

Conference program

**2026 IEEE 43rd International Conference
on Electronics and Nanotechnology**

ELNANO-2026

**April 27-30, 2026
Kyiv, Ukraine**

IEEE 
UKRAINE SECTION



ORGANIZERS

IEEE Ukraine Section

IEEE Ukraine Section (Kyiv) ED/MTT/EP/COM/SSC Societies Joint Chapter

IEEE Ukraine Section SP/AES Societies Joint Chapter

IEEE Ukraine Section EMB Society Chapter

IEEE Ukraine Section NANO Council Chapter

National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"

CONFERENCE SUPPORTER

LEM Ukraine



VENUE

Smart shelter at Kyiv Polytechnic Institute Library, Clust Space

Scientific and Technical Library named after G.I. Denysenko

(Location 50.449817067508455, 30.456642277845997)



TIME ZONE

Time zone: Kyiv city, Ukraine (GMT+3)

COMMITTEES

OVERSIGHT COMMITTEE

Iryna Ivasenko	IEEE Ukraine Section
Mikhail Balaban	IEEE Ukraine Section, IEEE Ukraine Section NANO Council Chapter
Ievgen Pichkalov	IEEE Ukraine Section
Mykhaylo Melnyk	IEEE Ukraine Section
Sergii Grybniak	IEEE Ukraine Section
Sergey Krivenko	IEEE Ukraine Section EMBS Society Chapter
Hanna Porieva	IEEE Ukraine Section (Kyiv) ED/MTT/EP/COM/SSC Societies Joint Chapter
Mykhaylo Andriychuk	IEEE Ukraine Section SP/AES Societies Joint Chapter

ORGANIZING COMMITTEE

HONORARY CHAIR

Yuriy Yakymenko	Academician, IEEE Life Senior Member, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
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ORGANIZING COMMITTEE CHAIR

Kateryna Ivanko	Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
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ORGANIZING COMMITTEE CO-CHAIR

Volodymyr Timofeyev	IEEE Life Member, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
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TECHNICAL PROGRAM COMMITTEE CHAIR

Viktor Kazmirenko	Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
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PUBLICATION CHAIR

Hanna Porieva	Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
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FINANCIAL CHAIR

Olena Semenovska	Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
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LOCAL ORGANIZING COMMITTEE CHAIR

Yuriy Prokopenko	Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
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TECHNICAL PROGRAM COMMITTEE

TRACK 1. NANOTECHNOLOGY IN ELECTRONICS

Dmytro Tatarchuk (CHAIR), Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
Ievgen Kharabet, Infineon Technologies, Dresden, Germany
Halyna Klym, Lviv Polytechnic National University, Lviv, Ukraine
Viktoriia Koval, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
Tetiana Obukhova, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
Volodymyr Timofeyev, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine

TRACK 2. BIOMEDICAL ENGINEERING

Anton Popov (CHAIR), Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
Volodymyr Berest, V.N.Karazin Kharkiv National University, Kharkiv, Ukraine
Kateryna Ivanko, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
Yevhenii Karpliuk, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
Ismael Navas, University of Malaga, Malaga, Spain
Hanna Porieva, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
Radu Ranta, Université de Lorraine, Nancy, France

TRACK 3. ELECTRON DEVICES

Viktor Kazmirenko (CHAIR), Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
Anton Korniienko, Ecole Centrale de Lyon, Ecully, France
Olena Semenovska, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
Eldar Sabanovic, Vilnius Gediminas Technical University, Vilnius, Lithuania
Volodymyr Timofeyev, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
Oleg Vityaz, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine

TRACK 4. MICROWAVE THEORY AND TECHNIQUES

Yuriy Prokopenko (CHAIR), Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
Irina Golubeva, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
Viktor Kazmirenko, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
Yurii Vountesmery, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine

CONFERENCE STATISTICS

Submissions	179
Accepted	111
Rejected	68
Acceptance rate	0,62

TRACK	ACCEPTED
NANOTECHNOLOGY IN ELECTRONICS	41
BIOMEDICAL ENGINEERING	22
ELECTRON DEVICES	16
MICROWAVE THEORY AND TECHNIQUES	32

COUNTRIES OF THE AUTHORS

1. Armenia	7. Denmark	13. Mexico	19. Türkiye
2. Canada	8. France	14. Portugal	20. Ukraine
3. Chad	9. Germany	15. Republic of Korea	21. United Kingdom
4. Chile	10. Italy	16. Serbia	22. USA
5. China	11. Kazakhstan	17. Sweden	
6. Colombia	12. Latvia	18. Switzerland	

CONFERENCE SCHEDULE

Time/Date	27.04.2026 Monday	28.04.2026 Tuesday	29.04.2026 Wednesday	30.04.2026 Thursday					
09:30 – 10:00		Registration Desk CLUST Space							
10:00 – 10:30		On-site presentations Tracks 1, 2, 4 CLUST Space	Online presentations Tracks 1, 2, 3, 4						
10:30 – 11:00	Registration Desk CLUST Space								
11:00 – 11:30	OPENING CEREMONY								
11:30 – 12:00	On-site presentations Tracks 1, 3, 4 CLUST Space	Coffee Break							
12:00 – 12:30		IEEE YP MEETUP CLUST Space							
12:30 – 13:00									
13:00 – 13:30	Coffee Break	Coffee Break							
13:30 – 14:00									
14:00 – 14:30	Supporter Presentation LEM Ukraine CLUST Space	On-site presentations Track 2			IEEE YP MEETUP online				
14:30 – 15:00	On-site presentations Tracks 1, 3, 4 CLUST Space								
15:00 – 15:30									
15:30 – 16:00									
16:00 – 16:30									
16:30 – 17:00									
17:00 – 17:30									
17:30 – 18:00									

27.04.2026

CONFERENCE PARTICIPANTS REGISTRATION

Smart Shelter CLUST Space, Library of Igor Sikorsky Kyiv Polytechnic
Institute (April 27, 10:30 – 11:00)

IEEE Kyiv Polytechnic Week: OPENING CEREMONY

ON-SITE

Smart Shelter CLUST Space, Library of Igor Sikorsky Kyiv Polytechnic
Institute (April 27, 11:00 – 11:30)

1	Welcome speech from the administration of Igor Sikorsky Kyiv Polytechnic Institute
2	Serhii Naida , Dean of the Faculty of Electronics, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
3	Ievgen Pichkalov , IEEE ELNANO Oversight Committee Member, IEEE Ukraine Section Treasurer, Section OpCom Member, Ukraine
4	Yuriy Yakymenko , IEEE ELNANO Honorary Chair, Academician, IEEE Life Senior Member, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
5	Kateryna Ivanko , IEEE ELNANO Organizing Committee Chair, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
6	Ievgen Verbytskyi , IEEE STEE Organizing Committee Chair, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine

TRACK 1. NANOTECHNOLOGY IN ELECTRONICS

ON-SITE PRESENTATIONS

Smart Shelter CLUST Space, Library of Igor Sikorsky Kyiv Polytechnic
Institute (April 27, 11:45 – 13:15)

