse, France; [7]School of Physics and Astronomy, Queen Mary University of London, London E1 4NS, UK; rafael_alencar@fisica.ufc.br
B.28	PROBING CRYSTALLINITY OF PHOTONIC-SORTED CNT TEXTILES WITH EXTREME MAGNETIC FIELDS AND RAMAN SPECTROSCOPY - John Simmons Bulmer[1], Thurid S. Gspann[1], Francisco Orozco[1], Martin Sparkes[1], Hilmar Hilmar Koerner[2], Angelo Di Bernardo[1], Arkadiusz Niemiec[1], Agnieszka Lekawa-Raus[1], Dwight Rickel[3], Fedor Balakirev[3], Jason Robinson[1], Krzysztof Koziol[1], William O'Neill[1], James Elliott[1] [1]Cambridge University, United Kingdom; [2]Materials and Manufacturing Directorate, Air Force Research Laboratory, Wright-Patterson Air Force Base, Ohio, USA; [3]National High Magnetic Field Laboratory, Los Alamos, New Mexico 87545, USA; johnofkabul@gmail.com

B.29	PROGRESS IN UNDERSTANDING OF CARBYNES CONFINED INSIDE DOUBLE WALLED CARBON NANOTUBES - thomas pichler university of vienna, Austria; thomas.pichler@univie.ac.at
B.30	QUANTITATIVE ANALYSIS OF CIRCULAR DICHROISM OF CARBOON NANOTUBES - Riichiro Saito, Naomichi Sato, Yuki Tatsumi Department of Physics, Tohoku University, Japan; rsaito@flex.phys.tohoku.ac.jp
B.31	QUANTUM CORRELATIONS IN THE STOKES/ANTI-STOKES RAMAN SCATTERING PHOTON PAIRS - Filomeno Júnior[1], Mark Kasperczyk[2], Cassiano Rabelo[1], Georgy Gordeev[3], Stephanie Reich[3], Lukas Novotny[2], Ado Jorio[1] [1]Ferderal University of Minas Gerais (UFMG) - Brazil; [2]Photonics Laboratory, ETH Zurich - Zurich, Switzerland.; [3]Freie Universität Berlin - Berlin, Germany; fsa.juniorfisicaufv@gmail.com
B.32	QUASI PHASE TRANSITION IN A SINGLE FILE OF WATER MOLECULES ENCAPSULATED INSIDE (6,5) CARBON NANOTUBES - Sofie Cambré[1,2], Xuedan Ma[2], Wim Wenseleers[1], Stephen K. Doorn[2], Han Htoon[2] [1]University of Antwerp, Belgium; [2]Center of Integrated Nanotechnologies, Los Alamos National Laboratory, USA; sofie.cambre@uantwerpen.be
B.33	RESONANCE RAMAN SPECTROSCOPY IN TWISTED BILAYER GRAPHENE - Eliel Gomes da Silva Neto[1], Marcus V. O. Moutinho[2,3], Ariete Righi[1], Henrique B. Ribeiro[4], Chun Chien Lu[5], Kentaro Sato[6], Riichiro Saito[7], Po Wen Chiu[5], Pedro Venezuela[3], Marcos Pimenta[1] [1]UFMG, Brazil; [2]UFRJ, Brazil; [3]UFF, Brazil; [4]UPM, Brazil; [5]National Tsing Hua University, Taiwan; [6]Sendai National College of Technology, Japan; [7]Tohoku University, Japan; elielgsn@gmail.com
B.34	RESTRUCTURING OF GRAPHITE NANOBELTS UNDER FAST HIGH TEMPERATURES PROCESSING - Stanislav Moshkalev[1], Andrei Alaferdov[1], Raluca Savu[1], Mara Canesqui[1], Yakov Kopelevich[1], Robson Silva[1], Natalia Rozhkova[2], Geraldo Trindade[3], Ueverson Lima[3], Antonio Sergio Souza[3] [1]UNICAMP, Brazil; [2]KRC RAS, Russia; [3]Nacional de Grafite Ltda, Brazil; stanisla@unicamp.br
B.35	SOLVENT-DEFINED AND TEMPERATURE-OPTIMIZED OPTOELECTRONIC PERFORMANCE OF SINGLE-WALLED CARBON NANOTUBE FILMS DOPED WITH HAUCL4 - Alexey P. Tsapenko[1], Anastasia E. Goldt[1], Anton S. Anisimov[2], Albert G. Nasibulin[1,3] [1]Skolkovo Institute of Science and Technology, Nobel str. 3, 143026, Moscow, Russia; [2]Canatu Ltd., Konalankuja 5, 00390, Helsinki, Finland; [3]Aalto University, Department of Applied Physics, 00076, Aalto, Finland; alexey.tsapenko@skolkovotech.ru
B.36	STRUCTURAL, MORPHOLOGICAL AND SURFACE EVALUATION OF MWCNTS OXIDIZED BY ACID REFLUX, IN MICROWAVE OVEN, FOR DIFFERENT TIMES, FOR BIOAPPLICATIONS - Hugo Campos Souto, Mariana Botelho Barbosa, Estefânia Martins Nascimento, Adelina Pinheiro Santos, Clascídia Aparecida Furtado, Ester Figueiredo de Oliveira Centro de Desenvolvimento da Tecnologia Nuclear, Brazil; hugo.campossouto@gmail.com
B.37	THE EFFECTS OF MORPHOLOGY ON PROPERTY SCALING IN MACROSCOPIC ASSEMBLIES OF CARBON NANOTUBE FIBRES - Adarsh Kaniyoor, Thurid S. Gspann, John S. Bulmer, Jeronimo Terrones, Alan H. Windle, James A. Elliott Department of Materials Science and Metallurgy, University of Cambridge, United Kingdom; ak2011@cam.ac.uk

