

PROGRAMME

12/09/2022

14:00 – 18:00 **Conference registration**

14:30 – 15:00 **Poster installation, coffee time**

15:00 – 18:30 **POSTER SESSION**

13/09/2022

MORNING SESSION 1

Chair: Tony Spassov

09:00 – 09:15 **OPENING**

09:15 – 09:45 **K. Ruseva, M. Simeonov, E. Vassileva, E. Dyulgerova, R. Ilieva, R. Gergulova, D. Rabadjieva, P. Shestakova** Solid state NMR characterization of novel calcium phosphate/polymer hybrid materials for early caries lesion treatment

09:45 – 10:05 **G. Dobrikov, Y. Nikolova, I. Slavchev, M. Dangalov, V. Deneva, L. Antonov, N. G. Vassilev** Structure and Conformational Mobility of 1,3,5-Triazine Derivatives for OLED Applications;

10:05 – 10:25 **M. Fabián, M. Žukalová, L. Kavan, V. Girman, M. Senna, V. Šepelák** Structure and electrochemical properties of lithium containing spinels synthesized by ball milling

10:25 – 10:45 **V. Lyubomirova, R. Djingova** Application of Mass spectrometry techniques in Archaeometry

10:45 – 11:15 **COFFEE BREAK**

MORNING SESSION 2

Chair: Vessela Tsakova

11:15 – 11:35 **K. Kamenova, S. Simeonov, L. Radeva, K. Yoncheva, P. Petrov** Nanogel drug delivery system from natural substances;

11:35 – 11:55 **K. Lazarova, D. Karashanova, B. Georgieva, A. Slavov, D. Christova, T. Babeva**
Improvement of sensing properties of acetone sensitive polymer thin films via silver nanoparticles obtained by “green” method

11:55 – 12:15 **K. Kamburova, N. Boshkova, N. Boshkov, Ts. Radeva**
Application of Safranin loaded CuO nanocontainers for combined protection of low-carbon steel against corrosion and biofouling;

12:15 – 14:00 **LUNCH BREAK**

AFTERNOON SESSION

Chair: Iglia Mishkova

14:00 – 14:30 **Hristo Popov**

14:30 – 15:00 **V. Foj, R. Popova, R. Preshlenova**
The color code

15:00 – 15:20 **Reneta Karamanova-Zlatkova**
Antique floor mosaics from Stara Zagora - conservation problems

15:20 – 15:40 **I. Borisov, B. Zlateva**
Archaeometrical Investigations of Pigments: Project Mount Athos Heritage, Chapel of Zograph;

15:40 – 16:10 **COFFEE BREAK**

Chair: Hristo Popov

16:10 – 16:30 **Alexander Vatov**
Study on the photographic collection of The National Museum of History using X-ray fluorescence spectrometry (XRF). Preliminary results

16:30 – 17:00 **Laura Esposito**
NFFA-Europe Research Infrastructure

17:00 – 18:00 **Round Table Discussion**

19:30 – __:__ **CONFERENCE DINNER**

14/09/2022

MORNING SESSION 1

Chair: Yuri Kalvachev

08:30 – 08:50 **D. Gerginova, S. Simova**

The secrets of honey wine

08:50 – 09:10 **R. Ivanov, V. Tsakova, C. Czibula, C. Teichert, M. Bojinov**

Glycerol oxidation at Pd nanocatalysts obtained through spontaneous metal deposition on carbon screen-printed electrodes

09:10 – 09:30 **S. Atanasova-Vladimirova, E. Velcheva, S. Tapanov, B. Stamboliyska,**

D. Yancheva, M. Guncheva, S. Stoyanov, I. Piroeva, B. Rangelov

Scanning electron microscope analysis of natural painting in the church ossuary of the Rila Monastery, Bulgaria

09:30 – 09:50 **F. Hodzhaoglu**

Sample preparation of different materials

BREAK

9:50 – 10:10

MORNING SESSION 2

Chair: Kalin Dimitrov

10:10 – 10:30 **G. Baykusheva, I. Nikolov, N. Levterov, I. Mishkova**

Spectrophotometric analysis of historical textile in museum environment – case studies;