1	11:45-12:00	Study of Structure and Microwave Properties of Magnesium Titanate Ceramic Sample Synthesized by the Pechini Method (CMT #71)	Tetiana Plutenko, Oleg V'yunov, Oleg Yanchevskii, <u>Oleksandr Fedorchuk</u> , Leonid Kovalenko, Anatolii Bilous (V.I. Vernadsky Institute of General and Inorganic Chemistry of the National Academy of Sciences of Ukraine - Ukraine)
2	12:00-12:15	Chemical Surface Modification of Silicon Nanowires for Photovoltaic Application (CMT #96)	Viktoriia Koval, <u>Daria Khomiakova</u> , Yaroslav Linevych, Mykhailo Dusheiko, Yurii Yasiievych, Petro Teselko (Igor Sikorsky Kyiv Polytechnic Institute; Taras Shevchenko National University of Kyiv - Ukraine)

3	12:15-12:30	Synthesis of Ag-doped ZnO nanocrystals by electrolytic method and their characterization (CMT #101)	V.M. Dzhagan, A.V. Lysytsya, V.O. Myslinchuk, M.V. Moroz, B.D. Nechyporuk, B.P. Rudyk, V.A. Siaskyi, <u>V.V. Nosenko</u> , V.O. Yukhymchuk (V. Lashkaryov Institute of Semiconductors Physics NASU; Rivne State University of Humanities; National University of Water and Environmental Engineering - Ukraine)
4	12:30-12:45	Breath Sensors Based on Modified Silicon Nanowire Array for Human Health Monitoring (CMT #94)	Viktoriia Koval, <u>Yevhenii Mamonov</u> , Yaroslav Linevych, Mykhailo Dusheiko, Natalia Kavratska, Petro Teselko (Igor Sikorsky Kyiv Polytechnic Institute; Taras Shevchenko National University of Kyiv - Ukraine)
5	12:45-13:00	Simulation of Current Losses of Short-Focus Electron Beams in the Guiding Channel (CMT #7)	<u>Igor Melnyk</u> , Mykola Surzhikov, Serhii Tuhai (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)
6	13:00-13:15	Concentration-Regulated Optical Behavior and Energy-Transfer Pathways in Carbon Nanodots (CMT #78)	<u>Olha Pylypova</u> , Anna Topchylo, Olexandr Tsuvariev, Ivan Lysenko, Taisiia Kuzmenko, Valeriy Skryshevsky (Taras Shevchenko National University of Kyiv - Ukraine)

27.04.2026

TRACK 3. ELECTRON DEVICES

ON-SITE PRESENTATIONS

Smart Shelter CLUST Space, Library of Igor Sikorsky Kyiv Polytechnic Institute (April 27, 11:45 – 13:00)

1	11:45-12:00	Equalized Bandwidth Modeling of Distributed Raman Gain in Singlemode Silica Fibers (CMT #141)	<u>Vladyslav Zaika</u> , Georgii Felinskyi, Stanislav Felinskyi, Valerii Grygoruk, Iryna Serdeha (Educational and Scientific Institute of High Technologies Taras Shevchenko National University of Kyiv - Ukraine)
2	12:00-12:15	Thermal Time-of-Flight Method for Gas Flow Velocity Measurement on a MEMS Platform (CMT #28)	<u>Yevhen Hrebonkin</u> , Viktor Zavorotnyi, Borys Lupyna, Yaroslav Linevych (Igor Sikorsky Kyiv Polytechnic Institute; V. Lashkaryov Institute of Semiconductor Physics of National Academy of Sciences of Ukraine - Ukraine)

3	12:15-12:30	Design and Control of a Thrust-Vectoring Quadrotor with Experimental Validation (CMT #34)	Renat Oliinyk , Maksym Zylevich (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)
4	12:30-12:45	Parametric Identification of Resistive-Reactive Two-Terminal Component Model Using Exponential Excitation (CMT #73)	Bohdan Dakal , Oleg Vityaz, Yevhenii Karpliuk (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)
5	12:45-13:00	Method for Measurement of Reactive Parameters of Two-Terminal Components with Self-Tuning to a Measuring Value (CMT #176)	Oleg Vityaz, Bohdan Dakal , Yevhenii Karpliuk (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)

TRACK 4. MICROWAVE THEORY AND TECHNIQUES

ON-SITE PRESENTATIONS

Smart Shelter CLUST Space, Library of Igor Sikorsky Kyiv Polytechnic Institute (April 27, 11:45 – 13:15)

1	11:45-12:00	Microwave Behavior of PVC/YIG/carbon Composite Thin Films (CMT #42)	Dmytro Zhytnyk , Hryhorii Chumak, Igor Fesych, Valerii Klepko, Volodymyr Malyshev, Andrii Komarov, Natalia Atamas, Olga Boldyrieva, Maksym Popov, Igor Matushko, Yuriy Noskov, Vladyslav Lisnyak (Taras Shevchenko National University of Kyiv; Institute of Macromolecular Chemistry, National Academy of Sciences of Ukraine; Ukraine Educational and Scientific Institute of High Technologies, Taras Shevchenko National University of Kyiv; Kukhar Institute of Bioorganic Chemistry and Petrochemistry, National Academy of Sciences of Ukraine; Chuiko Institute of Surface Chemistry, National Academy of Sciences of Ukraine – Ukraine)
2	12:00-12:15	Loss Compensation and Tunable Surface Polaritons in Ferrite-Semiconductor Hypercrystals under Magnetic Bias (CMT #18)	Illia Fedorin (Igor Sikorsky Kyiv Polytechnic Institute – Ukraine)
3	12:15-12:30	Role of Filler Oxidation in Tuning the X-Band Electromagnetic Properties	Liudmyla Grishchenko, Igor Matushko, Yuriy Noskov, Olga Boldyrieva, Dmytro Zhytnyk , Vladyslav Moiseienko, Valerii

		of Poly(vinyl chloride)/ Activated Carbon Composites (CMT #21)	Klepko, Vitaliy Diyuk, Volodymyr Malyshev, Andrii Komarov, Anatoliy Ivanisik, Vladyslav Lisnyak (Chuiko Institute of Surface Chemistry, National Academy of Sciences of Ukraine; Taras Shevchenko National University of Kyiv; Kukhar Institute of Bioorganic Chemistry and Petrochemistry, National Academy of Sciences of Ukraine; Institute of Macromolecular Chemistry, National Academy of Sciences of Ukraine; Independent Research & Development Laboratory "200k Electronics"; Institute of High Technologies, Taras Shevchenko National University of Kyiv – Ukraine)
4	12:30-12:45	Surface-Wave Dispersion at Magnetized Ferrite– Semiconductor Hypercrystal Interfaces Under Variable External Dielectric Loading (CMT #19)	<u>Illia Fedorin</u> (Igor Sikorsky Kyiv Polytechnic Institute – Ukraine)
5	12:45-13:00	Dynamic Data-Driven Machine Learning: Signature Analysis of Radio Frequency Spectrum and Signals (CMT #98)	Sergey Lyshevski, Serhii Kovbasa, <u>Anton Holosha</u> (RIT - USA; Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)
6	13:00-13:15	X-band Microwave Behavior of Thin Films of Poly(vinyl chloride)/Multi- walled carbon nanotubes (CMT #9)	<u>Dmytro Zhytnyk</u> , Yuriy Noskov, Olga Boldyrieva, Nataliia Atamas, Igor Matushko, Anatoliy Ivanisik, Andrii Komarov, Valerii Klepko, Volodymyr Malyshev, Yuriy Len, Mykola Makarets, Vladyslav Lisnyak (Taras Shevchenko National University of Kyiv; Kukhar Institute of Bioorganic Chemistry and Petrochemistry, NASU; Institute of Macromolecular Chemistry, NASU; Chuiko Institute of Surface Chemistry, NASU – Ukraine)

