P R O G R A M M E

MatCatNet Workshop
"From Molecules to Functionalised Materials"
and
Scientific module "Optical and Electronic Devices"
<u>*1-5 September 2016 Ohrid, Macedonia*</u>

<u>**Thursday, 1 September 2016**</u>

09:00-09:50	**Registration**
09:50-10:00	**Prof. Dr. Evamarie Hey-Hawkins and Prof. Dr. Slobotka Aleksovska** *Welcoming address*

Scientific module
"Optical and Electronic Devices"
-Lectures-

10:00-11:00	**Prof. Dr. Muriel Hissler (Rennes, France)**
	π-CONJUGATED POLYMERS FOR (OPTO)ELECTRONIC DEVICES
11:00-11:30	*Coffee break*
11:30-12:30	**Prof. Dr. Muriel Hissler (Rennes, France)**
	π-CONJUGATED POLYMERS FOR (OPTO)ELECTRONIC DEVICES
12:30-14:00	*Lunch*
14:00-14:45	**Assoc. Prof. Dr. Luiza Gaina (Cluj-Napoca, Romania)**
	PRECURSORS FOR OPTICAL MATERIALS AND DEVICES
14:45-15:30	**Prof. Dr. Slobotka Aleksovska (Skopje, Macedonia)**
	ORGANIC-INORGANIC PEROVSKITES AS PROSPECTIVE MATERIALS FOR SOLAR CELLS
15:30-16:00	*Coffee break*
16:00-16:45	**Prof. Dr. Metodija Najdoski (Skopje, Macedonia)**
	ELECTROCHROMISM AND ELECTROCHROMIC DEVICES

Friday, 2 September 2016

09:00-09:45   **Prof. Dr. Fetah Podvorica (Prishtina, Kosovo)**

GRAFTING OF ORGANIC FILMS FOR MOLECULAR ELECTRONIC JUNCTIONS

09:45-10:30   **Prof. Dr. Rubin Gulaboski (Štip, Macedonia)**

ELECTROCHEMICAL DEVICES - PRINCIPLES AND APPLICATION

10:30-11:00   *Coffee break*

11:00-11:45   **Ass. Prof. Dr. Marjan Randjelović (Niš, Serbia)**

COLOR(ED) CENTERS AND RELATED DEFECTS IN CRYSTALLINE MATERIALS FOR OPTO-ELECTRONIC (FUNCTIONALIZED) DEVICES

11:45-12:30   **Dr. Radomir Ljupkovic (Niš, Serbia)**

HRTEM AND FESEM IN CHARACTERIZATION OF SELECTED MODERN MATERIALS – PART 1

12:30-14:00   *Lunch*

14:00-14:45   **Dr. Radomir Ljupkovic (Niš, Serbia)**

HRTEM AND FESEM IN CHARACTERIZATION OF SELECTED MODERN MATERIALS – PART 2

Minisymposium "Advanced Methods in Chemistry"

14:45-15:15   **Ass. Prof. Dr. Biljana Balabanova (Štip, Macedonia)**

OPTICAL EMISSION SPECTROSCOPY: A METHOD FOR CORRELATING EMISSION INTENSITIES TO "REACTIVE PARTICLE DENSITY"

15:15-15:45   **Assoc. Prof. Dr. Violeta Ivanova Petropulos (Štip, Macedonia**

BASIC PRINCIPLES OF HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

15:45-16:15   *Coffee break*

16:30-   *Sightseeing of Ohrid*

MatCatNet Workshop
"From Molecules to Functionalised Materials"

-Oral presentations-

Session 1 (Chair: Leon Stojanov)

09:00-09:40   **Muriel Hissler – invited speaker (Rennes, France)**
P-CONTAINING POLYCYCLIC AROMATIC HYDROCARBONS:
COORDINATION CHEMISTRY AND OPTO-ELECTRONIC
APPLICATIONS

09:40-10:00   *Coffee break*

10:00-10:15   **Éva Andrea Molnár**
(Faculty of Chemistry and Chemical Engineering, Babes-Bolyai
University, Cluj-Napoca, Romania)

ARYL- AND β-FORMYLATION OF NEW PHENOTHIAZINYL-
PORPHYRINS

10:15-10:30   **Arijanit A. Reka**
(Faculty of Natural Science and Mathematics, University in Tetovo,
Macedonia)

