	ASSOCIATION OF ENGINEER ASSOCIATION OF ENGINEER IN TECHNOLOGICAL SCIENC IN ISRAE	is E CODSIS			BACOSOCIE	
		International Confe	rence & Exhibition on Optics & El	lectro-Optics	WILE	
			5 David InterContinental Ho			
			Monday March 10, 2025			
:00 - 09:00			Breakfast & registration			
:00 - 10:55			Opening session - Plenary Hall			
	Chairperson: Prof. Abraham Katzir, Chairma	an of Oasis 2025				
	Opening 2: Guy Shasha, Chairman of the Th	ne Association of Engineers, Architects and G	raduates in Technological Sciences in Israel		r	
25-09:35	Opening 3: Dr. Alon Stopel, Chairman of the	e Innovation Authority and Chief Scientist for I	nnovation at the Ministry of Innovation, Science	e and Technology		
	Plenary lecture 1 : Artificial Intelliger Prof. Isaac Ben-Israel, Director, Cyber Rese					
	Plenary lecture 2 : Silicon Photonics Prof. Avinoam Zadok, Faculty of Electrical a					
05 - 11:30	Coffee break and Posters review					
:30 - 13:00			Parallel Session 1			
	Hall A	Hall B	Hall C	Hall D	Hall E	
	Optical Engineering Dr. Tali Hurvitz	Atomic and Quantum Optics Dr. Ofer Kfir	Lasers and Applications Dr. Shaul Pearl	Electro-Optics in Industry Dr. Alex Avalon	Electro-Optics in Defense Dr. Dov Oster	
	Invited - 30' Prof. Uriel Levy Department of Applied Physics, Center for nanoscience and nanotechnology, The Hebrew University of Jerusalem Metasurfaces: Capabilities and limitations	Invited - 30' Prof. Maria Chekhova Max Planck Institute for the Science of Light, Erlangen, Germany Quantum measurement through parametric amplification	Invited - 30' Dr. Liad Levi Rafael Advanced Systems High power DPAL (Diode Pumped Alkali Laser)	Invited - 20' Dr. Eyal Shekel <i>Civan Lasers</i> Dynamic beam laser for welding and metal additive manufacturing: Advancing fiber Laser technology through coherent beam combining and optical phased arrays	Invited - 30' BG (res.) Eytan Eshel, IAI, EVP R&D, technology and innovation (CTO) Innovation in a defense company	
	Invited - 30' Prof. Natan Shaked Department of Biomedical Engineering, Tel Aviv University Holographic multiplexing for acquiring wavefronts of rapid dynamics for optical metrology applications	15' Mr. Stav Lotan Technion - Israel Institute of Technology Leveraging sparsity for efficient detection of entanglement in high	15' Dr. Yaakov Glick Lasers Department, Applied Physics Division Soreq NRC 40mJ energy, high power, pulsed all-fiber amplifier	Invited - 20' Dr. Yoram Karni SCD Advancements in miniaturization, weight reduction, and power optimization for infrared imaging systems by SCD	15' Dr. Mara Baraban Rafael Advanced Defense System Experimental approaches to optical atmospheric turbulence measurements	
	15' Mr. David Halfon The Hebrew University of Jerusalem 3D-printed coupling aids for efficiently interfacing silicon chip to rectangular core fiber	15' Mr. Shaul Katznelson Technion - Israel Institute of Technology Superfluorescent scintillation from coupled Perovskite quantum dots	15' Mr. Nitzan Haviv Department of Physics and Solid-State Institute, Technion Noise suppression in gain-managed nonlinear amplifiers	Invited - 20' Dr. Rani Ditcovski Triarii Research Israeli free space quantum key distribution demonstration	15' Dr. Zeev Schiffer Elbit Systems, ISTAR Division-Elop Pros and cons for Super-Gaussian based CBC	

	15' Mr. Ariel Ashkenazy Bar-Ilan University All-optical, computation-free time-multiplexing super- resolved imaging based on speckle illumination	15' Dr. Shay Elmalem Department of Physics of Complex Systems, Weizmann Institute of Science Massively multiplexed wide-field photon correlation sensing	15' Prof. Salman Noach Jerusalem College of Technology Widely tunable, pulsed Tm:YAP laser, based on an Active / Passive Q switch with Yag etalons		15' Dr. David EI-Chai Ben-Ezra Soreq NRC Tuning event camera biases heuristic for detection applications in staring scenarios
		15' Mr. Gilad Pollack Tel-Aviv University Correlation of purely spatial bell-state measurements in event-based single-photon camera	15' Dr. Zaharit Refaeli Soreg NRC Bandwidth control and frontal contrast for a high-joule mixed Nd:glass ultrafast laser for proton acceleration	Beckermus Technologies Advancing photonic and optic chip packaging:	15' Mr. Pierre Noubel OKTAL Synthetic Environment Overcoming data scarcity in defense AI : Can physics- based sensor simulation system be a reliable solution ?