B.38	THERMAL AND ELECTRICAL CHARACTERIZATION OF FLEXIBLE CONDUCTING FILMS BASED ON THIN GRAPHITE NANOBELTS - Stanislav Moshkalev[1], Alfredo Vaz[1], Mara Canesqui[1], Andrei Alaferdov[1], Celso Canesqui[1], Geraldo Trindade[2], Ueverson Lima[2], Antonio Sergio Souza[2] [1]UNICAMP, Brazil; [2]Nacional de Grafite Ltda, Brazil; stanisla@unicamp.br
B.39	TIP-ENHANCED RAMAN SPECTROSCOPY CHARACTERIZATION AND NANOMANIPULATION OF GRAPHENE SAMPLES - Cassiano Rabelo[1], Thiago L. Vasconcelos[2], Luiz Gustavo Cançado[3], Emil Sandoz-Rosado[4], Ado Jorio[1,3] [1]Programa de Pós-Graduação em Engenharia Elétrica, Univ. Federal de Minas Gerais, Belo Horizonte, MG, 31270-901, Brazil; [2]Divisão de Metrologia de Materiais, Instituto Nacional de Metrologia, Qualidade e Tecnologia (INMETRO), Duque de Caxias, RJ 25250-020, Brazil; [3]Departamento de Física, Univ. Federal de Minas Gerais, Belo Horizonte, MG 31270-901, Brazil; [4]U.S. Army Research Laboratory, Aberdeen Proving Ground, 4600 Deer Creek Loop, Aberdeen, Maryland 21005, United States; cassianorabelo@ufmg.br
B.40	TUNING CARBON NANOTUBE PROPERTIES BY MOLECULAR FILLING - Wim Wenseleers[1], Jochen Campo[1,3], Sofie Cambré[1], Bea Botka[1], Wouter Van Werveke[1], Xueadan Ma[2], Stephen K. Doorn[2], Han Htoon[2], Jan Obrzut[3], Jeffrey A. Fagan[3] [1]University of Antwerp, Physics Department, Antwerp, Belgium; [2]Los Alamos National Laboratory (LANL), Materials Physics and Applications, Center for Integrated Nanotechnologies (MPA-CINT), Los Alamos, New Mexico, USA; [3]National Institute of Standards and Technology (NIST), Materials Science and Engineering Division, Gaithersburg, Maryland, USA; Wim.Wenseleers@uantwerp.be
B.41	TUNING THE NONLINEAR RESPONSE OF (6,5)-ENRICHED SINGLE-WALL CARBON NANOTUBES DISPERSIONS USING THE Z-SCAN TECHNIQUE WITH HIGH REPETITION RATE LASER - Odón S. Aréstegui[1], Elaine Cristina Silva[1], André Luís Baggio[1], Rafael Nunes Gontijo[2], Cristiano Fantini Leite[2], Jandir Miguel Hickmann[3], Marcio André Alencar[4], Eduardo Jorge Fonseca[1] [1]Universidade Federal de Alagoas, Brazil; [2]Universidade Federal de Minas Gerais, Brazil; [3]Universidade Federal do Rio Grande do Sul, Brazil; [4]Universidade Federal de Sergipe, Brazil; eduardo@fis.ufal.br
B.42	VALIDATION OF RAMAN SPECTROSCOPY FOR M- OR S-SWCNT% EVALUATION BY USING ELECTRON DIFFRACTION AS A MEANS - Ying tian, hua jiang, esko kauppinen Department of Applied Physics, aalto university, Finland; ying.tian@aal to.fi

Poster Session C

THEORY AND SIMULATION - VAN DER WAALS HETEROSTRUCTURES - NON-CARBON MATERIALS

WEDNESDAY, 28/JUN/2017

Location: **CAD 1(UFMG) – Lobby**
Time: **4:30pm - 6:00pm**

Poster number	Presentation
C.1	AN AB INITIO INVESTIGATION OF BI2SE3 TOPOLOGICAL INSULATOR DEPOSITED ON AMORPHOUS SiO2 - Igor S. S. de Oliveira[1], Wanderla L. Scopel[2], Roberto H. Miwa[3] [1]Universidade Federal de Lavras, Brazil; [2]Universidade Federal do Espírito Santo, Brazil; [3]Universidade Federal de Uberlândia, Brazil; igor.oliveira@dfi.ufla.br

C.2	ANOMALOUS TRANSMISSION OF LIGHT BELOW PLASMON FREQUENCY IN WEYL SEMIMETAL - Muhammad Shoufie Ukhtary, Ahmad. R. T. Nugraha, Riichiro Saito Tohoku University, Japan; shoufie@flex.phys.tohoku.ac.jp
C.3	BANDSTRUCTURE AND CONTACT RESISTANCE OF CARBON NANOTUBES DEFORMED BY THE METAL CONTACT - Vasili Perebeinos[1], Roohollah Hafizi[1,2], Jerry Tersoff[3] [1]Skoltech, Russia; [2]Isfahan University of Technology, Iran; [3]IBM T.J. Watson Research Center, USA; v.perebeinos@skoltech.ru
C.4	CHIRAL PHONON MODES IN THE FIRST ORDER RAMAN SPECTRA FOR TRANSITION METAL DICHALCOGENIDES AND STRAIN-INDUCED GRAPHENE - Yuki Tatsumi, Riichiro Saito Tohoku University, Japan; tatsumi@flex.phys.tohoku.ac.jp
C.5	COMMENSURABILITY EFFECT ON THE ELECTRONIC STRUCTURE OF CARBON NANOSTRUCTURES: IMPACT ON SUPERCELL CALCULATIONS IN NANOTUBES AND 2D MATERIALS - Claudia Rocha[1], Alexandre Rocha[2], Mauro Ferreira[1], Pedro Venezuela[3] [1]Trinity College Dublin, Ireland; [2]Universidade Estadual Paulista, Brazil; [3]Universidade Federal Fluminense, Brazil; pedro.venezuela@gmail.com
C.6	Withdraw
C.7	EFFECT OF CATALYTIC NANOPARTICLES ON SWNT GROWTH MECHANISMS - Hakim Amara[1], Juan-Manuel Aguiar-Hualde[1], Yann Magnin[2], Christophe Bichara[2] [1]ONERA/CNRS, France; [2]Aix Marseille University, / CNRS, France; hakim.amara@onera.fr
C.8	EFFECTS OF OXYGEN CONTAMINATION ON MONOLAYER GeSe: A COMPUTATIONAL STUDY - Igor Saulo Santos de Oliveira, Raphael Longuinhos Monteiro Lobato Universidade Federal de Lavras, Brazil; raphael.lobato@dfi.ufla.br
C.9	ENERGY BARRIER FOR CARBON NANOTUBE COLLAPSE - Rafael Rodrigues Del Grande, Rodrigo Barbosa Capaz Universidade Federal do Rio de Janeiro, Brazil; rafaeldgrande@gmail.com
C.10	EXCITONS AND THE OPTICAL PROPERTIES OF CARBON NANOTUBES - Bruno Vieira, Eduardo Barros Universidade Federal do Ceara, Brazil; ebarros@fisica.ufc.br
C.11	FIRST PRINCIPLES STUDY OF TIO2 GRAPHENE NANORIBBONS AS CHEMICAL SENSORS - Stefanie Camile Schwarz, Mariana Zancan Tonel, Solange Binotto Fagan UNIFRA, Brazil; stefanie_camile@yahoo.com.br
C.12	GROWTH MODES AND CHIRAL SELECTIVITY OF SWNTs - Yann Magnin[1], Juan-Manuel Aguiar-Hualde[2], Hakim Amara[2], Christophe Bichara[1] [1]CNRS and Aix Marseille Univ., CINaM, Marseille, France; [2]LEM, ONERA and CNRS, Chatillon, France; bichara@cinam.univ-mrs.fr
C.13	INFLUENCE OF THE POSITION ON THE ELECTRONIC PROPERTIES CAUSED BY THE FUNCTIONALIZATION OF THE GRAPHENE - Mariana Zancan Tonel, Solange Binotto Fagan Centro Universitário Franciscano, Santa Maria RS, Brazil; marianaztonel@gmail.com