COFFEE BREAK

Smart Shelter CLUST Space (April 27, 13:15 – 14:00)

27.04.2026

PRESENTATION FROM THE CONFERENCE SUPPORTER

LEM UKRAINE

Smart Shelter CLUST Space (April 27, 14:00 – 14:30)

14:00-14:30	Advanced Methods in Nanomaterials and Electronics Research	Oksana Rudyk, LLC LEM Ukraine
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27.04.2026

TRACK 1. NANOTECHNOLOGY IN ELECTRONICS

ON-SITE PRESENTATIONS

Smart Shelter CLUST Space, Library of Igor Sikorsky Kyiv Polytechnic Institute (April 27, 14:30 – 15:45)

1	14:30-14:45	The evolution of the structure and magnetic state of Cu-Al-(Fe, Mn) alloys induced by thermal treatment (CMT #111)	Lesya Demchenko, Anatoliy Titenko, Dariya Savchenko, Anatolii Kravets, Anatoliy Perekos, Volodymyr Trachevskij, <u>Oleksii Titenko</u> , Xiaodong Zou (Igor Sikorsky Kyiv Polytechnic Institute; Institute of Magnetism; G.V. Kurdyumov Institute for Metal Physics - Ukraine, Technical Center of NAS; Stockholm University - Sweden, Royal Institute of Technology - Sweden)
2	14:45-15:00	Electromagnetic Shielding Performance of Spinel Ferrite-Epoxy Nanocomposites (CMT #52)	Ludmila Matzui, Ludmila Vovchenko, Tetyana Len, Kateryna Dubyk, Denys Shpylka, <u>Olena Yakovenko</u> , Larysa Kaykan, Julia Mazurenko (Taras Shevchenko National University of Kyiv; G.V. Kurdyumov Institute for Metal Physics NAS of Ukraine – Ukraine)
3	15:00-15:15	Effect of Layer Inversion on the Ordering Process in Nanoscale FePt/FePd and FePd/FePt Films during Annealing in Hydrogen (CMT #80)	<u>Dmytro Melnikov</u> , Ruslan Shkarban, Maryna Natalenko, Halyna Lobachova, Mykola Skoryk, Viktoriia Slepchenko, Tetiana Verbitska, Maksym Barabash, Iurii Makogon (Educational and Research Institute of Materials Science and Welding, Igor Sikorsky Kyiv Polytechnic Institute;

			G.V.Kurdyumov Institute for Metal Physics NASU; Technical Center NASU - Ukraine)
4	15:15-15:30	Cracking propagation and crystallization behavior of NiTi nanofilms on flexible polyimide substrate (CMT #80)	Andrii Orlov, <u>Oleksandr Palchekovskyi</u> , Ivan Kruhlov (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)
5	15:30-15:45	Nonlinear Frequency Tunability of Antiferromagnetic Spin Hall Oscillators (CMT #116)	<u>Oleh Shtanko</u> , Oleksandr Ivanyuta, Oleksandr Prokopenko (Taras Shevchenko National University of Kyiv - Ukraine)

27.04.2026

TRACK 3. ELECTRON DEVICES

ON-SITE PRESENTATIONS

Smart Shelter CLUST Space, Library of Igor Sikorsky Kyiv Polytechnic Institute (April 27, 14:30 – 15:45)

1	14:30-14:45	Surface triangulation as a method for adaptive linearization of electronic three-terminal component mathematical models (CMT #83)	<u>Serhii Drozdov</u> , Oleg Vityaz (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)
2	14:45-15:00	Pulse-Based Method for p-n Junction Capacitance Measurement (CMT #77)	Oleg Vityaz, <u>Artem Moskovko</u> (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)
3	15:00-15:15	Limiting Characteristics of an Electric Discharge for Obtaining Carbon Nanomaterials from Gaseous Hydrocarbons (CMT #130)	<u>Dmytro Vinnychenko</u> , Natalia Nazarova (Institute of Electrodynamics NASU; Institute of Pulse Processes and Technologies NASU - Ukraine)
4	15:15-15:30	Design and Characterization of a Single-Element Guard-Ring-Free Silicon PIN Photodiode (CMT #167)	Mykola Kukurudziak, Andriy Voronko, Yuriy Yakymenko, Denys Novikov, <u>Dmytro Verbitskyi</u> (Igor Sikorsky Kyiv Polytechnic Institute; Engineering production complex 1 Rhythm Optoelectronics Shareholding Company – Ukraine)
5	15:30-15:45	Development and Qualification of a Silicon PN Photodiode for	Mykola Kukurudziak, Andriy Voronko, Dmitry Volovik, Denys Novikov, <u>Dmytro Verbitskyi</u> (Engineering production complex 1 Rhythm

	Precision Radiometric Measurements (CMT #168)	Optoelectronics Shareholding Company; Igor Sikorsky Kyiv Polytechnic Institute - Ukraine; Agnitron Technology Inc. - Chanhassen, MN, USA)
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27.04.2026

TRACK 4. MICROWAVE THEORY AND TECHNIQUES

ON-SITE PRESENTATIONS

Smart Shelter CLUST Space, Library of Igor Sikorsky Kyiv Polytechnic Institute (April 27, 14:30 – 15:45)

1	14:30-14:45	Design of the Excitation System for a Helicon Isolator (CMT #55)	<u>Yuriy Vountesmery</u> (Igor Sikorsky Kyiv Polytechnic Institute – Ukraine)
2	14:45-15:00	Energy-Efficient Reactive Jamming Architecture Based on SDR and Real-Time Signal Analysis (CMT #38)	<u>Dmytro Svakha</u> , Maksym Zylevich (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)
3	15:00-15:15	Compact Lumped-Distributed Bandpass Filters (CMT #13)	<u>Evgeniy Nelin</u> (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)
4	15:15-15:30	Physical Mechanisms of Electrically Tunable Microwave Materials (CMT #33)	Yuriy Poplavko, Yuriy Didenko, <u>Kostiantyn Mazur</u> , Dmytro Tatarchuk, Yuriy Yakymenko (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)
5	15:30-15:45	Bragg Hybridization: Impedance Model and Microwave Devices (CMT #115)	<u>Evgeniy Nelin</u> (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)
6	15:45-16:00	The Effect of Electromagnetic Field Inhomogeneity in a GTEM Cell on Radiation Measurements (CMT #118)	<u>Oleksii Malyshok</u> , Artem Chernov, Irina Golubeva, Victor Kazmirenko, Yuriy Prokopenko, Young Dae Kim (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine; Tescom Co. Ltd. - Republic of Korea)