10:50 – 11:10 **A. Andreeva, D. Pantaleeva, Ek. Stoyanova**

Technological problems of murals transferred on canvas

10:30 – 10:50 **Slavena Ziapkova**

Packing materials and tools in the light of the preventive conservation;

10:50 – 11:20 **CLOSING CEREMONY**

POSTER SESSION

- M1-01 K. Aleksieva**
EPR identification of gamma-irradiated figs
- M1-02 S. Simeonova**
Application of the atomic force microscope to study the morphology of metal surfaces and coatings
- M1-03 V. Chakarova, M. Monev**
X-ray fluorescence (EDXRF) measuring instrument.
Application in practice and science
- M1-04 T. Todorova, Yu. Kalvachev, A. Liutcanova, R. Velinova, A. Naydenov**
Oxidation of benzene, toluene and hexane over Pt modified Fly Ash Zeolite
- M1-05 M. Arnaudova, R. Rashkov**
Electrocatalytic behavior of nickel-based alloys electrodeposited on carbon fibers
- M1-06 Ch. Hyusein; V. Tsakova**
Nitrate reduction on modified Pd-Cu-modified screen-printed
- M1-07 Hr. Kolev, O. Kostadinova, I. Popov, T. Petkova**
Influence of the synthesis conditions on the surface, structure and electrocatalytic activity of non-stoichiometric Ba₂Sr₂La₂Ti₄O₁₂ perovskites
- M1-08 M. Gancheva, R. Iordanova, I. Koseva, P. Ivanov**
Effect of ball milling speeds on the phase formation and optical properties of α-ZnMoO₄ and β-ZnMoO₄ nanoparticles
- M1-09 E. Grigorova, G. Çakmak, P. Markov, P. Tzvetkov**
Synthesis of Mg-Ni-Al-V-Fe BBC alloy by mechanical alloying
- M1-10 L. Aleksandrov, M. Milanova, R. Iordanova, M. Fábíán**
Preparation and characterization of glasses in the ZnO- B₂O₃-Bi₂O₃-WO₃ system
- M1-11 O. Porodko, M. Fábíán, H. Kolev, M. Lischnichuk, M. Žukalová, V. Girman, K. Da Silva, V. Šepelák**
Synthesis and characterization of high entropy spinel-based oxides prepared by ball milling
- M1-12 P. Vassileva, J. Uzunov, D. Voykova**
Removal of Congo red dye by modified einkorn husks