PHASE TRANSOFRMATIONS OF SILICON DIOXIDE IN
DIATOMACEOUS EARTH AT TEMPERATURE RANGE
1000 – 1200 °C

10:30-10:45   **John Popp**
(Faculty of Chemistry and Mineralogy, Leipzig University,
Germany)
DENDRITIC FERROCENYL PHOSPHINES FOR REDOX-SWITCHABLE
CATALYSIS

10:45-11:00   **Dijana Atanasova**
(Faculty of Medical Sciences, University Goce Delcev– Štip,
Macedonia)

OPTIMIZATION AND VERIFICATION OF THE METHOD FOR
DETERMINATION OF ANTIOXIDANT ENZYME CATALASE IN VITRO

Session 2 (Chair: Marija Sterjova)

11:00-11:15   **Jeton Halili**
(University of Prishtina, Department of Chemistry, Prishtina, Kosovo)

GC-FID OPTIMIZATION AND VALIDATION FOR SIMULTANEOUS
DETERMINATION OF HEROIN IN REAL SAMPLES

11:15-11:30   **Noémi Deak**
(Faculty of Chemistry and Chemical Engineering, Babes-Bolyai University, Cluj-Napoca, Romania)

NEW SULFUR-BASED PINCER TYPE LIGANDS:
FROM DESIGN TO APPLICATIONS

11:30-11:45   *Coffee break*

11:45-12:00   **Kaltrina Jusufi**
(University of Prishtina, Department of Chemistry, Prishtina, Kosovo)

DETERMINATION OF HEAVY METALS IN CABBAGE SAMPLES FROM THE AREA SURROUNDING KOSOVO'S POWER PLANTS

12:00-12:15   **Antonio Buzharevski**
(Faculty of Chemistry and Mineralogy, Leipzig University, Germany)

CARBORANYL ANALOGUES OF NONSTEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDs)

Session 3 (Chair: Patricia Miclea)

12:15-12:30   **Miranda Misini**
(University of Prishtina, Department of Chemistry, Prishtina, Kosovo)

DETERMINATION OF ANTIOXIDANTS WITH ELECTROCHEMICAL BIOSENSORS BASED ON BORON DOPED DIAMOND ELECTRODES AND CARBON PASTE ELECTRODES

12:30-12:45   **Viktorija Maksimova**
(Faculty of Medical Sciences, University Goce Delcev– Štip, Macedonia)

COMPARISON OF OPTICAL AND ELECTROCHEMICAL METHODS FOR DETERMINATION OF THE ANTIOXIDANT EFFECT OF SOME PLANT METABOLITES

12:45-13:00   **Hamdije Memeti**
(Faculty of Natural Science and Mathematics, University in Tetovo, Macedonia)

DETERMINATION OF ADSORPTION CHARACTERISTICS OF NATURAL INORGANIC SORBENTS FOR REMOVAL OF Cr(VI) IONS FROM WATER RESOURCES

13:00-13:15   **Aleksandra Krstić**
(Faculty of Science and Mathematics, University of Niš, Niš, Serbia)

CYCLIC VOLTAMMETRY USING MODIFIED CARBONPASTE ELECTRODES FOR ELECTRO-CATALYTIC ACTIVITY STUDY OF DOPED CARBON MICROSPHERES:
POTENTIAL APPPLICATION FOR ELECTRO-CATALYTIC SENSING

13:15-14:30   *Lunch*

14:30   *Boat trip to St. Naum*

Sunday, 4 September 2016

-Oral presentations-

Session 4 (Chair: Arijanid Reka)

09:00-09:15   **Ionut-Tudor Moraru**
(Faculty of Chemistry and Chemical Engineering, Babes-Bolyai University, Cluj-Napoca, Romania)

UNDERSTANDING THE STRUCTURE OF SILOXANIC, GERMOXANIC AND STANNOXANIC SPECIES

09:15-09:30   **Leon Stojanov**
(Faculty of Natural Sciences and Mathematics, Unversity Ss Cyril and Methodius, Skopje, Macedonia)

PREPARATION OF SILVER NANOPARTICLES USING ASCORBIC ACID AND GLUTHATHIONE AS REDUCTIVE REDOX AGENTS

09:30-09:45   **Taulant Demelezi**
(University of Prishtina, Department of Chemistry, Prishtina, Kosovo)