28.04.2026

CONFERENCE PARTICIPANTS REGISTRATION

Smart Shelter CLUST Space, Library of Igor Sikorsky Kyiv Polytechnic
Institute (April 28, 9:30 – 10:00)

TRACK 1. NANOTECHNOLOGY IN ELECTRONICS

ON-SITE PRESENTATIONS

Smart Shelter CLUST Space, Library of Igor Sikorsky Kyiv Polytechnic
Institute (April 28, 10:00 – 11:30)

1	10:00-10:15	Supervised Learning of Artificial "Neuron" Based on Antiferromagnetic Spin Hall Oscillator (CMT #58)	Iryna Sotnyk , Oleksandr Prokopenko (Taras Shevchenko National University of Kyiv - Ukraine)
2	10:15-10:30	Current-voltage characterisation of por-Si metal-phthalocyanine heterostructures (CMT #157)	Tetiana Obukhova , Mykola Semenenko, Sergii Kravchenko, Andrey Sarikov, Viktoria Koval (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine, V. Lashkaryov Institute of Semiconductor Physics - Ukraine)
3	10:30-10:45	Plasmonic Properties of Dense Random Coatings of Solid Surfaces by Metallic Nanoparticles (CMT #156)	Taras Vasyliiev , Valeri Lozovski, Anatoliy Vasiljev (Educational Scientific Institute of High Technologies, Taras Shevchenko National University of Kyiv - Ukraine)
4	10:45-11:00	Thermally Controlled Interlayer Exchange Coupling in Magnetic Multilayers:Electrical Curie Switching and Field-Induced Anisotropy Effects (CMT #155)	Oleksii Kozlov , Anatolii Kravets, Serhii Reshetniak, Viktor Kalita (Igor Sikorsky Kyiv Polytechnic Institute; V.G. Baryakhtar Institute of Magnetism, NAS of Ukraine; Institute of Physics, NAS of Ukraine – Ukraine; Royal Institute of Technology - Sweden)
5	11:00-11:15	Energy levels tuning in the double quantum well by impurity ionization and transverse electric field (CMT #48)	Roman Demediuk, Viktor Tulupenko, Olha Mieziientseva , Oksana Fomina, Volodymyr Akimov, Anton Tiutiunnyk, Carlos Duque, David Laroze (Donbas State Pedagogical University, Donbas State Engineering Academy – Ukraine; Universidad de Medellín, Universidad de Antioquia-Colombia; Universidad de Tarapacá – Chile)

6	11:15-11:30	3D lattice Monte Carlo modeling of morphology formation of Si/SiOx nanocomposites during phase separation of nonstoichiometric Si oxide films (CMT #129)	Ivan Oliinyk, <u>Andrey Sarikov</u> (Taras Shevchenko National University of Kyiv, V. Lashkaryov Institute of Semiconductor Physics of the NASU - Ukraine)
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28.04.2026

TRACK 2. BIOMEDICAL ENGINEERING

ON-SITE PRESENTATIONS

Smart Shelter CLUST Space, Library of Igor Sikorsky Kyiv Polytechnic Institute (April 28, 10:00 – 11:30)

1	10:00-10:15	Automated Determination of aEEG Patterns for the Diagnosis of Hypoxic-Ischemic Encephalopathy in Newborns Using Machine Learning (CMT #177)	<u>Danylo Reznichenko</u> , Alina Frunza, Anastasiya Babintseva, Anton Popov, Kateryna Ivanko, Illya Chaikovsky, Maksym Manko (Igor Sikorsky Kyiv Polytechnic Institute, Bukovinian State Medical University, Central Municipal Clinical Hospital, Ukrainian Catholic University, V.M.Glushkov Institute of Cybernetics of the NASU, Kyiv School of Economics - Ukraine)
2	10:15-10:30	Analysis of Electrical Brain Activity to Study the Effects of Painful Events in Newborns (CMT #178)	Danylo Reznichenko, <u>Viacheslav Bondarev</u> , Kateryna Ivanko, Yevhenii Karpluk, Anton Popov, Natalya Korogod, Hanna Porieva, Nataliia Ivanushkina (Igor Sikorsky Kyiv Polytechnic Institute, Ukrainian Catholic University - Ukraine; HESAV School of Health Sciences - Vaud, HES-SO University of Applied Sciences and Arts Western Switzerland - Switzerland)
3	10:30-10:45	Probabilistic Lung Masking for Reduction of Rib-Related Artifacts in Chest Tomosynthesis Images (CMT #132)	<u>Oleksandra Miroshnychenko</u> , Sergii Miroshnychenko, Yurii Klobta, Andrii Nevgasymyi (State University "Kyiv Aviation Institute"; Teleoptika SPA, LLC; Teleoptic PRC, LTD - Ukraine)
4	10:45-11:00	Non-Invasive Blood Glucose Estimation Using Machine Learning: Multi-Wavelength Photoplethysmography-Based Approach (CMT #144)	Volodymyr Chuchkanov, Dmytro Velyhotskyi (Taras Shevchenko National University of Kyiv; Igor Sikorsky Kyiv Polytechnic Institute; V.G. Baryakhtar Institute of Magnetism of the NASU - Ukraine)

5	11:00-11:15	Recognition of Cardiac Pathology and Late Potentials on ECG Signals Using Multimodal Large Language Models (CMT #179)	Nataliia Ivanushkina, <u>Anton Mnevets</u> , Kateryna Ivanko (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)
6	11:15-11:30	Effect of magnetic field on laser-stimulated photodissociation of oxyhemoglobin in arterial blood (CMT #86)	Dmytro Velyhotskyi, Igor Bekh, <u>Oleksandra Ostepenکو</u> , Serge Mamilov (Igor Sikorsky Kyiv Polytechnic Institute, Taras Shevchenko National University of Kyiv, V.G. Baryakhtar Institute of Magnetism of the NAS of Ukraine - Ukraine)

28.04.2026

TRACK 4. MICROWAVE THEORY AND TECHNIQUES

ON-SITE PRESENTATIONS

Smart Shelter CLUST Space, Library of Igor Sikorsky Kyiv Polytechnic Institute (April 28, 10:00 – 11:45)