- M1-13** M. Tavlinova-Kirilova, M. Kamenova-Nacheva, M. Marinova, K. Dikova, K. Kostova, V. Dimitrov
Synthesis of bis-dihydro-1,3-naphthoxazines using 1,2-cyclohexanediamine or dihydroxynaphthalenes in Mannich condensation
- M1-14** N. Lumov, S. Stoyanov, K. Anichina, D. Yancheva
Synthesis, structural characterization and study on the nitroreduction of 1-benzoyl-2-(4-nitro)phenylbenzimidazole by theoretical, electrochemical and spectral methods
- M1-15** B. Napoleonov, D. Petrova, V. Marinova, B. Blagoev and D.Z. Dimitrov
Electrical properties of AZO layers deposited by ALD technique
- M1-16** N. Minev, K. Buchkov, R. Todorov, V. Videva, M. Stefanova, H. Dikov, D. Dimov, I. Avramova, D. Dimitrov, V. Marinova
Structural and optical measurements of 2D PtSe₂ nanolayers
- M1-17** I. Dionisiev, N. Minev, V. Strijkova, V. Videva, D. Karashanova, K. Buchkov, V. Marinova, H. Dikov, D. Dimitrov
Surface morphology characterization of 2D WSe₂ flakes and nanolayers
- M1-18** S. Kozhukharov, C. Girginov, P. Petkov
Cerium conversion coatings – a reliable environmentally acceptable alternative of conventional technologies
- M1-19** C. Girginov, V. Gontcheva, S. Kozhukharov, P. Petkov
Temperature dependence of the anodizing kinetics of aluminum and its alloys
- M1-20** St. Kolchev, T. Cholakova, L. Kolaklieva, Ch. Bahchedjiev, V. Chitanov, R. Kakanakov
Tribological properties of multilayer TiCN/ZrCN coatings with different carbon content
- M1-21** V. Nikolov, I. Koseva, P. Ivanov, P. Tzvetkov, D. Karashanova
Luminescent properties of Dy³⁺ doped Li₂CaGeO₄ with different size grains
- M1-22** V. Nikolov, I. Koseva, P. Ivanov, P. Tzvetkov, D. Karashanova
Particle size and luminescent intensity relationship in Dy³⁺ doped Ca₅Ge₃O₁₁
- M1-23** I. Koseva, P. Petrova, V. Nikolov, P. Ivanov, P. Tzvetkov, R. Tomova
Europium doped germanate matrixes candidate for LED application
- M1-24** K. Kamburova, A. Gyurova, I. Dimitrov, V. Milkova
Design of soft nanocapsules for drug delivery in the therapy of coronavirus infection
- M1-25** R. Stancheva, E. Haladjova, Ts. Paunova-Krasteva, Ts. Damyanova, P.D. Dimitrova, M. Leseva, P.A. Dimitrova, T. Topouzova-Hristova, S. Stoitsova, P. Petrov
Mixed polymeric micelles as novel biocompatible systems for ciprofloxacin delivery
- M1-26** E. Dimitrov, N. Toncheva-Moncheva, P. Bakardzhiev, R. Stancheva, D. Momekova, A. Forys, B. Trzebicka, S. Rangelov
Development of polymer amphiphiles for surface modification of niosomes
- M1-27** S. Stoyanov, R. Kukeva, R. Stoyanova, S. Georgieva, A. Kosatev¹, D. Yancheva
Reduction of nitrofurantoin and its N-methyl derivative followed by electrochemical methods, IR, ESR spectroscopy and cyclovoltametry

- M1-28 N. Anastassova, M. Guncheva, N. Hristova-Avakumova, D. Yancheva**
Spectroscopic and theoretical studies of catecholic benzimidazoles as potential metal-protein attenuating compounds
- M1-29 K. Radev, N. Anastassova, D. Aluani, N. Hristova-Avakumova, M. Kondeva-Burdinna, V. Tzankova, D. Yancheva**
Evaluation of the neuroprotective and antioxidant properties of 5-methoxy indole hydrazones as potential anti-Parkinsonian drugs
- M1-30 D. Gerginova, S. Simova**
A bradykinin analogue – a NMR study
- M1-31 R. Mladenova, K. Loginovska, N. Solakov**
Comparison of antioxidant properties of honeybee products
- M1-32 G. Adeev**
Use of asbestos waste for the production of new building materials
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- M2-01 M. Argirova, M. Dimitrov, N. Lumov, S. Belishki, S. Tapanov, P. Penkova, E. Velcheva, B. Stamboiyska, D. Yancheva**
Identification of organic materials in art and archaeological objects by combined analytical methods
- M2-02 D. Yancheva, M. Guncheva, M. Argirova, N. Lumov, N. Anastassova, S. Stoyanov, E. Stoyanova, S. Belishki, E. Velcheva, B. Stamboliyska**
Infrared spectral and enzyme-linked immunosorbent analysis of model paint samples
- M2-03 E. Stoyanova, S. Belishki, N. Lumov, D. Yancheva, B. Stamboliyska**
Application of IR spectroscopy, optical microscopy and micro-chemical analysis in the investigation of an oil painting by Gospodin Zhelyazkov
- M2-04 M. Belcheva, M. Abrashev, S. Russev, G. Russeva, N. Bolkansky**
Advanced Non-invasive Multi-analytical Study of Historical Parchment Dyeing Techniques
- M2-05 A. Vatov, K. Ninova**
Conservation and restoration of paper materials from The History Museum, Pomorie
- M2-06 D. Kiuranova**
Historical textiles research and establishment of primary data base for most used materials in traditional costume