C.14	INTERACTIONS OF SELF-ASSEMBLED ORGANIC SYSTEMS WITH TWO-DIMENSIONAL MATERIALS: A FIRST-PRINCIPLES APPROACH - Genilson M. Carvalho[1,2], Matheus J. S. Matos[2], Karolline A. S. Araujo[3], Luiz A. Cury[4], Thales F. D. Fernandes[4], Luiz G. Cancado[4], Bernardo R. A. Neves[4] [1]Instituto Federal Catarinense - Campus São Bento do Sul, Brazil; [2]Dept. of Physics – Universidade Federal de Ouro Preto, Brazil; [3]Instituto Federal de Minas Gerais – Ponte Nova – Brazil; [4]Dept. of Physics – Universidade Federal de Minas Gerais – Belo Horizonte – Brazil; matheusmatos@iceb.ufop.br
C.15	Withdraw
C.16	ISOCYANIDES INTERACTING WITH PRISTINE AND MONOVACANCY CARBON NANOTUBES VIA AB INITIO COMPUTER SIMULATION - Patrícia Viera de Oliveira, Solange Binotto Fagan, Cristiano Bohn Rhoden Centro Universitário Franciscano, Brazil; patiolivera@yahoo.com.br
C.17	M BIS-DITHIOLENE (M=Ni, Pt) A TOPOLOGICAL INSULATOR ORGANOMETALLIC FRAMEWORK - Felipe David Crasto de Lima, Roberto Hiroki Miwa Federal University of Uberlândia, Brazil; felipe.lima@ufu.br
C.18	MAGNETIC STATES OF LINEAR DEFECTS IN GRAPHENE MONOLAYERS: EFFECTS OF STRAIN AND INTERACTION - Simone Silva Alexandre, Ricardo Wagner Nunes Federal University of Minas Gerais, Brazil; salexandre23@gmail.com
C.19	METHOTREXATE INTERACTING WITH PRISTINE AND CARBOXYLATED FULLERENES: AN AB INITIO SIMULATION - Laura Vendrame[1], Ivana Zanella[2], Solange Fagan[3] [1]UNIFRA, Brazil; [2]UNIFRA, Brazil; [3]UNIFRA, Brazil; laura.o.vendrame@gmail.com
C.20	MICROSCOPIC MECHANISMS OF THE FERMI VELOCITY REDUCTION IN TWISTED BILAYER GRAPHENE FROM THE BAND UNFOLDING METHOD - Yu-ichiro Matsushita The University of Tokyo, Japan; matsushita@ap.t.u-tokyo.ac.jp
C.21	NOVEL III-TE-GRAPHENE VAN DER WAALS HETEROJUNCTIONS FOR OPTOELECTRONIC DEVICES - Jimena Anahí Olmos-Asar[1], Cedric Rocha Leão[1], Adalberto Fazzio[1,2] [1]Universidade Federal do ABC (UFABC), Brazil; [2]Universidade de São Paulo (USP), Brazil; olmos.asar@ufabc.edu.br
C.22	PHONON SWITCH BY ULTRAFAST LASER PULSE TRAIN IN CARBON NANOTUBES AND GRAPHENE NANORIBBONS - Ahmad R. T. Nugraha[1], Eddwi H. Hasdeo[2], Riichiro Saito[1] [1]Department of Physics, Tohoku University, Japan; [2]Institute of High Performance Computing, A*STAR, Singapore; nugraha@flex.phys.tohoku.ac.jp
C.23	ROLE OF THE SULFUR IN THE ONSET OF CNT GROWTH: A REACTIVE MOLECULAR DYNAMICS STUDY - Tibor Höltzl[1], Balázs Orbán[2], András Olasz[1], Tamás Kárpáti[1], Erik Neyts[3], Tamás Veszprémi[2] [1]Furukawa Electric Institute of Technology, Hungary; [2]Budapest University of Technology and Economics, Hungary; [3]University of Antwerp, Belgium; t.holtzl@feti.hu
C.24	SIMULATION OF TIP-DEPENDENCE IN NEAR-FIELD RAMAN SCATTERING OF SPATIAL CORRELATED PHONONS IN GRAPHENE SAMPLE - Aroldo Ribeiro Neto, Luiz Gustavo Cançado, Ado Jorio Federal University of Minas Gerais, Brazil; aroldoribeiro@ufmg.br

C.25	STRUCTURAL, ELECTRONIC AND MAGNETIC PROPERTIES OF TRANSITION METALS ON InAs (110) AND (001): AN AB INITIO STUDY - Dominike Pacine de Andrade[1], Roberto Hiroki Miwa[2] [1]Instituto Federal de Goiás - Campus Jataí, Brazil; [2]Universidade Federal de Uberlândia, Brazil; dominike.deus@ifg.edu.br
C.26	THEORETICAL STUDY OF GRAPHENE GROWTH ON Ni2C / Ni(111) SURFACE CARBIDE - Rafael Martinez-Gordillo[1], Céline Varvenne[1], Hakim Amara[2], Christophe Bichara[1] [1]CNRS and Aix Marseille Univ., CINaM, Marseille, France; [2]LEM, ONERA and CNRS, Chatillon, France; bichara@cinam.univ-mrs.fr
C.27	ULTRA-WEAK INTERLAYER COUPLING IN TWO-DIMENSIONAL GALLIUM SELENIDE - Raphael Longuinhos Monteiro Lobato, Jenaina Ribeiro Soares Universidade Federal de Lavras, Brazil; raphael.lobato@dfi.ufla.br
C.28	TWO-DIMENSIONAL MATERIALS WITH LOW SYMMETRY: OPTICAL ANISOTROPY AND RAMAN ENHANCEMENT - Lianming Tong, Jin Zhang Peking University, China, People's Republic of; tonglm@pku.edu.cn
C.29	SYNTHESIS OF SILVER NANOWIRES FOR APPLICATION IN FLEXIBLE AND TRANSPARENT ELECTRODES - Felipe Soares[1], Sidney Lorenço[2], Carlos Eduardo Cava[2] [1]Department of Physics, State University of Londrina, CP6001, 86051-990 Londrina, PR, Brazil; [2]Department of Materials Science and Engineering, Technological Federal University of Paraná (UTFPR), 86036-370, Londrina, PR, Brazil.; carloscava@utfpr.edu.br
C.30	SLATER-KOSTER TIGHT-BINDING PARAMETRIZATION OF SINGLE AND FEW-LAYER BLACK-PHOSPHORUS FROM FIRST-PRINCIPLES CALCULATIONS - Marcos G. Menezes, Rodrigo B. Capaz Universidade Federal do Rio de Janeiro, Brazil; marcosgm@if.ufrj.br
C.31	RAMAN SPECTROSCOPY IN BLACK PHOSPHORUS EDGES - Henrique B. Ribeiro[1], César E. P. Villegas[2,3], Dario A. Bahamon[1], Diego Muraca[4], Antonio Hélio de Castro Neto[5], Eunézio A. T. de Souza[1], Alexandre R. Rocha[3], Marcos A. Pimenta[6] [1]MackGraphe-Graphene and Nanomaterials Research Center, Mackenzie Presbyterian University, 01302-907 São Paulo, Brazil; [2]Instituto de Física Teórica, Universidade Estadual Paulista Julio de Mesquita Filho (UNESP), 01140-070 São Paulo, Brazil; [3]Istituto di Struttura della Materia of the National Research Council, Via Salaria Km 29.3,I-00016 Monterotondo Stazione, Italy; [4]Instituto de Física Gleb Wataghin (IFGW), Universidade Estadual de Campinas, 13083-970 Campinas, Brazil; [5]Centre for Advanced 2D Materials and Graphene Research Centre, National University of Singapore, Singapore 117546, Singapore.; [6]Departamento de Física, Universidade Federal de Minas Gerais (UFMG), 30161-970 Belo Horizonte, Brazil.; henfisica@gmail.com
C.32	INVESTIGATION OF THE RESONANCE RAMAN PROPERTIES OF 1T-TaS2 AT AMBIENT AND CRYOGENIC CONDITIONS - Sergio Luis Lima de Moraes Ramos[1], Ryan Plumadore[2], Geovani Carvalho de Resende[1], Bruno Ricardo Carvalho[1], Adina Lucian-Mayer[2], Marcos Assunção Pimenta[1] [1]Federal University of Minas Gerais (UFMG), Brazil; [2]University of Ottawa, Canada; slramos@ctnanotubos.com.br
C.33	Withdraw