1	10:00-10:15	Preparation of Thermoplastic Polyurethane/Birch Activated Carbon Composites and Measurement of Their X-Band Microwave Properties (CMT #53)	Liudmyla Grishchenko, <u>Viktoriia Malovychko</u> , Oleksii Gonchar, Maksym Popov, Hryhorii Chumak, Vladyslav Moiseienko, Vladyslav Lisnyak, Roman Belimenko, Maksym Kremenskoy, Oleksii Barsukov, Igor Fesych, Igor Matushko (Chuiko Institute of Surface Chemistry, NASU; Taras Shevchenko National University of Kyiv; Institute of Macromolecular Chemistry, NASU; Institute of High Technologies Taras Shevchenko National University of Kyiv; Independent Research & Development Laboratory "200k Electronics"; Semiconductor electronics department EL-SY Ltd; Novations LLC; Institute of Gerontology the NAMS of Ukraine Kyiv; Taras Shevchenko National University of Kyiv - Ukraine)
2	10:15-10:30	Neural Network-Based Solution of the Inverse Radar Cross Section Problem (CMT #48)	<u>Maksym Buhai</u> , Maxim Legenkiy (V.N. Karazin Kharkiv National University - Ukraine)
3	10:30-10:45	Loss Analysis in a Micromechanically Tunable Slotline (CMT #122)	<u>Artem Chernov</u> , Oleksii Malyshok, Irina Golubeva, Victor Kazmirenko, Yuriy Prokopenko (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)

4	10:45-11:00	Effective Parameter Method for Electromagnetic Wave Scattering in Multilayer Anisotropic Media (CMT #119)	Oleksii Malyshok, Artem Chernov , Irina Golubeva, Victor Kazmirenko, Olena Semenovska, Yuriy Prokopenko (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)
5	11:00-11:15	Effects of Aluminium and Gold Ions on the Spectral Characteristics of TiO ₂ Nanoparticles Elaborated as Efficient UV-excited Phosphors (CMT #32)	Tetiana Busko, Iryna Moiseienko, Valentyna Levchyk, Tetiana Voitenko, Oksana Chukova, Aleksei Kotlov, Yuriy Hizhnyi, Oleksii Makarenko, Thor Fesych (Taras Shevchenko National University of Kyiv, Donetsk Institute for Physics and Engineering NAS of Ukraine – Ukraine; Yusuf Hamied Department of Chemistry University of Cambridge - United Kingdom, Deutsches Elektronen-Synchrotron DESY - Germany)
6	11:15-11:30	Nonlinear Waves in Layered Superconductors in Bilateral Otto Configuration (CMT #45)	Tetiana Rokhmanova , Zakhar Maizelis, Valery Yampol'skii (O.Ya. Usikov Institute for Radiophysics and Electronics, National Academy of Sciences of Ukraine; V.N.Karazin Kharkiv National University - Ukraine)
7	11:30-11:45	Synthesis and Properties of the Composite Materials with Nickel-Zinc and Nickel-Zinc-Copper Spinel for the Microwave-Absorbing Coatings (CMT #31)	Vladyslav Kukhar, Maksym Popov , Oleksandr Fedorchuk, Tetiana Plutenko, Anatolii Belous (V.I. Vernadsky Institute of General and Inorganic Chemistry; Taras Shevchenko National University of Kyiv - Ukraine)

COFFEE BREAK

Smart Shelter CLUST Space, Library of Igor Sikorsky Kyiv Polytechnic Institute (April 28, 11:30 – 12:00 tracks 1 and 2, 11:45 – 12.15 track 4)

28.04.2026

IEEE R8 Young Professionals Meetup

Supported by IEEE Young Professionals and IEEE Foundation

ON-SITE PRESENTATIONS

Smart Shelter CLUST Space, Library of Igor Sikorsky Kyiv Polytechnic
Institute (April 28, 12:00 – 14:00)

1	12:00-12:30	Overview of the IEEE and Young Professionals community. IEEE Engagement & Volunteering Opportunities	Kateryna Ivanko , IEEE Ukraine Section Student Activity Committee Chair
2	12:30-13:00	<i>Seminar 1</i> Intelligent Control for Assistive Orthoses: An Embedded Linux and Distributed Architecture Approach	Anton Kotsiubailo , Igor Sikorsky Kyiv Polytechnic Institute - Ukraine
3	13:00-13:30	<i>Seminar 2</i> Longitudinal Modeling and Prediction of Parkinson's Disease Using Deep Learning and Clinical Time-Series Data	Illia Mushta , Igor Sikorsky Kyiv Polytechnic Institute - Ukraine
4	13:30-14:00	Networking Session	Discussions with the speakers and further interaction with fellow attendees

COFFEE BREAK

Smart Shelter CLUST Space,
Library of Igor Sikorsky Kyiv Polytechnic Institute

28.04.2026

TRACK 2. BIOMEDICAL ENGINEERING

ON-SITE PRESENTATIONS

Smart Shelter CLUST Space, Library of Igor Sikorsky Kyiv Polytechnic
Institute (April 28, 14:00 – 16:00)

1	14:00-14:15	Methodology of R-peaks detection algorithm selection for single-lead ECG devices (CMT #114)	Artur Klibyshev , Roman Tomashevskiyi (National Technical University "Kharkiv Polytechnic Institute" - Ukraine)
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2	14:15-14:30	Classification of Respiratory Sounds by Respiratory System Condition Using Open-Access Databases (CMT #62)	Eduard Vvedenskyi , Viktor Beregun (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)
3	14:30-14:45	Evaluating Clusterability of CNN-Based EMG Feature Embeddings Under PCA Dimensionality Reduction (CMT #41)	Bohdan Kolomiiets , Yevhenii Karpluk (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)
4	14:45-15:00	Heart Rate Variability Analysis for the Classification of Physical Activity Levels Using Machine Learning Methods (CMT #146)	Mykhailo Kudas , Hanna Porieva, Yevhenii Karpluk (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)
5	15:00-15:15	Localization of Systolic and Diastolic Sounds in a Phonocardiogram using the Sliding Quantile for Threshold Filtering of the Signal (CMT #22)	Victor Grinchenko, Natalia Gorodetska, Valery Oliynik (Institute of Hydromechanics of the National Academy of Sciences of Ukraine - Ukraine)
6	15:15-15:30	Statistical Analysis of Factors Influencing Blood Oxygen Saturation in Patients During Oxygen Therapy (CMT #152)	Danylo Yarosh , Yevgeniy Karplyuk, Yuriy Vountesmyr (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)

29.04.2026

TRACK 1. NANOTECHNOLOGY IN ELECTRONICS

ON-LINE PRESENTATIONS (10:00-12:15)