3:00 - 14:00			Lunch Break		
4:00 - 14:15			Poster Review		
4:15 - 15:45	11-11-0	11-11.0		1600	Hall E
	Hall A Spectroscopy and Optical Sensing				Optics in Medicine and Biology
	Prof. Tal Ellenbogen	Prof. Ilya Goykhman	the second se		Prof. Yuval Garini
	Invited - 30' Prof. Dr. Christoph Lienau University of Oldenburg, Institute of Physics, Germany Two-dimensional electronic spectroscopy of many- body correlations in quantum materials	Invited - 25' Prof. Shaya Fainman University of California, San Diego Foundry enabled chip-scale photonics technology and applications	rf Complex Systems, Watermann wide-field photon correlation Per S. Salman Noach wide-field photon correlation Per S. Salman Noach Wide Vanable, publed Tm: XP laser, based on an All S. OPTCS, Salma LWR Optical System for the Particle Deservation to support of smart famming Per S. Salman Noach M. B. Arter Deservation to support of smart famming Per S. Salman Noach M. B. Arter Deservation to support of smart famming Per S. Salman Noach M. B. Arter Deservation to support of smart famming Per S. Salman Noach M. B. Arter Deservation to support of smart famming Per S. Salman Noach M. B. Arter Deservation to support of smart famming Per S. Salman Noach M. B. Arter Deservation to support of smart famming Per S. Salman Noach M. B. Arter Deservation and optic chip packaging: Per S. Salman Noach M. P. Salman Noach M. Sal	Invited - 25'	
	15' Mr. Tamir Shpiro Technion - Israel Institute of Technology 4D near-field electron tomography	Invited - 25' Dr. Boris Desiatov Bar Ilan Institute of Technology TBC		14' Mr. Yaakov Neustadter Soreg NRC Kerr frequency comb generation in Saddle-Shape	Prof. Ori Katz Institute of Applied Physics, The Hebrew University of Jerusalem Noninvasive megapixel fluorescence microscopy through scattering layers by a virtual incoherent
	15' Mr. Idan Kizel Tel Aviv University Stacking-dependent photoluminescence modulation in bilayer and trilayer 3R-MoS2 via asymmetric dielectric environments	Invited - 25' Dr. Grisha Spektor Octave Photonics Atomic-photonic interfaces via linear and nonlinear photonics for the real world	Eikolos Optical communication Ofir Nichtern Sfez Technologies Itd	Dr. Gil Bashan Tel Aviv University Optically programable quasi phase matching in four-	Dr. Raya Sorkin School of Chemistry, Tel Aviv University Optical tweezers provide insight into membrane
	Invited - 30' Prof. Yehonadav Bekenstein Technion - Israel Institute of Technology Engineering fast emitters using halide perovskite nanocrystal heterostructures and superlattices	15' Mr. Eitan Kaminski Technion - Israel Institute of Technology Waveguide integrated MoS2-based photodetectors in the shortwave IR	Bruno Sfez LiteBC Medical devices Or Peleg Laser-Team	Mr. Alon Krause Bar-Ilan University Highly-efficient and stable Second Harmonic	10' Mrs. Tamar Harary Andrew and Erna Viterbi Faculty of Electrical & Computer Engineering, Technion Large-field-of-view optical-resolution optoacoustic microscopy using silicon photonics acoustic detector
			Pini Ben-Elazar Spiral Photonics <i>Imaging, photonics</i> Eyal Hollander	Ms. Naama Harcavi Ben Gurion University of the Negev Optical nonlinearity of transparent conducting oxides -	10' Mr. Jonathan Jeffet School of Physics and Astronomy, Tel Aviv University Multi-color super-resolution imaging using spectral confocal spinning disk image scanning microscopy
			Q <i>uantum computers</i> Nati Bar Grinman Sky-Walls LTD	Ms. Sutapa Ghosh	

15:45 - 16:15		Coffee break and Posters review				
16:15 - 17:45			Parallel Session 3			
	Hall A	Hall B	Hall C	Hall D	Hall E	
	Micro and Nano Optics Prof. Alina Karabchevsky	Quantum Computers Prof. Nadav Katz	Ultrafast Phenomena Dr. Marcus Gilad	Artificial Intelligence in Optics Prof. Yoav Shechtman	Lasers and Applications Dr. Shaul Pearl	
	Invited - 30' Prof. Tal Carmon Photonic Enhancement Laboratory, School of Electrical Engineering, Faculty of Engineering, Tel Aviv University Introducing new phases of matter to microphotonics	Invited - 30' Prof. Barak Dayan Weizmann Institute of Science and Quantum Source Labs Atom-mediated large-scale photonic quantum computing	Invited - 25' Dr. Ofer Neufeld Technion - Israel Institute of Technology Ultrafast magnetism: novel control schemes and probes	Invited - 25' Prof. Ron Kimmel The Technion Montreal Chair in Sciences Professor of Computer Science Professor of Electrical & Comp. Eng. (courtesy) Learning geometry: Some recent bits	15' Mr. Shmuel Freudenstein <i>Civan Lasers</i> Enhanced free space optical communication (FSOC) by coherent beam combining with optical phased array lasers	