THE EVALUATION OF THE CARBON DIOXIDE SUPERCRITICAL EXTRACTION PERFORMANCE OF VITAMIN C FROM LEMON FRUIT BY THE USE OF ELECTROCHEMICAL METHODS

09:45-10:00   **Sasho Stojkovikj**
(Faculty of Natural Sciences and Mathematics, Unversity Ss Cyril and Methodius, Skopje, Macedonia)

DESIGN OF AMPEROMETRIC SENSORS FOR H_2O_2 BASED ON $K_{0.27}MnO_2 \cdot x\ H_2O$ THIN FILMS

10:00-10:15   **Patricia Miclea**
(Faculty of Chemistry and Chemical Engineering, Babes-Bolyai University, Cluj-Napoca, Romania)

ALTERNATIVE PATHS FOR CONTROLLING THE OXIDATION STATE OF CLASS 2 HEMOGLOBIN FROM *ARABIDOPSIS THALIANA*

Session 5 (Chair: John Popp)

10:15-10:30   **Ana Koceva**
(Faculty of Natural Sciences and Mathematics, Unversity Ss Cyril and Methodius, Skopje, Macedonia)

POSSIBILITIES FOR CHEMICAL MODIFICATION AND ANALYSIS WITH INFRARED AND RAMAN SPECTROSCOPY OF GROUND SILICATE GLASS

10:30-10:45   **Angela Trajkovska**
(Faculty of Natural Sciences and Mathematics, Unversity Ss Cyril and Methodius, Skopje, Macedonia)

IR AND RAMAN SPECTROSCOPIC ANALYSIS OF CHEMICALY MODIFIED FLAT SILICATE GLASS

10:45-11:00   **Stefan Jovanov**
(Faculty of Natural Sciences and Mathematics, Unversity Ss Cyril and Methodius, Skopje, Macedonia)

TEMPERATURE-DEPENDENT PROPERTIES OF LIQUID WATER FROM A COMBINED STATISTICAL MECHANICS – NETWORK SCIENCE PERSPECTIVE

11:00-11:15   **Daniela Gjorgjevikj**
(Faculty of Natural Sciences and Mathematics, Unversity Ss Cyril and Methodius, Skopje, Macedonia)

EVALUATION OF THE ELECTROCHEMICAL ACTIVITY OF ASCORBIC ACID AND THE SYNERGY WITH GLUTATHIONE IN DIFFERENT pH ENVIRONMENT

11:15-11:45   *Coffee break*

- Poster flash presentations -

Session 6 (Chair: Aleksandra Krstić)

11:45-11:50   **Marija Sterjova**
(Faculty of Medical Sciences, University Goce Delcev–Štip, Macedonia)

POSSIBILITIES FOR FORMULATION OF TRASTUZUMAB - RADIOIMMUNOGONJUGATES

11:50-11:55   **Elena Drakalska**
(Faculty of Medical Sciences, University Goce Delcev– Štip, Macedonia)

CURCUMIN LOADED HYBRID pH-SENSITIVE LIPOSOMES- PREPARATION AND CHARACTERIZATION

11:55-12:00   **Alexandra-Krisztina Simon**
(Faculty of Chemistry and Chemical Engineering, Babes-Bolyai University, Cluj-Napoca, Romania)

SPIN-LABELED BLOOD SUBSTITUTE CANDIDATES: IN VITRO AND IN VIVO EVALUATION

12:00-12:05   **Marija Atanasova**
(Faculty of Medical Sciences, University Goce Delcev– Štip, Macedonia)

VOLATILE COMPOSITION, ANTIOXIDANT AND ANTIMICROBIAL ACTIVITY OF ESSENTIAL OIL FROM *MENTHA ARVENSIS* L. ORGANICALLY PLANTED FROM MACEDONIA

12:05-12:10   **Bojan Bogatinovski**
(Faculty of Natural Sciences and Mathematics, Unversity Ss Cyril and Methodius, Skopje, Macedonia)

DEHALOGENATION OF HEXACHLOROCYCLOHEXANES USING ZINC DUST

12:10–14:00   *Lunch*

Session 7 (Chair: Kaltrina Jusufi)

14:00-14:05   **Dragana Trajkovikj**
(Faculty of Natural Sciences and Mathematics, Unversity Ss Cyril and Methodius, Skopje, Macedonia)

