

B. Verkin Institute for Low Temperature Physics and Engineering (ILTPE) of NAS of Ukraine,
47 Nauky Ave., Kharkiv, 61103, Ukraine

**INTERNATIONAL ADVANCED RESEARCH WORKSHOP
“THERMAL CONDUCTIVITY OF SOLID STATES AT LOW
TEMPERATURE”**

CONFERENCE HALL & LIVE STREAM, 8 JUNE 2021

- Co-chairs:** Dr. Razet Basnukaeva & Dr. Maksym Barabashko
- 9:00 -9:15** **Opening ceremony**
- 9:15 -9:45** **Keynote talk: Heat transfer in molecular crystals and their solutions above or of the order of Debye temperature**
Prof. Viacheslav Konstantinov
B.Verkin Institute for Low Temperature Physics and Engineering of NAS of Ukraine,47 Nauky Ave., Kharkiv, 61103, Ukraine
- 9:45-10:00** **Thermal activation heat transfer in dynamically disordered phases of molecular crystals. Ethane series freons**
Dr. Anna Karachevtseva
B.Verkin Institute for Low Temperature Physics and Engineering of NAS of Ukraine,47 Nauky Ave., Kharkiv, 61103, Ukraine
- 10:00-10:15** **Features of transport processes in an electroconsolidated FeNi composite**
Dr. Maksim Kislitsa
V.N. Karazin Kharkiv National University, Kharkiv 61022, Ukraine
- 10:15-10:45** **Keynote talk: Thermal Conductivity of Organic Charge Transfer Complexes with Strong Correlation in 2D π -Electrons Layers**
Ukraine time UTC/GMT +3
(16:15 -16:45) Prof. Yasuhiro Nakazawa
Japan time UTC/GMT +9
Dept. of Chemistry, Graduate School of Science, Osaka University, Machikaneyama 1-1, Toyonaka, Osaka 560-0043, Japan
- 10:45-11:00** **Thermophysical and electrophysical characterization of exfoliated graphite - carbon nanotube composites**
Prof. Galyna Dovbeshko
Institute of Physics, NAS of Ukraine, 46 Nauky Ave., 03028 Kyiv, Ukraine
- 11:00-11:15** **Calculations of thermal gradients in hydroxyapatite composite with the additives of multi-walled carbon nanotubes**
Ukraine time UTC/GMT +3
(15:00-15:15) Ms. Anastasiya Rezvanova
Tomsk, RF UTC/GMT +7
Institute of Strength Physics and Materials Science of SB RAS, 2/4 Akademichesky Ave., Tomsk, 634055, Russia
- 11:15-11:45** **Keynote talk: The influence of diffusive phonon boundary scattering on the thermal conductivity of a two-dimensional sample**
Prof. Konstantin Nemchenko
V.N.Karazin Kharkiv National University, 61022, Kharkiv, Ukraine
- 11:45-12:00** **Disorder-induced localized low-energy tunneling states in the carbon nanomaterials**
Ukraine time UTC/GMT +3
(15:45-16:00) Dr.Alexander Ponomarev
Tomsk, RF UTC/GMT +7
Institute of Strength Physics and Materials Science of SB RAS, Tomsk, 34055, Russia

