SCIENTIFIC PROGRAMME

MONDAY, JUNE 11

Chairperson: Dr. Evgenia Benova

10:00 Opening ceremony

10:15 CHEMICAL PROCESSES INITIATED BY ELECTRICAL DISCHARGES AS LABORATORY MIMICS OF NON-TERRESTRIAL ATMOSPHERIC PROCESSES
Prof. Frantisek Krcma, Brno University of Technology, Faculty of Chemistry, Czech Republic

11:30 PLASMA JET AS A SOURCE FOR WOUND HEALING
Dr. Todor Bogdanov, Medical University - Sofia, Bulgaria

12:15 METAMATERIALS AND THEIR CHARACTERIZATION IN THE MICROWAVE RANGE
Dr. Plamen Dankov, Sofia University "St. Kliment Ohridski", Faculty of Physics, Bulgaria

Chairmen: Prof. Frantisek Krcma

16:00 EXPERIMENTAL INVESTIGATION OF MICROWAVE PLASMA TORCH
Ivan Tsonev, Sofia University "St. Kliment Ohridski", Faculty of Physics, Bulgaria

16:25 SURFACE-WAVE-SUSTAINED PLASMA TORCH FOR BIOLOGICAL SYSTEMS TREATMENT
Plamena Marinova, University of Forestry, Bulgaria

17:20 ELECTRICAL AND SPECTRAL ENERGY DIAGNOSTICS OF PULSED CONTINUOUS SPECTRUM IRRADIATION SOURCES
Sergey Kireev, Scientific and Industrial Enterprise "Melitta", Ltd, Russia

17:45 LASER ABLATION ON GLASS MATERIALS DOPPED WITH GOLDEN NANOPARTICLES
Dr. Ekaterina Iordanova, Institute of Solid State Physics, Bulgarian Academy of Sciences, Bulgaria

19:30 WELCOME PARTY
TUESDAY, JUNE 12
WORKSHOP: Pegasus

Chairperson: Dr. Elena Tatarova

09:00 OPENING PEGASUS WORKSHOP
Dr. Elena Tatarova, Instituto de Plasmas e Fusão Nuclear, Instituto Superior Tecnico, Universidade de Lisboa, Portugal

09:10 SYSTEM FOR DEPOSITION OF CARBON NANOSTRUCTURES AT ATMOSPHERIC PRESSURE
Prof. Zhivko Kiss'ovski, Sofia University "St. Kliment Ohridski", Faculty of Physics, Bulgaria

09:35 ATMOSPHERIC PLASMA DEPOSITION OF COPPER OXIDE 2D NANOSTRUCTURES
Dr. Gregor Filipič, "Jožef Stefan" Institute, Slovenia

10:00 PLASMA-ASSISTED BOTTOM-UP APPROACH FOR THE SYNTHESIS OF VERTICALLY ALIGNED CARBON NANOSTRUCTURES USING POLYMER GELS
Mr. Neelakandan Marath Santhosh, "Jožef Stefan" Institute, Slovenia

Chairperson: Dr. Elena Tatarova

11:30 ELECTRICAL CONDUCTIVITY OF FREE-STANDING N-GRAPHENE SHEETS
Prof. Evgenia Valcheva, Sofia University "St. Kliment Ohridski", Faculty of Physics, Bulgaria

11:55 RAMAN SPECTROSCOPY OF GRAPHENE AND NITROGEN DOPED GRAPHENE FLAKES: EFFECTS OF THE SYNTHESIS TECHNOLOGY AND THE MEASUREMENT CONDITIONS ON THE SPECTRA LINES PARAMETERS
Dr. Neno Todorov, Sofia University "St. Kliment Ohridski", Faculty of Physics, Bulgaria

12:20 3D-MECHANISM OF NITROGEN-DOPED GRAPHENE FORMATION IN MICROWAVE PLASMAS
Prof. Dzmitry Tsyhanou, Instituto de Plasmas e Fusão Nuclear, Portugal

12:45 POLYMERIZATION AND NEGATIVE ION FORMATION IN REACTIVE HYDROCARBON PLASMAS
Cédric Pattyn, GREMI, France

14:00 EXCURSION
WEDNESDAY, JUNE 13

Chairmen: Prof. Zhivko Kiss'ovski

09:30 ON THE CHARACTERIZATION OF NANOMATERIALS: TECHNIQUES AND APPLICATIONS
Prof. Amelia Almeida, Instituto Superior Tecnico, Universidade de Lisboa, Portugal

10:15 HOW CAN PLASMAS BUILD 2D CARBON NANOSTRUCTURES?
Prof. Uros Cvelbar, “Jožef Stefan” Institute, Slovenia

11:30 PLASMA-BASED N-GRAPHENE SYNTHESIS: POST-TREATMENT APPROACH
Dr. Neli Bundaleska, Instituto de Plasmas e Fusão Nuclear, Instituto Superior Tecnico, Universidade de Lisboa, Portugal

Chairmen: Dr. Francisco Dias

12:15 LARGE-SCALE N-GRAPHENE SYNTHESIS: IN-SITU PLASMA-BASED METHOD
Dr. Francisco Dias, Instituto de Plasmas e Fusão Nuclear, Instituto Superior Tecnico, Universidade de Lisboa, Portugal

16:00 VACUUM ULTRAVIOLET RADIATION EMITTED BY ARGON PLASMAS
Dr. Julio Henriques, Instituto de Plasmas e Fusão Nuclear, Instituto Superior Tecnico, Universidade de Lisboa, Portugal