C.34	THIRD NON-LINEAR OPTICAL RESPONSE OF 2D-MATERIALS NEAR PHONON RESONANCES - Lucas Lafetá[1], Alisson R. Cadore[1], Thiago G. Mendes Sá[1], Kenji Watanabe[2], Takashi Tanigushi[2], Leonardo C. Campos[1], Ado Jorio[1], Leandro M. Malard[1] [1]Departamento de Física, Universidade Federal de Minas Gerais, Belo Horizonte, MG 31270-901, Brazil; [2]National Institute for Materials Science (NIMS) — 1-2-1 Sengen, Tsukuba-city Ibaraki 305-0047 Japan; lucaslafeta.labns@gmail.com
C.35	THERMALLY ACTIVATED HYSTERESIS IN HIGH QUALITY GRAPHENE/hBN DEVICES - Alisson Ronieri Cadore[1], Edrian Mania[1], Kenji Watanabe[2], Takashi Taniguchi[2], Rodrigo Gribel Lacerda[1], Leonardo Cristiano Campos[1] [1]Federal University of Minas Gerais - UFMG, Brazil; [2]Advanced Materials Laboratory, National Institute for Materials Science, Japan; alissoncadore@gmail.com
C.36	PHOTO-DOPING AND PHOTO-MEMORY EFFECT IN MoS2 TRANSISTORS - Andreij de Carvalho Gadêlha[1], T. Taniguchi[2], K. Watanabe[2], Rodrigo Gribel Lacerda[1], Leandro Malard Moreira[1], Leonardo Cristiano Campos[1] [1]UFMG, Brazil; [2]National Institute for Materials Science, Japan; andreij@fisica.ufmg.br
C.37	INVESTIGATION OF THE ELECTRONIC PROPERTIES OF A GRAPHENE-TALC HETEROSTRUCTURE - Edrian Mania[1], Ananias B. Alencar[1], Alisson R. Cadore[1], Bruno Carvalho[1], Kenji Watanabe[2], Takashi Taniguchi[2], Bernardo R. A. Neves[1], Helio Chacham[1], Leonardo C. Campos[1] [1]Departamento de Física, Universidade Federal de Minas Gerais, 30123-970 - Belo Horizonte, Minas Gerais, Brazil; [2]Advanced Materials Laboratory, National Institute for Materials Science, 1-1 Namiki, 305-0044 - Tsukuba, Japan; edrian.mania1@gmail.com
C.38	HEXAGONAL BORON NITRIDE CRYSTAL STRUCTURE IMAGING BY SECOND HARMONIC GENERATION - Egleidson Frederik do Amaral Gomes[1], Maria Izabel M. Conceição[1], Ana Paula Moreira Barboza[2], Camilla K. B. Q. M[3], Thonimar V. Alencar[2], Bernardo R. A. Neves[1], Leandro M. Malard[1], Ana Maria de Paula[1] [1]Universidade Federal de Minas Gerais; [2]Universidade Federal de Ouro Preto; [3]Universidade Federal do Paraná; egleidsonfrederik@gmail.com
C.39	EPITAXIAL GROWTH OF 1D-2D VAN DER WAALS HETEROSTRUCTURES ON THE SINGLE CARBON NANOTUBE - Boyuan Shen[1], Huanhuan Xie[1,2], Zhenxing Zhu[1,2], Yunxiang Bai[1,2], Fei Wei[1] [1]Beijing Key Laboratory of Green Chemical Reaction Engineering and Technology, Department of Chemical Engineering, Tsinghua University, Beijing 100084, China.; [2]Center for Nano and Micro Mechanics, Tsinghua University, Beijing 100084, China.; sby19921009@sina.com
C.40	ELECTRONIC STRUCTURE CALCULATION OF TWISTED MULTILAYER GRAPHENE - Adriana Vela, Francisco Culchac, Rodrigo Capaz Universidade Federal do Rio de Janeiro, Brazil; alvelap@if.ufrj.br