- 12:00-12:15** **Resonance levels in electron and phonon spectra of graphene nanostructures: formation, decay, possibility of HTS appearance**
 Prof. Sergey Feodosyev
B.Verkin Institute for Low Temperature Physics and Engineering of NAS of Ukraine,47 Nauky Ave., Kharkiv, 61103, Ukraine
- 12:15-12:30** **Thermally activated conductivity of molybdenum disulfide MoS₂ nanopowder**
 Dr. Roman Rudenko
Institute of Physics, NAS of Ukraine, 46 Nauky ave., 03680, Kyiv, Ukraine
- 12:30-13:00** **Coffee-break/Lunch Time**
- 13:00-13:30** **Keynote talk: Thermal conductivity of solid state laser materials: ceramics of YbAG and GAGG**
 Ukraine time
 UTC/GMT +3
(12:00-12:30)
 Dr. Daria Szewczyk
Institute of Low Temperature and Structure Research PAS, Division of Low Temperature and Superconductivity, Okólna 2, 50-422 Wrocław, Poland
 (Wrocław, Poland
 time UTC/GMT +2)
- 13:30-13:45** **Temperature Dependence of the Thermal Conductivity in SiO₂ with Disorder Due to Embedded Ge Nanoparticles**
 Mr. Volodymyr Shmid
Taras Shevchenko National University of Kyiv, 64/13 Volodymyrska Street, 01601 Kyiv, Ukraine
- 13:45-14:00** **Electronic thermal conductivity of single and bilayer graphene with disorder**
 Ukraine time
 UTC/GMT +3
(17:45-18:00)
 Dr. Nadezhda Bobenko
Institute of Strength Physics and Materials Science of SB RAS, 2/4 Akademichesky Avenue, Tomsk 634021, Russia
 Tomsk, RF
 UTC/GMT +7
- 14:00-14:30** **Keynote talk: Low Thermal Conductivity and the Evidence of the Glassy Behavior in (Pb_{0.7}Sn_{0.25}Ge_{0.05})₂P₂S₆ and (Pb_{0.7}Sn_{0.25}Ge_{0.05})₂P₂Se₆ Mixed Crystals**
 Prof. Yulian Vysochanskii
Institute for Solid State Physics and Chemistry, Uzhhorod University, Pidgirna Str. 46, Uzhhorod, 88000, Ukraine
- 14:30-14:45** **Influence of Chemical Substitution on the Thermal Transport Properties in 2D layered M¹⁺M³⁺P₂X₆ (M¹⁺ = Cu, Ag; M³⁺ = In, Bi; X = Se, S) Compounds**
 Dr. Vitalii Liubachko
Institute for Solid State Physics and Chemistry, Uzhhorod University, Pidgirna Str. 46, 88000 Uzhhorod, Ukraine
- 14:45-15:00** **Analysis of thermal conductivity for clathrate thermoelectrics**
 Dr. Yuliia Horbatenko
B.Verkin Institute for Low Temperature Physics and Engineering of NAS of Ukraine, 47 Nauky Ave, Kharkiv 61103, Ukraine
- 15:00-15:30** **Keynote talk: Thermal anomalies in ordered and disordered phases**
 Ukraine time
 UTC/GMT +3
(14:00-14:30)
 Prof. Josep Lluís Tamarit
Grup de Caracterizació de Materials, Departament de Física, EEBE and Barcelona Research Center in Multiscale Science and Engineering, Universitat Politècnica de Catalunya, Barcelona 08019, Catalonia
 Barcelona, Spain time
 UTC/GMT +2

- 15:30-15:45** **Electrophysical properties of aqueous colloidal solutions of C₆₀**
Mr. Sergey, Cherednychenko
B.Verkin Institute for Low Temperature Physics and Engineering of NAS of Ukraine, 47 Nauky Ave., Kharkiv, 61103, Ukraine
- 15:45-16:00** **Heat capacity and thermal expansion for ordered and disordered crystal materials**
Dr. Maksym Barabashko
B.Verkin Institute for Low Temperature Physics and Engineering of NAS of Ukraine, 47 Nauky Ave., Kharkiv, 61103, Ukraine
- 16:00-16:30** **Generalized analysis of thermal conductivity for molecular solids**
Prof. Alexander Krivchikov
B.Verkin Institute for Low Temperature Physics and Engineering of NAS of Ukraine, 47 Nauky Ave., Kharkiv 61103, Ukraine

The event is open for participants of the CM<P 2021 and all interesting persons. Listeners can choose the format of participation: off-line or online. The number of free places in the conference hall during the event agrees with the sanitary standards. For life stream participation in Zoom as listener at the Thermal Conductivity Workshop, please choose the online format during the step of registration. The Zoom link to the live stream of the event will be send by email for all registered participants before 8 June 2021.

Registration for the listeners: <https://forms.gle/2uToPvkSWzGHDeYm6>

Zoom link

<https://us05web.zoom.us/j/3888458369?pwd=N3N0UkJLNFNad29oWG1kelpwelhjUT09>

ID: 388 845 8369

Password: 13051960



Thermal Conductivity

International Advanced
Research Workshop



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ФОНД ДОСЛІДЖЕНЬ
УКРАЇНИ**