

PROGRAMM

29 October 2020 года

09:50 **Workshop opening**
Prof. V. Fedin, NIIC SB RAS, Novosibirsk
Dr. M. Kosinova, NIIC SB RAS, Novosibirsk

Session 1

Chair: Dr. M. Kosinova, NIIC SB RAS, Novosibirsk

- 10:00–10:20** **Basova T.V.**, *NIIC SB RAS, Novosibirsk, Russia*
“Hybrid materials on the basis of carbon nanotubes with phthalocyanines and other polyaromatic molecules as active layers of chemical sensor”
- 10:20–10:40** **Yuanxing Fang**, *FU, China*
“Carbon Nitride Polymer Semiconductors for Photoelectrochemical Water Splitting”
- 10:40–11:00** **Zherikova K.V.**, *NIIC SB RAS, Novosibirsk, Russia*
“MOCVD for advanced materials. Part I. Precursor's physical chemistry”
- 11:00–11:20** **Vikulova E.S.**, **Karakovskaya K.I.**, *NIIC SB RAS, Novosibirsk, Russia*
“MOCVD for advanced materials. Part II. From precursor to functional material. Iridium and iridium oxide”
- 11:20–11:40** **Break**

Session 2

Chair: Prof. N. Morozova, NIIC SB RAS, Novosibirsk

- 11:40–12:00** **Dorovskikh S.I.**, **Khomyakov M.N.**, **Kal'nyi D.B.**, **Morozova N.B.**, *NIIC SB RAS, Novosibirsk, Russia*
“MOCVD for advanced materials. PART III. Features of the growth of Pt_xIr_(1-x) coatings for medical applications”
- 12:00–12:20** **Nikolaeva N. S.**, *NIIC SB RAS, Novosibirsk, Russia*
“MOCVD for advanced materials. Part IV. Heterostructures and multicomponent systems. Palladium-based films and nanoparticles for hydrogen sensing and purification”
- 12:20–12:40** **Gorshkov D.V.**, **Igumenov I.K.**, *Katod, NIIC SB RAS, Novosibirsk, Russia*
“MOCVD for advanced materials. Part V. Practical application. MCP enhancement”
- 12:40–13:00** **Semenova O.I.**, **Anikeeva V.E.**, **Boldyrev K.N.** *ISP SB RAS, Novosibirsk, IS RAS, Moscow, MIPT, Moscow, Russia*
“Structural and optoelectronic properties of hybrid perovskite crystals”
- 13:00** **Break**

Session 3

Chair: Prof. T. Basova, NIIC SB RAS, Novosibirsk

- 14:00–14:20** **Eswaraiah Varrla**, *SRM IST, Chengalpattu, India*
“Exfoliation of atomically thin nanosheets: Size control and quality assessment”
- 14:20–14:40** **Kai-Chun Li, Ming-Yen Lu, Hong Thai Nguyen, Shih-Wei Feng, S.B. Artemkina, V.E. Fedorov, Hsiang-Chen Wang**, *NCCU, NTHU Hsinchu, NUK, Kaohsiung, Taiwan. NIIC SB RAS, NSU, Novosibirsk, Russia*
“Intelligent identification of MoS₂ nanostructures”
- 14:40–15:00** **Kokh K.A., Atuchin V.V., Bahadur A.M., Klimov A.S., Mukherjee S.** *IGM SB RAS, NSU, ISP SB RAS, Novosibirsk, Russia, KNU, Alma Ata, Kazakhstan, IINI, Madhya Pradesh, India*
“Phase formation in Cu₂ZnSnS₄ - SnCl₂, CuCl₂, ZnCl₂ systems”
- 15:00–15:20** **Azarapin N.O., Atuchin V.V., Maximov N.G., Aleksandrovsky A.S., Molokeev M.S., Oreshonkov A.S., Shestakov N.P., Krylov A.S., Mukherjee S., Andreev O.V.**, *TSU, Tyumen, ISP SB RAS, Novosibirsk, KSC SB RAS, Krasnoyarsk, Russia, IITI, Madhya Pradesh, India*
“Synthesis, structure and thermal stability of complex orthorombic sulfide BaDyCuS₃”
- 15:20–15:40** **Break**