Poster Session D

SENSORS AND DEVICES - COMPOSITES - ENERGY AND ENVIRONMENTAL APPLICATIONS

THURSDAY, 29/JUN/2017

Location: **CAD 1(UFMG) – Lobby**
Time: **11:15am - 12:45pm**

Poster number	Presentation
D.1	A MEASUREMENT PLATFORM FOR STUDYING WETTING PHENOMENA AT THE NANOSCALE - Michael Engel[1], Peter W. Bryant[1], Rodrigo F. Neumann[1], Ronaldo Giro[1], Claudius Feger[2], Phaedon Avouris[2], Mathias B. Steiner[1,2] [1]IBM Research - Brazil; [2]IBM Research - T. J. Watson Research Center; rgiro@br.ibm.com
D.2	APPLICATION OF GRAPHENE DEVICES FOR HYDROGEN SENSORS - Cíntia Lima Pereira, Alisson R. Cadore, Leonardo C. Campos, Rodrigo G. Lacerda Universidade Federal de Minas Gerais, Brazil; cintialpfisica@gmail.com
D.3	CAPACITIVE PRESSURE SENSING WITH SUSPENDED GRAPHENE-POLYMER HETEROSTRUCTURE MEMBRANES - Aravind Vijayaraghavan The University of Manchester, United Kingdom; aravind@manchester.ac.uk
D.4	CARBON NANOTUBE MACRO- AND PRINTED ELECTRONICS - Chongwu Zhou University of Southern California, United States of America; chongwuz@usc.edu
D.5	DEVELOPMENT OF A GRAPHENE-BASED BIOSESENSOR, SELECTIVE TO rCV-N PROTEIN - Pedro Rodrigues de Almeida III[1,2], Elmo Salomão Alves[1], Andre M. Murad[3] [1]UFMG, BRAZIL; [2]CEFET-MG, BRAZIL; [3]EMBRAPA Genetic Resources and Biotechnology; pedroraiii@yahoo.com.br
D.6	ELECTRICAL STUDIES OF SUSPENDED GRAPHENE MEMBRANES INTEGRATED WITH BURIED MICROFLUIDICS CHANNELS - Leonel Muniz Meireles, Gustavo Arrigh Ferrari, Paulo Alexandre A. Neves, Ive Silvestre, Leonardo Cristiano Campos, Rodrigo Gribel Lacerda UFMG, Brazil; leonel.meireles27@gmail.com
D.7	FORMATION OF THIONINE SELF-ASSEMBLED MONOLAYERS AND BILAYERS OVER GRAPHENE AND ITS EFFECTS IN GRAPHENE DEVICES - Thiago Sousa[1], Thales Fernandes[1], Matheus Matos[2], Mário Mazzoni[1], Bernardo Neves[1], Flávio Plentz[1] [1]UFMG, Brazil; [2]UFOP, Brazil; thiagostephan@gmail.com
D.8	HIGH PERFORMANCE RADIO FREQUENCY TRANSISTORS BASED ON CARBON NANOTUBE NETWORKS - Yang Yang[1], Shuai Huo[1], Yun Wu[1], Jianjun Zhou[1], Zhengyi Cao[1], Xinxin Yu[1], Yuechan Kong[1], Tangsheng Chen[1], Gehan Amaratunga[2] [1]Nanjing Electronics Device Institute, China, People's Republic of; [2]University of Cambridge, UK; yang.yang@cantab.net

D.9	HYDROGEN GAS SENSOR BASED IN MONOLAYER MOLYBDENUM DISULFIDE TRANSISTORS - Natália Pereira Rezende[1], Alisson Ronieri Cadore[1], Andreij de Carvalho Gadelha Gadelha[1], André Santarosa Ferlauto[1], Kenji Watanabe[2], Takashi Tanigushi[2], Leonardo Cristiano Campos[1], Rodrigo Gribel Lacerda[1] [1]Universidade Federal de Minas Gerais, Brazil; [2]Advanced Materials Laboratory, National Institute for Materials Science, Tsukuba, Japan; nat.p.rezende@gmail.com
D.10	LARGE, FAST AND REVERSIBLE VISIBLE-LIGHT SWITCHING OF THE CONDUCTIVITY IN SWNT-FET DEVICE DECORATED BY PHOTOACTIVE COMPLEXES - Salome Forel[1], Gurvan Magadur[2], Fatima Bouanis[1], Shyamal Das[3], Aurélie Baron[3,4], Christian Herrero[2], Annamaria Quaranta[3], Géraud Delport[2,5], Jean-Sébastien Lauret[2,5], Boris Vauzeilles[2,4], Vincent Huc[1], Marie Sircoglou[2], Winfried Leibl[3], Costel-Sorin Cojocaru[1], Talal Mallah[2], Ally Aukauloo[2,3] [1]Ecole Polytechnique, France; [2]Univ. Paris Sud, France; [3]CEA Saclay, France; [4]Institut de Chimie des Substances Naturelles du CNRS, France; [5]ENS Cachan, France; salome.forel@polytechnique.edu
D.11	MODELING OF FLEXIBLE CARBON NANOTUBE THIN-FILM TRANSISTORS - Taiga Kashima, Tomoki Matsuura, Jun Hirotani, Shigeru Kishimoto, Yutaka Ohno Nagoya University, Japan; yohno@nagoya-u.jp
D.12	REMOTE ORGANIZATION OF CARBON NANOTUBES BY MEANS OF AZOPOLYMERS TO CREATE HYBRID MATERIALS - Maria Gabriela Capeluto[1], Marcos Daniel Vozer Felisberto[2], Silvia Goyanes[3], Silvia Ledesma[1] [1]Laboratório de Procesado de Imágenes, Departamento de Física, FCEyN, UBA and IFIBA, CONICET, Pabellón 1, Ciudad Universitária 1428, Buenos Aires, Argentina; [2]CTNano - Centro de Tecnologia em Nanomateriais, Belo Horizonte, Minas Gerais, Brazil; [3]Laboratório de Polímeros y Materiales Compuestos - Departamento de Física, FCEyN, Universidad de Buenos Aires , Pabellón 1, Ciudad Universitária 1428, Buenos Aires, Argentina; felisberto@ctnanotubos.com.br
D.13	TEMPERATURE-DEPENDENT CHARGE TRANSPORT IN SEMICONDUCTING SWCNT-NETWORKS WITH DIFFERENT DIAMETERS - Maximilian Brohmann, Stefan P. Schießl, Marcel Rother, Jana Zaumseil Institute for Physical Chemistry, Universität Heidelberg, D-69120 Heidelberg, Germany; maximilian.brohmann@pci.uni-heidelberg.de
D.14	THE DOPING EFFECT ON SELF-ASSEMBLED FILMS OF POLYANILINE AND CARBON NANOTUBE APPLIED AS AMMONIA GAS SENSOR - Marcelo Eising[2], Carlos Eduardo Cava[3], Aldo José Gorgatti Zarbin[4], Rodrigo Villegas Salvatierra[4], Lucimara Stolz Roman[1] [1]Department of Physics, UFPR, Brazil; [2]PIPE, UFPR, Curitiba, Brazil; [3]Department of Materials Science and Engineering, UTFPR, Londrina, PR, Brazil.; [4]Department of Chemistry, UFPR, Curitiba, PR, Brazil.; LSROMAN@FISICA.UFPR.BR
D.15	UNDERSTANDING THE ELECTRONIC PROPERTIES OF NITROGEN DOPED SINGLE WALLED CARBON NANOTUBES NETWORKS - Filippo Fedi[1,2], Oleg Domanov[1], Carlos Reinoso[1], Thomas Pichler[1] [1]University of Vienna, Electronic Properties of Materials, Faculty of Physics, Vienna; [2]University of Vienna, Faculty of Physics & VDSP, Boltzmanngasse 5, 1090 Vienna; filippo.fedi@univie.ac.at