SIMULTANEOUS DETERMINATION OF ACTIVE COMPONENTS IN VETERINARY DRUGS USING UV SPECTROSCOPY AND CHEMOMETRICS

14:05-14:10   **Kire Stojanovski**
(Faculty of Natural Sciences and Mathematics, Unversity Ss Cyril and Methodius, Skopje, Macedonia)

SYNTHESIS AND CRYSTALSTRUCTURE DETERMINATION OF $SmCo_{0.5}Cr_{0.5}O_3$ AND $Sm_{0.8}Ca_{0.2}Co_{0.5}Cr_{0.5}O_{3-\delta}$ PEROVSKITES

14:10-14:15   **Elena Cvetkovska**
(Faculty of Natural Sciences and Mathematics, Unversity Ss Cyril and Methodius, Skopje, Macedonia)

ESTIMATION OF MEASUREMENT UNCERTAINTY FOR ENROFLOXACIN DETERMINATION IN VETERINARY MEDICINAL PRODUCTS BY TWO SPECTROPHOTOMETRIC METHODS

14:15-14:20   **Besart Shatri**
(University of Prishtina, Department of Chemistry, Prishtina, Kosovo)

SYNTHESIS, CHARACTERIZATION AND THE USE OF SUBSTITUTED ARYLDIAZONIUM SALTS FOR THE MODIFICATION OF THE ACTIVATED CARBON POWDER

14:20-14:25   **Elisaveta Nikoloska**
(Faculty of Natural Sciences and Mathematics, Unversity Ss Cyril and Methodius, Skopje, Macedonia)

INFLUENCE OF SILVER SUBSTITUTION ON ELECTROCATALYTIC

PROPERTIES OF LaCr$_{0.5}$Fe$_{0.5}$O$_3$ PEROVSKITE

Session 8 (Chair: Noemi Deak)

14:25-14:30   **Alexandra Bogdan**
(Faculty of Chemistry and Chemical Engineering, Babes-Bolyai University, Cluj-Napoca, Romania)

1,3-DIOXANE DERIVATIVES AS INTERMEDIATES FOR CHEMICALLY AND PHOTOCHEMICALLY ACTIVATED MOLECULAR DEVICES

14:30-14:35   **Fjolla Hashani**
(University of Prishtina, Department of Chemistry, Prishtina, Kosovo)

THE ROLE OF SURFACTANTS (TRITON X-100 AND SODIUM DODECYLBENZENESULFONATE) ON THE ELECTROCHEMICAL DETERMINATION OF ASCORBIC ACID

14:35-14:40   **Sara Gligoroska**
(Faculty of Natural Sciences and Mathematics, Unversity Ss Cyril and Methodius, Skopje, Macedonia)

SYNTHESIS AND IDENTIFICATION OF SOME GUANIDINIUM ORGANIC-INORGANIC PEROVSKITES

14:40-14:45   **Ilirijana Osmani**
(University of Prishtina, Department of Chemistry, Prishtina, Kosovo)

THE ELECTROCHEMICAL MONITORING OF ''EX SITU'' EXTRACTED VITAMIN C

14:45-14:50   **Gjani Hulaj**
(University of Prishtina, Department of Chemistry, Prishtina, Kosovo)

THE USE OF THE GRAFTED ACTIVATED CARBON POWDERS FOR THE ADSORPTION OF THE LINDANE PESTICIDE FROM MODEL SYSTEMS

14:50–16:30   *Poster session / Coffee break*

20:00 -   *Gala dinner*

Monday, 5 September 2016

AN OVERVIEW OF THE MatCatNet PROJECT

09:30-10:00 **Prof. Dr. Evamarie Hey-Hawkins (project leader, Germany)**
An overview of the project: achievements and perspectives

10:00-10:30 **Prof. Dr. Luminita Silaghi-Dumitrescu**
An Overview of the project – Romanian perspective

10:30-10:45 **Prof. Dr. Slobotka Aleksovska**
Personal experiences

10:45-11:15 *Coffee break*

11:00-11:30 ***Award ceremony***

11:30-12:30 ***Roundtable discussion-***
Moderator: Prof. Evamarie Hey-Hawkins (project leader)

12:30-14:30 *Lunch*

14:30-15:30 ***Project coordinators meeting***

15:30-16:00 ***Closing remarks***

17:00 *Departure*