1	10:00-10:15	Enhanced Magnetocaloric Effect in Cadmium-doped Manganite Nanopowders (CMT #44)	Danyang Su, Nikita Liedienov , Victor Kalita, Igor Fesych, Andrey Bodnaruk, Yuri Dzhezherya, Sergiy Reshetnyak, Aleksey Pashchenko, Georgiy Levchenko (State Key Laboratory of High Pressure and Superhard Materials of Jilin University - China; Donetsk Institute for Physics and Engineering named after O.O. Galkin, NASU; Igor Sikorsky Kyiv Polytechnic Institute; Taras Shevchenko National University of Kyiv; Institute of Physics, NAS of Ukraine; Donetsk Institute for Physics and Engineering named after O.O. Galkin, NASU - Ukraine)
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2	10:15-10:30	Electromagnetic Field Distribution and Absorption in the THz Range in PTFE Based Composites with Carbon Nanotube Clusters (CMT #99)	Zoya Eremenko, Yuriy Savin, Iryna Galstian, <u>Kateryna Kuznetsova</u> , Roman Sukhanevych, Evgen Len (O. Ya. Usykov Institute for Radiophysics and Electronics of the N.A.S. of Ukraine, Kyiv Academic University, G.V. Kurdyumov Institute for Metal Physics of the N.A.S. of Ukraine - Ukraine, Leibniz Institute for Solid State and Materials Research - Germany)
3	10:30-10:45	Optical Phenomena in a Dimer of Parallel Long Nanocylinders from the Perspective of Transformational Plasmonics (CMT #138)	Roman Korolkov, Andrii Korotun, <u>Oleh Shyrokoopoulos</u> , Vitalii Reva (Zaporizhzhia Politechnic National University, G.V. Kurdyumov Institute for Metal Physics of the NAS of Ukraine)
4	10:45-11:00	Surface Electromagnetic Wave Maps for a Composite with Randomly Distributed Spheroidal Metallic Inclusions (CMT #136)	Nazar Pavlyshche, Andrii Korotun, Vitalii Reva, <u>Dmytro Chyslov</u> , Igor Titov (Zaporizhzhia Politechnic National University; G.V.Kurdyumov Institute for Metal Physics of the NAS of Ukraine - Ukraine)
5	11:00-11:15	A Study of Baseline Drift Behavior in a CNT-Enhanced Metal Oxide Sensor for Battery Failure Detection (CMT #147)	<u>Chinwe Tait</u> , Ping Ren (Kettering University - United States of America)
6	11:15-11:30	Fabrication of Porous Palladium Through Two-step Process for a Hydrogen Sensor (CMT #162)	Esme Isik, Murat Ozabaci, <u>Necmettin Kilinc</u> (Malatya Turgut Ozal University - Türkiye; Inonu University - Türkiye)
7	11:30-11:45	Tailoring Black Silicon Nanoneedle Arrays: The Role of RIE Parameters and Post-Etching Treatments (CMT #36)	<u>Gagik Ayyazyan</u> , Arthur Aghabekyan, Harutyun Dashtoyan, Laura Lakhoyan (National Polytechnic University of Armenia - Armenia)
8	11:45-12:00	Physical properties of CdFeP2S6 as a new material for spintronic devices (CMT #159)	<u>Henrietta Bán</u> , Roman Pavlyshyn, Andrew Horvat, Anton Kohutych, Vitaly Gerasimov, Alexander Molnar (Uzhhorod National University, Mukachevo State University - Ukraine)
9	12:00-12:15	Efficient Algorithm for Rectilinear Spanning Graph Construction for 3D Integrated Circuits Routing (CMT #12)	<u>Rafavel Khachatryan</u> , Ashot Harutyunyan (National Polytechnic University of Armenia – Armenia)

BREAK (12:15-13:00)

TRACK 1. NANOTECHNOLOGY IN ELECTRONICS

ON-LINE PRESENTATIONS (13:00-14:45)

1	13:00-13:15	Porous Silicon Buffer Layer for β -SiC/Si Heterostructures for High-Performance Supercapacitors (CMT #74)	<u>Yana Suchikova</u> , Ivan Kosogov, Serhii Kovachov, Ihor Bohdanov, Zhakyp Karipbaev, Anatoli I. Popov (Berdiansk State Pedagogical University – Ukraine, L.N. Gumilyov Eurasian National University – Kazakhstan, Institute of Solid State Physics University of Latvia - Latvia)
2	13:15-13:30	Structural and Compositional Analysis of CIGS Thin Films for Solar Cell Applications (CMT #76)	<u>Yana Suchikova</u> , Serhii Kovachov, Ihor Bohdanov, Ivan Kosogov, Dariya Drozhcha, Anatoli I. Popov (Berdiansk State Pedagogical University – Ukraine, Institute of Solid State Physics University of Latvia - Latvia)
3	13:30-13:45	Enhancing Toroidal-Mode Excitation in Dielectric Trimer Unit Cell Metasurface (CMT #76)	<u>Oleksii Breaslavets</u> , Zoya Eremenko (O.Ya. Usikov Institute for Radiophysics and Electronics of the National Academy of Sciences of Ukraine - Ukraine; Leibniz Institute for Solid State and Materials Research - Germany)
4	13:45-14:00	Structural and Optical Properties of AlGaAs/GaAs Heterostructure Synthesized by Electrochemical Method (CMT #75)	<u>Yana Suchikova</u> , Serhii Kovachov, Ihor Bohdanov, Ivan Kosogov, Dariya Drozhcha, Anatoli I. Popov (Berdiansk State Pedagogical University – Ukraine, Institute of Solid State Physics University of Latvia - Latvia)
5	14:00-14:15	Reflector Material Effect on Threshold Conditions of DBR-Equipped Microlaser in Visible Range (CMT #133)	Serhii Herasymov, Sergii Dukhopelnykov, <u>Dariia Herasymova</u> (The Institute of Radio Astronomy of the NASU, Institute of Radio-Physics and Electronics NASU - Ukraine; IETR Université de Rennes 1 - France)
6	14:15-14:30	Formation of the morphology of the porous layer for the anti-reflective coating of photoelectric converters (CMT #81)	Sergiy Pritchyn, <u>Oleksiy Prytchyn</u> , Igor Yanchuk, Tymur Zhumatii, Ivan Hul, Dmytro Vedmid, Mykhailo Dusheiko (Kremenchuk Mykhailo Ostrogradsky National University; Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)

7	14:30-14:45	Viscoelastic and Microwave Properties of Thermostable Polycyanurate Based Nanocomposites with Ultra-Low Content of Multiwalled Carbon Nanotubes (CMT #54)	Olga Grigoryeva, Volodymyr Yu. Malyshev, Andrii O. Komarov, Olga Starostenko, <u>Diana Shulzhenko</u> , Alexander Fainleib (Institute of Macromolecular Chemistry National Academy of Sciences of Ukraine; Taras Shevchenko National University - Ukraine)
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BREAK (14:45-15:30)

TRACK 1. NANOTECHNOLOGY IN ELECTRONICS

ON-LINE PRESENTATIONS (15:30-17:30)