D.16	VERTICAL CHARGE TRANSPORT IN PRINTED NETWORKS OF SEMICONDUCTING SINGLE-WALLED CARBON NANOTUBES - Marcel Rother, Maximilian Brohmann, Jana Zaumseil Institute for Physical Chemistry, Universität Heidelberg, Heidelberg D-69120, Germany; marcel.rother@pci.uni-heidelberg.de
D.17	ATTENUATION PROPERTIES OF PVDF/MWCNT AND METAL OXIDES NANOCOMPOSITES FOR LOW ENERGY X-RAYS - Esther Lorrayne Machado Pereira[1], Adriana de Souza Medeiros Batista[2], Fabíola A. S. Ribeiro[3], Arno Heeren Oliveira[1], Adelina P. Santos[3], Luiz Oliveira de Faria[3] [1]Departamento de Engenharia Nuclear, Universidade Federal de Minas Gerais, Brazil; [2]Departamento de Anatomia e Imagem, Universidade Federal de Minas Gerais, Brazil; [3]Centro de Desenvolvimento da Tecnologia Nuclear, Brazil; adriananuclear@yahoo.com.br
D.18	BIOACTIVE SILVER-CONTAINING NANOCOMPOSITES BASED ON HUMIC SUBSTANCES WITH ANTIOXIDANT ACTIVITY - Spartak Khutsishvili, Nikolay Tikhonov, Marina Lesnichaya, Tamara Vakul'skaya, Galina Aleksandrova, Boris Sukhov A.E.Favorsky Irkutsk Institute of Chemistry SB RAS, Russian Federation; khutsishvili_sp@yahoo.com
D.19	BORON NITRIDE NANOTUBES: TOWARDS THERMOCONDUCTIVE, ELECTRICALLY INSULATING COMPOSITES WITH MULTI-FUNCTIONAL PROPERTIES - Diego Pedrazzoli, Kevin Jordan, Thomas Dushatinsky, Roy Whitney BNNT, LLC, United States of America; dpedrazzoli@bnnt.com
D.20	CHITOSAN-BASED TERNARY NANOCOMPOSITES REINFORCED WITH MWCNT AND CNC - Sandra Aparecida Alexandre, Fabiano Vargas Pereira Pereira, Rodrigo Lassarote Lavall Universidade Federal de Minas Gerais, Brazil; salexandre2007@gmail.com
D.21	Co/MWCNT HYBRID NANOMATERIALS: SYNTHESIS, CHARACTERIZATION AND APPLICATIONS - Mariya Kazakova[1,2], Andrey Andreev[2], Alexander Selyutin[2], Arcady Ischenko[1,2], Vladimir Kuznetsov[1,2] [1]Novosibirsk State University, Russian Federation; [2]Boreskov Institute of Catalysis SB RAS, Russian Federation; manj86@mail.ru
D.22	COMPARATIVE EVALUATION OF GO AND rGO INTERACTION WITH POLYMER MATRIX IN PVDF-BASED NANOCOMPOSITES - Liliane Silva[1], Adriana de Souza Medeiros Batista[2], Jefferson P. Nascimento[3], Clascídia Aparecida Furtado[3], Luiz Oliveira de Faria[3] [1]Departamento de Engenharia Nuclear, Universidade Federal de Minas Gerais, Brazil; [2]Departamento de Anatomia e Imagem, Universidade Federal de Minas Gerais, Brazil; [3]Centro de Desenvolvimento da Tecnologia Nuclear, Brazil; adriananuclear@yahoo.com.br
D.23	DISPERSION OF GRAPHENE OXIDE IN LIQUID SODIUM SILICATE BY MEANS OF HIGH-SHEAR DISPERSION - Tiago Serodre[1], Jefferson Patrício Nascimento[1], Valdirene Gonzaga Resende[2], Flávio de Castro Dutra[2], Adelina Pinheiro Santos[1], Clascídia Aparecida Furtado[1] [1]CDTN, Brazil; [2]Vale S.A.; tserodre@outlook.com
D.24	DOPING OF HYBRID CARBON NANOTUBE – GRAPHENE FIBERS - Sandra Lepak[1], Łucja Dybowska-Sarapuk[1,2], Iwona Jóźwik[2], Małgorzata Jakubowska[1,2], Tomasz Gizewski[3], Krzysztof Koziol[4], Agnieszka Lekawa-Raus[1] [1]Warsaw University of Technology, Poland; [2]Institute of Electronic Materials Technology, Poland; [3]Lublin University of Technology, Poland; [4]Pembroke College, Cambridge, England; lepak@mchtr.pw.edu.pl

D.25	EFFECT OF NANOCARBONS ADDITION ON CONTINUOUS CASTING ALUMINA-CARBON REFRACTORIES TUBES - Carla Aparecida de Resende[1], Clascídia Aparecida Furtado[2], Paula Regina Dutra[1], Norval Rodrigues de Oliveira Junior[1], Thales André Lopes Cunha[2], Fabíola A.S. Ribeiro[2], Aloyso de Oliveira Figueiredo Junior[1], Adelina Pinheiro Santos[2] [1]Magnesita Refratários S A; [2]Nuclear Technology Development Center; carla.resende@magnesita.com
D.26	EFFECT OF THE ADDITION OF CARBON NANOTUBES ON ALUMINA-CARBON REFRACTORY COMPOSITES - Paula Regina Dutra[1], Pedro Augusto Silva[2], Clascídia Aparecida Furtado[2], Norval Rodrigues de Oliveira Junior[1], Carla Aparecida de Resende[1], Adelina Pinheiro Santos[2] [1]Magnesita Refratários S A; [2]Nuclear Technology Development Center; paula.dutra@magnesita.com
D.27	FABRICATION OF GRAPHENE AND ZnO COMPOSITE BY CHEMICAL SOLUTION DEPOSITION - Kouichi Akahane[1], Akira Togawa[2], Hideyuki Sotobayashi[2], Naokatsu Yamamoto[1] [1]National Institute of Information and Communications Technology, Japan; [2]Aoyama Gakuin University; akahane@nict.go.jp
D.28	LAYERED CARBON NANOTUBE SILVER ELECTRICAL CONDUCTORS - Łucja Dybowska-Sarapuk[1,2], Jakub Krzemiński[1], Sandra Lepak[1], Małgorzata Jakubowska[1,2], Agnieszka Łękawa-Raus[1] [1]Warsaw University of Technology, Faculty of Mechatronics, Poland; [2]Institute of Electronic Materials Technology, Poland; l.dybowska@mchtr.pw.edu.pl
D.29	MAGNETIC, ELECTRONIC AND STRUCTURAL PROPERTIES OF NICKEL(II) ACETYLACETONATE TRIMERS ARRANGED IN SINGLE-WALL CARBON NANOTUBES - Oleg Domanov[1], Markus Sauer[1], Michael Eisterer[2], Takashi Saito[3], Herwig Peterlik[1], Eugen Weschke[4], Thomas Pichler[1], H. Shiozawa[1] [1]University of Vienna, Austria; [2]Institute of Atomic and Subatomic Physics, Austria; [3]National Institute of Advanced Industrial Science and Technology (AIST), Japan; [4]Helmholtz-Zentrum Berlin für Materialien und Energie GmbH, Germany; oleg.domanov@univie.ac.at
D.30	MONITORING THE EFFECT OF CARBON NANOTUBES CONCENTRATION ANCHORED ON GOLD NANOPARTICLES FILMS FOR FUTURE USES IN LSPR OPTICAL DEVICES - Karinna Meinol, Marcela Mohallem Oliveira Technological Federal University of Parana, Brazil; kmeinol@alunos.utfpr.edu.br
D.31	NANOCARBONS INTRODUCED IN REFRACTORY CASTABLE: EFFECTS ON RHEOLOGY AND HIGH TEMPERATURE PROPERTIES - Norval Rodrigues Oliveira Junior[1,2], Fabiola A. S. Ribeiro[1], Paula Regina Dutra[1,2], Modestino A. M. Brito[2], Manoel R. F. Fernandes[2], Clascidia A. Furtado[1], Gustavo C. Salles[1], Adelina P. Santos[1] [1]CDTN, Brazil; [2]Magnesita Refratários S.A.; paula.dutra@magnesita.com
D.32	NANOSCALE TO SUBMICRON GROWN OF Cu PARTICLES ON REDUCED GRAPHENE OXIDE - Daniel Andrada Maria[1,2], Clascidia A Furtado[1], Adelina Pinheiro Santos[1] [1]CDTN, Brazil; [2]UNIFEI, Brazil; dam@unifei.edu.br
D.33	NICKEL/IRON– SINGLE WALLED CARBON NANOTUBE METAL MATRIX COMPOSITE VIA CARBONYL VAPOR DEPOSITION - Gadhadar Changalaraya Reddy NoPo Nanotechnologies (I) Private Limited, India; gadhadar@nopo.in