Session 4

Chair: Dr. M. Kosinova, NIIC SB RAS, Novosibirsk

- 15:40–16:00** **Yude Yu, Shiming Hu**, *IS CAS, University of Chinese Academy of Sciences, Beijing, China*
“Structured illumination microscopy based on fiber devices”
- 16:00–16:20** **Dvurechenskii A.V., Yakimov A.I., Zinovieva A.F., Zinovyev V.A., Bloshkin A.A., Nenashev A.V., Kirienko V.V.**, *ISP SB RAS, NSU, Novosibirsk, Russia*
“Advanced Si based Ge quantum dot nanostructures coupled with the plasmonic and hybrid metal-dielectric metasurfaces for nanophotonics”
- 16:20–16:40** **Ashok Mahajan**, *North China University of Technology, Beijing, China*
- 16:40–17:00** **Baklanov M.R., Zhang Jing, Vorotilov K. A.** *North China University of Technology, Beijing, China, MIREA – Russian Technological University, Moscow, Russia*
“Challenges of materials selection for advanced ULSI interconnects”

30 October 2020 года

Session 1

Chair: Prof. N. Gelfond, NIIC SB RAS, Novosibirsk

- 10:00–10:20 **Baigang An, Xin Gu, Fang Di**, USTL, Anshan, China
“Coaxial CNT@Si@SiC material with high rate stability as anode of lithium ion batteries”
- 10:20–10:40 **V.S. Sulyaeva, N. Bhaskar, B. Basu, M.L. Kosinova**, NIIC SB RAS, Novosibirsk, Russia, IIS, Bangalore, India
“Modification of titanium surface with SiC_xN_yO_z films by reactive magnetron sputtering for biomedical applications”
- 10:40–11:00 **Shayapov V.R., Merenkov I.S., Zakharchenko K.V., Kapustin V.I.**, NIIC SB RAS, NSTU, IH SB RAS, Novosibirsk, Russia
The influence of B-C-N coatings on stress-strain characteristics of the Ti-6Al-4V ALLOY AT PERIODIC (CYCLIC) LOADING
- 11:00–11:20 **Plehanov A.G., Fainer N.I.**, NIIC SB RAS, Novosibirsk, Russia
“Synthesis of SiC_xN_yFe_z films by plasma chemical decomposition of a gas mixture 1,1,1,3,3,3-hexamethyldisilazane, ferrocene and helium”
- 11:20–11:40 **Break**

Session 2

Chair: NIIC SB RAS, Novosibirsk

- 11:40–12:00 **Enjun Gao**, USTL, Anshan, China
“Structure and medicinal chemistry of metal complexes”
- 12:00–12:20 **Ilyin I.Yu., Bonegardt D.V., Kalnyi D.B.** NIIC SB RAS, Novosibirsk, Russia
“Cyclopentadienyl and beta-diketonate iridium(I) complexes [Ir(cod)L] for fabrication of functional coatings by MOCVD method”
- 12:20–12:40 **Shaoyan Wang, Xiaoxu Tan**, USTL, Anshan, China
“Application of iron nitride magnetic abrasives”
- 12:40–13:00 **Nguyen T.T., Arkhipov S.G., Losev E.A., Rychkov D.A.**, NSU, ISSCM SB RAS, Novosibirsk, Russia
“First example of preserved plasticity of molecular crystal at cryogenic temperatures”
- 13:00 **Break**

Session 3

Chair: Prof. Yu. Mironov, NIIC SB RAS, Novosibirsk

- 14:00–14:20 **Yaguang Sun, Lixin You, Gang Xiong**, SUCT, Shenyang, China
“Heterogeneous catalysts for cross-coupling reaction synergistically constructed by rare earth coordination polymers and palladium”
- 14:20–14:40 **Litvinova Y.M., Gayfulin Y.M., Mironov Y.V.**
NIIC SB RAS, Novosibirsk, Russia
“Metal-organic frameworks based on rhenium octahedral clusters and Ln³⁺ cations”

- 14:40–15:00** **Lysova A.A., Samsonenko D.G., Kovalenko K.A. Dybtsev D.N., Fedin V.P.**, NIIC SB RAS, NSU, *Novosibirsk, Russia*
“Novel metal-organic frameworks based on Zn₁₂ carboxylate wheels: from synthesis to functional properties”
- 15:00–15:20** **Xudong LUO**, *SUCT, Shenyang, China*
“Application of nanotechnology on the magnesia refractory”
- 15:20–15:40** **Break**

Session 4

Chair: Dr. M. Kosinova, NIIC SB RAS, Novosibirsk

- 15:40–16:00** **Babailov S.P., Zapolotskiy E.N., Qu Ya., Stabnikov P.A.**, *NIIC SB RAS, Novosibirsk, Russia, ICM CAEP, Mianyang, China*
“Molecular structure and activation energy of the processes of conformational dynamics in the series of complexes depending on the lanthanide cation according to NMR”
- 16:00–16:20** **Grigorash D.Y., Kurdakova S.V., Kovalenko N.A., Uspenskaya I.A.**, *MSU, Moscow, Russia*
“Thermodynamic properties in the D2EHPA – toluene system”.
- 16:20–16:40**
- 16:40–17:00**