1	15:30-15:45	Hydrothermal synthesis and characterization of CeO ₂ /graphite/Co _{0.5} Ni _{0.5} Fe ₂ O ₄ composite for tuning microwave absorption performance (CMT #59)	Liliya Frolova, <u>Nadiya Prokopenko</u> (Ukrainian State University of Science and Technologies - Ukraine)
2	15:45-16:00	The influence of MWCNT on the corrosion properties of a composite nanostructured multilayer [(Cu-Zn) ₁ (Cu-Zn) ₂]n coating (CMT #70)	Daria Stepanova, <u>Antonina Maizelis</u> (National Technical University "Kharkiv Polytechnic Institute" - Ukraine)
3	16:00-16:15	Effect of Powder Dispersity on Microstructure and Free-Volume Defects in Cu _{0.4} Ni _{0.4} Co _{0.4} Mn _{1.8} O ₄ Spinel Ceramics (CMT #140)	<u>Halyna Klym</u> , Yuriy Kostiv (Lviv Polytechnic National University - Ukraine)
4	16:15-16:30	Effect of Sintering Conditions on Electrical Resistance and Humidity Sensitivity of Nanostructured MgAl ₂ O ₄ Ceramics (CMT #142)	<u>Halyna Klym</u> , Ivan Hadzaman (Lviv Polytechnic National University; Ivan Franko Drohobych State Pedagogical University - Ukraine)
5	16:30-16:45	Refractive Index Control in Alq ₃ /DCM-based Thin Films (CMT #123)	<u>Oleksii Kushnir</u> , Ivan Karbovnyk, Borys Turko, Halyna Klym, Vladyslav Vasil'yev, Andriy Kostruba (Ivan Franko National University of Lviv; Lviv Polytechnic National University; Stepan Gzhytskyi National University of Veterinary Medicine and Biotechnologies - Ukraine)
6	16:45-17:00	Impact of GeS ₂ and Ga ₂ S ₃ Content on the Atomic-Deficient Structure and Positron Annihilation in Chalcogenide Glasses (CMT #143)	<u>Halyna Klym</u> , Ivanna Vasylychshyn (Lviv Polytechnic National University - Ukraine)

7	17:00-17:15	Scattering Characteristics of Silver Nanoparticle Structures in the Optical Band (CMT #49)	Stanislav Horielyshev, <u>Gennady Zalevsky</u> , Oleg Sukharevsky, Vitaly Vasilets (Ivan Kozhedub Kharkiv National Air Force University (KNAFU) - Ukraine; National Academy of the National Guard of Ukraine - Ukraine)
8	17:15-17:30	Synthesis and Characterization of TiO ₂ Nanoparticles for Efficient UV-Protective Coatings (CMT #68)	<u>Valentyna Levchyk</u> , Iryna Moiseienko, Tetiana Busko, Oksana Chukova, Vanessa Barvinska, Iaroslav Gnilityskiy, Tatiana Voitenko, Yuriy Hizhnyi, Ihor Fesych (Taras Shevchenko National University of Kyiv; NoviNano, Lab Limited Liability Company; Donetsk Institute for Physics and Engineering NAS of Ukraine - Ukraine; Deutsches Elektronen-Synchrotron DESY, Hamburg, Germany; Yusuf Hamied Department of Chemistry University of Cambridge - United Kingdom)

29.04.2026

TRACK 2. BIOMEDICAL ENGINEERING

ON-LINE PRESENTATIONS (10:00-11:15)

1	10:00-10:15	Detecting Stress-Linked Blood Pressure Relationship Shifts from Ambulatory Monitoring (CMT #165)	Alyona Tymchak, Anastasiia Butkevych, Kateryna Yurtsiv, Ievgen Nastencko, Daria Zahorska, Olha Shaposhnyk, Svetlana Yanushkevich, <u>Vitalii Babenko</u> (Igor Sikorsky Kyiv Polytechnic Institute, Center of Maternity & Childhood – Ukraine; University of Calgary - Canada)
2	10:15-10:30	Signal Analysis for Data-Driven Neurocritical Monitoring (CMT #50)	Gennady Chuiko, <u>Yevhen Darnapuk</u> , Olga Yaremchuk (Petro Mohyla Black Sea National University - Ukraine)
3	10:30-10:45	Machine Learning towards Intrusion Detection in the Internet of Medical Things (CMT #15)	<u>Olena Semenova</u> , Andrii Semenov, Oleksandr Stalchenko, Andrii Dzhush, Volodymyr Martyniuk, Vladyslav Kuzniak (Vinnytsia National Technical University - Ukraine)

4	10:45-11:00	Optimal Noise Filtering in Magnetic Resonance Images via Compression Using Versatile Video Coding (CMT #79)	Boban Bondžulić, Vladimir Lukin, Boban Pavlović, Vladimir Petrović, Olha Krylova, <u>Sergii Kryvenko</u> (University of Defence, University of Novi Sad – Serbia; Kharkiv National Medical University, National Aerospace University KhAI - Ukraine)
5	11:00-11:15	Mathematical Modeling of Temperature Fields in Animal Biological Tissues under Electrosurgical Coagulators for Optimization of Sterilization Modes (CMT #102)	Natalia Kosulina, <u>Yaroslav Yevsiukov</u> , Stanislav Kosulin (State Biotechnological University - Kharkiv; State Biotechnological University; Kharkiv National Medical University - Ukraine)

BREAK (11:15-12:00)

29.04.2026

TRACK 2. BIOMEDICAL ENGINEERING

ON-LINE PRESENTATIONS (12:00-13:15)

1	12:00-12:15	ECG-fingerprint-based key generation in wearable biomedical systems with real-time edge biosignal processing (CMT #128)	Inna Rozlomii, <u>Serhii Naumenko</u> , Olga Melnyk (Cherkasy State Technological University; Bohdan Khmelnytsky National University of Cherkasy; National University of Civil Protection of Ukraine - Ukraine)
2	12:15-12:30	Classification of Surgical Procedure Codes Using the Linear Discriminant Analysis (CMT #61)	Yevgen Sokol, Pavlo Shchapov, Kostiantyn Kolisnyk, Tatyana Bernadskaya, <u>Viktoriia Kolisnyk</u> , Volodymyr Nehoduiko (Kharkiv Polytechnic Institute, Kharkiv National University of Radio Electronics, Kharkiv National Medical University - Ukraine)
3	12:30-12:45	Modeling of microRNA-Mediated Gene Regulation: Dimensionless Analysis and Noise Buffering Mechanisms (CMT #93)	<u>Dimitri Koroliouk</u> , Vittorio Colizzi, Maksym Zoziuk, Maurizio Mattei, Stefano Marini, Yuriy Yakymenko (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine; University Hospital Complex "Bon Samaritain" - Chad; University of Rome Tor Vergata - Italy)
4	12:45-13:00	On the Negative Differential Capacitance in DNA (CMT #20)	<u>Ferdinand Gasparyan</u> , Lusine Gasparyan, Vahan Simonyan (DNA-HIVE LLC - USA)

5	13:00-13:15	Classification of Red Blood Cell Types Using Neural Network and Deep Learning (CMT #170)	<u>Maryna Olieinikova</u> , Daniil Liadov, Volodymyr Berest (V.N. Karazin Kharkiv National University - Ukraine)
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29.04.2026

TRACK 3. ELECTRON DEVICES

ON-LINE PRESENTATIONS (10:00-11:30)