D.34	Withdraw
D.35	PIPE LINE REPAIRS WITH STEEL SHEETS BONDED WITH EPOXY ADHESIVE MODIFIED WITH CARBON NANOTUBES AND GRAPHENE - Ramon Macário Da Silva[1], Eduardo Martins Sampaio[1], Felipe Luiz Queiroz Ferreira[2], Glaura Goulart[2] [1]Rio de Janeiro State Univesity, Brazil; [2]Centro de Tecnologia em Nanotubos de Carbono (CTNanotubos), Brazil; ramonmacario@hotmail.com
D.36	POLYMER COMPOSITES WITH CARBON NANOTUBES OF DIFFERENT LENGTH AND DIAMETER - Dmitry V. Krasnikov[1,2], Sergei I. Moseenkov[2], Vladimir L. Kuznetsov[1,2], Valentin I. Suslyaev[4], Eugene Yu. Korovin[4], Anatoly I. Romanenko[3], Ieva Kranauskaite[5], Mariya A. Kazakova[1,2], Jan Macutkevic[5], Juras Banys[5] [1]Novosibirsk State University, Russian Federation; [2]Boreskov Institute of Catalysis, Novosibirsk, Russia; [3]Nikolaev Institute of Inorganic chemistry Novosibirsk, Russia; [4]National Tomsk State University, Tomsk, Russia; [5]Vilnius University, Vilnius, Lithuania; krasnikovdmitry@gmail.com
D.37	POST-SYNTHESIS ALIGNMENT IN CNT NETWORKS SUPPORTED BY POLYMER INFILTRATION - Angelika Marianne Beinert, Thurid Susanne Gspann, Patrick Jerome Kiley, Jeronimo Terrones Portas, Alan H Windle, James Arthur Elliott University of Cambridge, United Kingdom; amb261@cam.ac.uk
D.38	PRINTING OF HIGHLY CONDUCTIVE FLEXIBLE WIRES BASED ON GRAPHENE AND CARBON NANOTUBES - Daniel Janczak[1], Sandra Lepak[1], Łucja Dybowska-Sarapuk[1,2], Tomasz Giżewski[3], Małgorzata Jakubowska[1,2], Agnieszka Lekawa-Raus[1] [1]Warsaw University of Technology, Poland; [2]Institute of Electronic Materials Technology, Poland; [3]Lublin University of Technology, Poland; dan.janczak@gmail.com
D.39	RADIATION EFFECT IN GRAPHENE BASED COATINGS AND NANOCOMPOSITES - Regina Duque Estrada Carvalho, Renata Humphreis Carvalho, Max Passos Ferreira, Adelina Pinheiro Santos, Clascídia Aparecida Furtado Centro de Desenvolvimento de Tecnologia Nuclear, Brazil; rdec.cdtn@gmail.com
D.40	SWCNTS AS A UNIVERSAL CONDUCTIVE AND REINFORCING ADDITIVE IN POLYMERS - Evgeniy Ilin, Alexander Bezrodny, Mickhail Predtechenskiy OCSiAl Group, Russian Federation; bezrodny.ae@ocsial.com
D.41	APPLICATION OF CARBON NANOTUBE ELECTRODES IN PEROVSKITE SOLAR CELLS - Il Jeon[1], E. Kauppinen[2], Yutaka Matsuo[1,3], Shigeo Maruyama[1,4] [1]The University of Tokyo; [2]Aalto University School of Science; [3]University of Science and Technology of China; [4]National Institute of Advanced Industrial Science and Technology; maruyama@photon.t.u-tokyo.ac.jp
D.42	CARBON NANOTUBE-BASED ELECTROCATALYST FOR OXYGEN REDUCTION REACTION - Jincheng Li, P. Hou, Chang Liu, Hui-Ming Cheng Institute of Metal Research, CAS, China, People's Republic of; cliu@imr.ac.cn
D.43	DEGRADING AND SENSING PESTICIDES WITH CARBON NANOSTRUCTURE-BASED NANOCATALYSTS - Elisa S. Orth, Leandro Hostert, Jéssica E. S. Fonsaca, Sirlon F. Blaskievicz, Aldo J. G. Zarbin Universidade Federal do Paraná, Brazil; elisaorth@gmail.com