16:25 VUV AND EUV SPECTROSCOPY OF SURFACE-WAVE PLASMAS
Dr. Edgar Felizardo, Instituto de Plasmas e Fusão Nuclear, Instituto Superior Tecnico, Universidade de Lisboa, Portugal

17:20 PULSED CONTINUOUS SPECTRUM RADIATION SOURCE WITH A QUARTZ-SAPPHIRE ENVELOPE
Sergey Kireev, Scientific and Industrial Enterprise "Melitta", Ltd, Russia

19:30 OFFICIAL DINNER
THURSDAY, JUNE 14

Chairperson: Dr. Miglena Dimitrova

09:30 ADVANTAGES OF THE FIRST-DERIVATIVE PROBE TECHNIQUE OVER THE THREE- AND FOUR-PARAMETER PROBE TECHNIQUES IN FUSION PLASMAS DIAGNOSTICS
Dr. Tsviatko Popov, Sofia University “St. Kliment Ohridski”, Faculty of Physics, Bulgaria

10:15 MEASUREMENTS OF SHUNT CURRENTS BY THE FLOATING DIVERTOR TILE IN THE COMPASS TOKAMAK
Dr. Michael Komm, Institute of Plasma Physics, Czech Academy of Sciences, Czech Republic

11:30 CONCEPTUAL DESIGN OF THE COMPASS-U TOKAMAK
Dr. Radomir Panek, Institute of Plasma Physics, Czech Academy of Sciences, Czech Republic

12:15 REMOTE OPERATION OF THE GOLEM TOKAMAK FROM KITEN
Dr. Jan Stockel, Institute of Plasma Physics, Czech Academy of Sciences, Czech Republic

Chairmen: Dr. Jan Stockel

16:00 WORKSHOP: Remote GOLEM operation
FRIDAY, JUNE 15

Chairmen: Prof. Uros Cvelbar

9:30  NEAR-EDGE X-RAY ABSORPTION FINE STRUCTURE SPECTROSCOPY AS TOOL FOR THE ANALYSIS OF CARBONACEOUS MATERIALS FROM PLASMAS  
Dr. Thomas Strunskus, Institute for Materials Science, CAU Kiel, Germany

10:15 PLASMA BASED DEPOSITION OF CONDUCTIVE POLYMERS  
Dr. Johannes Berndt, GREMI, France

11:30 NANOCOMPOSITES FOR CHEMICAL DETECTION  
Prof. Eva Kovacevic, GREMI, France

12:15 BIOLOGICAL EFFECTS OF LOW-TEMPERATURE PLASMA  
Prof. Irina Sitdikova, Kazan Federal University, Russia

12:40 BIOLOGICAL EFFECTS OF LOW TEMPERATURE PLASMA  
Mrs. Svetlana Fadeeva, Kazan Federal University, Russia

Chairmen: Dr. Francisco Dias

16:00 GRAPHENE NANOCOMPOSITES FOR BIOSENSING APPLICATIONS  
Mrs. Ana Dias, Instituto de Plasmas e Fusão Nuclear, Instituto Superior Tecnico, Universidade de Lisboa, Portugal

16:25 PHOTOLUMINESCENCE OF GRAPHENE QUANTUM DOTS PRODUCED BY MICROWAVE PLASMA  
Mrs. Susana Espinho, Instituto de Plasmas e Fusão Nuclear, Instituto Superior Tecnico, Universidade de Lisboa, Portugal

Chairmen: Dr. Michael Komm

17:20 EEDF IN THE COMPASS DIVERTOR REGION DURING AN IMPURITY-SEEDING EXPERIMENT  
Dr. Miglena Dimitrova, Institute of Plasma Physics, Czech Academy of Sciences, Czech Republic

17:45 ELECTRONIC SYSTEM FOR THE WEST TOKAMAK LANGMUIR PROBE  
Dr. Mladen Mitov, Faculty of Physics, St. Kliment Ohridski University of Sofia, Bulgaria
SATURDAY, JUNE 16

Chairperson: Dr. Evgenia Benova

09:30 EXPLORATION OF PLASMA TIME-SCALES USING POWER-INTERRUPTION  
Prof. Joost van der Mullen, Université libre de Bruxelles, Belgium

10:15 PLASMA CHARACTERIZATION GUIDED BY THOMSON SCATTERING  
Prof. Joost van der Mullen, Université libre de Bruxelles, Belgium

Chairperson: Dr. Evgenia Benova

11:30 THEORETICAL STUDY ON SOME PLASMA PARAMETERS AND THERMOPHYSICAL PROPERTIES OF GAS DISCHARGE IN VARIOUS GAS MIXTURES  
Dr. Krassimir Temelkov, Institute of Solid State Physics, Bulgarian Academy of Sciences, Bulgaria

12:15 ATMOSPHERIC PRESSURE GLOW DISCHARGE FOR CO₂ CONVERSION: MODELLING AND EXPERIMENTS  
Mr. Georgi Trenchev, University of Antwerp, Belgium

12:40 Closing

Posters

P1 STUDY OF THE RESONANT MAGNETIC PERTURBATION EFFECT ON THE PLASMA PARAMETERS BY LANGMUIR PROBES IN THE COMPASS DIVERTOR REGION  
Dr. Miglena Dimitrova, Institute of Plasma Physics, Czech Academy of Sciences, Czech Republic

P2 PARTICLE-IN-CELL SIMULATIONS OF FLUSH-MOUNTED PROBES AND IMPLICATIONS FOR COMPASS-UPGRADE PROJECT  
Mr. Ales Podolnik, Institute of Plasma Physics, Czech Academy of Sciences, Czech Republic