1	10:00-10:15	Magnetoelectric Information and Measurement System Based on Poly-Si Layers in Silicon-on-Insulator Structures (CMT #37)	<u>Oleksii Danyliv</u> , Yurii Khoverko, Anatolii Druzhinin (Lviv Polytechnic National University - Ukraine)
2	10:15-10:30	Simulation of High Field Electron Transport in Bulk Gallium Antimonide (CMT #100)	Tatiana Saurova, Volodymyr Timofeyev, <u>Roman Stasiuk</u> (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)
3	10:30-10:45	Study of Impulse Properties of Indium Antimonide at Strong Electric Fields (CMT #104)	Tatiana Saurova, Volodymyr Timofeyev, <u>Roman Stasiuk</u> , Sergei Khotiaintsev (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine; Universidad Nacional Autonoma de Mexico - Mexico)
4	10:45-11:00	A Multifunctional Analog Device for Real-Time Visualization of Poincaré Sections and 1D Maps (CMT #121)	Andrii Semenov, <u>Anton Khloba</u> , Anton Savytskyi, Olena Semenova, Serhii Tsyrlunyk, Andrii Rudyk (Vinnytsia National Technical University; Vinnytsia National Agrarian University; National University of Water and Environmental Engineering - Ukraine)
5	11:00-11:15	Aging-Aware Receiver Design Using Machine Learning (CMT #135)	<u>Gurgen Grigoryan</u> (Yerevan State University - Armenia)
6	11:15-11:30	Impact of Hardware Test Equipment on Frequency Characterization of 130-nm Register File (CMT #66)	<u>Oleksandr Grudanov</u> , Mykola Grudanov, Volodymyr Shutko (Kyiv Aviation Institute - Ukraine, Silvaco - Ukraine/USA)

29.04.2026

TRACK 4. MICROWAVE THEORY AND TECHNIQUES

ON-LINE PRESENTATIONS (10:00-11:30)

1	10:00-10:15	Excitation of Eigenwaves in a Cylindrical Layer of a Layered Superconductor by a Tubular Electron Beam (CMT #40)	<u>Yuriy Averkov</u> , Oleg Averkov, Alexandre Kats, Yuriy Prokopenko, Nannette Williams, Valery Yampol'skii (O.Ya. Usikov Institute for Radiophysics and Electronics of the National Academy of Sciences of Ukraine - Ukraine; University of New Mexico - USA)
2	10:15-10:30	Pulse Coding in the Study of the Lower Ionosphere by the Incoherent Scatter Method (CMT #14)	<u>Leonid Emelyanov</u> , Valeriy Pulyayev, Viktor Burmaka (Institute of Ionosphere, National Technical University "Kharkiv Polytechnic Institute" - Ukraine)
3	10:30-10:45	Wiener Deconvolution Approach for GPR Data Processing in Thickness Measurement of Asphalt Layers (CMT #64)	<u>Vadym Ruban</u> , Gennadiy Pochanin, Sergiy Urdzik, Iryna Shelkova (O.Ya.Usikov Institute for Radiophysics and Electronics of the NAS of Ukraine; Kharkiv National Automobile and Highway University - Ukraine)
4	10:45-11:00	Ultra-Narrow Band Conventional and Inverse Polarizer Regimes of Graphene Strip-on-Substrate Grating in the Lattice-Mode Resonances (CMT #27)	<u>Fedir Yevtushenko</u> (O.Y. Usikov Institute of Radio-Physics and Electronics NASU, Ukraine)
5	11:00-11:15	Parametric Analysis of Reflecting Intelligent Surface Unit Cells (CMT #149)	<u>Olena Semenovska</u> , Tatiana Saurova (Igor Sikorsky Kyiv Polytechnic Institute – Ukraine; Aalborg University - Denmark)
6	11:15-11:30	Methodology for Analyzing the Sensitivity of Signal Frequency Tracking Algorithms to External Influences (CMT #72)	Volodymyr Karlov, Andrii Kovalchuk, <u>Mykola Barkhudaryan</u> , Oleksandr Kuznietsov, Anatolii Prysiazhnyi, Olena Lukashuk (Ivan Kozhedub Kharkiv National Air Force University – Ukraine)

BREAK (11:30-12:00)

29.04.2026

TRACK 4. MICROWAVE THEORY AND TECHNIQUES

ON-LINE PRESENTATIONS (12:00-13:45)

1	12:00-12:15	Radiation Characteristics of a Multi-Band Corner Reflector Antenna under Maximum Directivity (CMT #39)	Nadezhda Yeliseyeva, Serhii Berdnyk, <u>Vladyslav Cherniavskiy</u> (V. N. Karazin Kharkiv National University - Ukraine)
2	12:15-12:30	Absorption of Microwave Radiation in a Thin Conductor of Finite Length (CMT #69)	Mykola Kokodii, <u>Mykola Dubinin</u> , Vyacheslav Maslov, Andrey Degtyarev (V. N. Karazin Kharkiv National University - Ukraine)
3	12:30-12:45	Application of Differential Evolution and Integral Equations Methods for Optimization of Multilayer Graphene Strip Grating Parameters (CMT #125)	<u>Mstyslav Kaliberda</u> , Sergey Pogarsky, Yuri Arkusha (V.N. Karazin Kharkiv National University - Ukraine)
4	12:45-13:00	Tunable Scattering and Absorption by Graphene-Strip-Loaded Dielectric Cylinder Under Magnetic Line Source Excitation (CMT #89)	<u>Mstyslav Kaliberda</u> , Sergey Pogarsky, Yuri Arkusha, Maksym Khruslov (V.N. Karazin Kharkiv National University - Ukraine)
5	13:00-13:15	Excitation of Waveguide Waves by Oscillations of Open Resonator (CMT #46)	<u>Bohdan Muzychyshyn</u> , Igor Kuzmichev, Aleksey Lukash, Oleh Voitovych, Gennadiy Churyumov, Theodor Narytnyk (O. Ya. Usikov IRE of NASU - Ukraine, NTU of Ukraine, Harbin Institute of Technology - China)
6	13:15-13:30	Formation of Axially Symmetric Field Structures Using Different Apertures (CMT #110)	<u>Bohdan Muzychyshyn</u> , Igor Kuzmichev, Oleh Voitovych, Aleksey Lukash, Oleksandr May, Olexandr Barhatov (O. Ya. Usikov IRE of NASU, Kharkiv University of Air Forces named after Ivan Kozhedub – Ukraine; "Wavecom" LLC - Portugal)
4	13:30-13:45	Functional Dielectrics Fundamental Properties (CMT #30)	Yuriy Poplavko, <u>Yurii Didenko</u> , Yuriy Yakymenko, Dmytro Tatarchuk (Igor Sikorsky Kyiv Polytechnic Institute - Ukraine)

30.04.2026

IEEE R8 Young Professionals Meetup

Supported by IEEE Young Professionals and IEEE Foundation

ONLINE WORKSHOP/SEMINAR (16:00 – 18:00)

1	16:00-17:30	Possibilities and Prospects for the Development of IEEE Young Professionals in Ukraine
2	17:30-18:00	Questions and Answers Session, Networking