D.44	GRAPHENE ONTO POLYDIMETHYLSILOXANE AS A COMPOSITE MEMBRANE FOR GAS BARRIER APPLICATIONS - Mariana O Paraense[1], Thiago H R da Cunha[2,3], Andre S Ferlauto[2,3], Katia C S Figueiredo[1] [1]Department of Chemical Engineering, UFMG, Brazil; [2]Physics Department, UFMG, Brazil; [3]CTNanotubos, UFMG, Brazil; mariparaense@yahoo.com.br
D.45	GRAPHENE PAPER-LIKE FOR LITHIUM ION BATTERIES - Fernanda Vieira[1], Regina Duque Estrada Carvalho[1], Daniel Cunha Elias[2], Vanessa Luciane Oliveira[1], Adelina Pinheiro Santos[1], Clascídia Aparecida Furtado[1] [1]Centro de Desenvolvimento da Tecnologia Nuclear, Brazil; [2]Departamento de Fisica, ICEX, UFMG; fervieira2001@gmail.com
D.46	INITIAL STRESS MEASUREMENT OF ULTRALONG CARBON NANOTUBES - Yunxiang Bai[1,2], Zhenxing Zhu[1,2], Huanhuan Xie[1,2], Boyuan Shen[1], Fei Wei[1,2] [1]Beijing Key Laboratory of Green Chemical Reaction Engineering and Technology, Tsinghua University, Beijing, 100084, China.; [2]Center for Nano and Micro Mechanics, Tsinghua University, Beijing, 100084, China.; baiyunxiang0101@163.com
D.47	PHOSPHORUS–NITROGEN CODOPED GRAPHENE: BEHIND THE SYNERGISTIC EFFECT OBSERVED ON THE OXYGEN REDUCTION REACTION - Eduardo Gracia-Espino Umeå University, Sweden; eduardo.gracia@umu.se
D.48	POLY(3-HEXYLTHIOPHENE) STRUCTURAL CHANGE INDUCTION AND PHOTOCURRENT ENHANCE USING REDUCED GRAPHENE OXIDE - Roger Gonçalves, Fernando Cruz Moraes, Ernesto Chaves Pereira Universidade Federal de São Carlos, Brazil; roger.gabiru@gmail.com
D.49	POROUS 3D GRAPHENE FOAM SYNTHESIZED FROM ICELAND CRYSTAL FOR HIGH PERFORMANCE SUPERCAPACITOR - Mingchao Zhang, Y. Zhang Department of Chemisty, Tsinghua University, China, People's Republic of; zhangmc16@mails.tsinghua.edu.cn
D.50	REMOVAL OF URANYL SULFATE COMPLEXES FROM AQUEOUS SOLUTION USING AMINE-FUNCTIONALIZED GRAPHENE OXIDE - Jefferson Patrício Nascimento, Isabela Costa Mendes Peres, Amanda Teixeira Trindade, Ana Cláudia Queiroz Ladeira, Adelina P. Santos, Clascídia Aparecida Furtado Centro de Desenvolvimento da Tecnologia Nuclear (CDTN), Brazil; nascimentopatricio@yahoo.com.br
D.51	THIN FILM GRAPHENE-DERIVED NANOCATALYSTS FOR MULTIPLE APPLICATIONS - Leandro Hostert, Jéssica Eliza Fonsaca, Eduardo Guilherme Cividini Neiva, Aldo José Gorgatti Zarbin, Elisa Souza Orth Department of Chemistry, Federal University of Paraná (UFPR), CP 19081, CEP 81531-990, Curitiba, PR, Brazil; leandro.hostert@gmail.com
D.52	Withdraw
D.53	ULTRA-STRETCHABLE SUPERCAPACITOR BASED ON CARBON NANOTUBE@GRAPHENE FIBER - Huimin Wang, Yingying Zhang Tsinghua University, China, People's Republic of; wanghm16@mails.tsinghua.edu.cn
D.54	VERTICALLY-ALIGNED CARBON NANOTUBE ARRAYS FOR DESALINATION - Zhe Yin, Yingying Zhang Department of Chemistry,Tsinghua University, China, People's Republic of; yin-z15@mails.tsinghua.edu.cn

INDEX

PS = Poster Session
KN = Keynote
Inv = Invited
Oral = Oral

SATELLITE SYMPOSIA PROGRAM

Location: **Convention Center - Engineering School (UFMG)**

FRI June 30	CCTN17 *Room 1012*	MSIN17 *Main auditor.*	CNBMT17 *Room T005*	GSS17 *Room 1010*	CNTFA17 *Room 1014*
09:00-09:15	Keynote **Hélio Chacham**	Keynote **Riichiro Saito**	Keynote **Cyrill Bussy**	Keynote **Alain Penicaud**	Keynote **Shigeo Maruyama**
09:15-09:30					
09:30-09:45					
09:45-10:00	Invited **D. Hedman**	Invited **R. Beams**	Invited **D. Barros**	Invited **R. Krupke**	Invited **A. Nasibulin**
10:00-10:15					
10:15-10:30	**A. T. Fowler**	**R. N. Gontijo**	**C. Viana**	**M. Engel**	**Zhe Yin**
10:30-11:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
11:00-11:15	Invited **R. Capaz**	Invited **P. Araujo**	Invited **M. Terrones**	Invited **S. Bericaud**	Invited **Jing Zhang**
11:15-11:30					
11:30-11:45	Invited **Y. Ando**	Invited **B. Flavel**	Invited **Celso Melo**	**H. Lipsanen**	Invited **L. S. Roman**
11:45-12:00				**J. Soares**	
12:00-12:15	**P. Venezuela**	**Vijayaraghavan**	**D. Martinez**	**D. Santos**	**S.Forel**
12:15-12:30	**Matsushita**	**T. Pichler**	**L. Franqui**	**Carlos Leon**	**Rong Xiang**
12:30-13:45	Lunch	Lunch	Lunch	Lunch	Lunch
14:00-14:15	Invited **S. Tretiak**	Invited **E. Anglaret**	Invited **Kai Yang**	Invited **M.Terrones**	Invited **C.Zhou**
14:15-14:30					
14:30-14:45	**Lobato**	Invited **Vasconcelos**	Invited **L. Gauthier**	Invited **C. Matos**	**M. Rother**
14:45-15:00	**Olmos-Asar**				**Brohmann**
15:00-15:15	**DelGrande**	**Krasnikov**	**Martins**	**R.B. Capaz**	**H. Z. Geng**
15:15-15:30	**C. Bichara**	**M R Ammar**	**A. Neves**	**Vijayaraghavan**	**N.P. Rezende**
15:30-15:45	**B. Yakbson***	**Miranda**	**MB Barbosa**	**Boyuan Shen**	**H. Wang**
15:45-16:15	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
16:15-16:30	Invited **R. W. Nunes**	Invited **S. Cambre**	Invited **V. Zucolotto**	Invited **Onner Yaffe**	**J. Lefebvre**
16:30-16:45					**S. Lepak**
16:45-17:00	**Oliveira***	Invited **Qingwen Li**	Summary	Invited **T. Ideue**	**Rahman**
17:00-17:15	**Matsushita***				**D Pedrazoll***
17:15-17:30	**Carvalho***	**A. Loiseau**		**E. Viana**	**Bezrodny***
17:30-17:45	**M. A. Filho ***	**ZJ Jakubek**		**D. v. Dreifus**	**Y. Yang***
17:45-18:00	Summary	**J. S. Bulmer**		**A. Corradi**	**Y. Ohno**
18:00-18:15		**A. Castan**		**L. Lafetá**	Summary
18:15-18:30		Summary		**Yang Wu**	
18:30				Summary	

* To be confirmed