	Invited - 30' Prof. Dan Marom The Institute of Applied Physics, The Hebrew University of Jerusalem 3D-nanoprinted photonic solutions	Invited - 30' Prof. Yaron Bromberg Senior lecturer at the Racah Institute of Physics at the Hebrew University of Jerusalem Boosting photonic quantum computation with multi- qubit encoding in single photons	12' Dr. Yariv Shamir Soreq NRC Widely wavelength-tunable amplified all-normal- dispersion laser aimed to excite Thorium-229 VUV transition?	Invited - 25' Prof. Natan Shaked Department of Biomedical Engineering, Tel Aviv University Deep2Deep: Label-free interferometric imaging for automatic classification and virtual staining of biological cells	15' Dr. Omri Wolf LightSolver LTD LightSolver's all-optical laser-based analog computer	
	Invited - 20' Dr. Itai Epstein Tel Aviv University Nanometer-scale phononic resonators for far-infrared radiation	15' Mr. Roey Shafran Technion - Israel Institute of Technology Tomography of hyperentangled single photon states with a single measurement setup	12' Ms. Gili Scharf Tel Aviv University Coherent control of phonon anharmonicity	10' Mr. Oded Rotem Ben Gurion University Brightfield to fluorescence microcopy transfer via diffusion models	15' Dr.Yaniv Vidne <i>Civan Lasers</i> Development of a 130kW high-power fiber laser system with enhanced reliability and compactness based on CBC technology	
	10' Mr. Matan Slook Technion – Israel Institute of Technology Highly reconfigurable silicon-photonic filter stage		12' Mr. Omri Meron Tel Aviv University Shaping exciton polarization dynamics in 2D semiconductors by tailored ultrafast pulses	10' Mr. Dafei Xiao Technion – Israel Institute of Technology A one-click software for PSF-engineering-based 3D localization microscopy	15' Dr. Aviran Halstuch School of Electrical and Computer Engineering, Ben-Gurion University of the Negev Femtosecond inscription of fiber Bragg gratings and Fabry-Perot interferometers structures for various applications	
	10' Dr. Jacob Engelberg The Hebrew University of Jerusalem Nature inspired design methodology for a wide field of view achromatic metalens		12' Mr. Tomer Bucher Technion–Israel Institute of Technology Ultrafast dynamics of correlated optical singularities	10' Ms. Dana Aharoni Department of Biomedical Engineering, Tel Aviv University Al-aided rapid cell classification using label-free interferometric imaging flow cytometry	15' Mr. Aaron Liberman Weizmann Institute of Science Algorithmically measuring the spectrally resolved wavefront of an ultrashort laser	
	10' Mr. Yehuda Baum Tel Aviv University Ultra-broadband wide-angle anti-reflection scheme utilizing multi-layer resonant metasurfaces		12' Mr. Yoad Aharon The Hebrew University of Jerusalem Mechanism of resonant enhancement in HHG	10' Dr. Amir Handelman Holon Institute of Technology Flexible polymeric all-optical logic gates	15' Mr. Ya'akov Mandelbaum Jerusalem College of Technology (JCT) - Lev Academic Center Advanced optical analysis of focal-point divergence between surgical neodymium-doped yttrium aluminum Garnet (Nd:YAG) and aiming beam lasers	

			Tuesday March 11, 2025			
09:00	Coffee and registration					
10:00						
)9:50	Plenary lecture1 : Electro-Optics in E					
			Development, at the Israeli Ministry of Defense	0		
	Plenary lecture 2 : High Power Laser					
10:50	Mr. Oded Ben David, CTO Elbit Systems IS	TAR & EW ELOP	Coffee break and Posters review			
10:50			Parallel Session 4			
	Hall A	Hall B	Hall C	Hall D	Hall E	
	Atomic and Quantum Optics Dr. Ofer Kfir	Electro-Optics Devices Prof. Ilya Goykhman	Optical Engineering Dr. Tali Hurvitz	Nonlinear Optics Prof. Avinoam Zadok	Artificial Intelligence in Optics Prof. Yoav Shechtman	
	Invited - 30' Dr. Ran Finkelstein School of Physics and Astronomy, and Tel Aviv Quantum Center, Tel Aviv University Atomic arrays as programmable quantum sensors and processors	Invited - 25' Prof. Pavel Ginzburg Tel Aviv University Optics behind drug screening and delivery	Invited - 30' Dr. Shany Danieli School of Physics and Astronomy, Tel Aviv University Revealing the hidden universe with telephoto lenses	Invited - 25' Prof. Polina Bayvel Professor of Optical Communications & Networks. Dept of Electronic & Electrical Eng. Faculty of Engineering Sciences, UCL, London, England How wide can you go – the challenges in designing ultrawideband optical fibre communications Systems & networks	Invited - 25' Prof. Adrian Stern Ben Gurion University How does deep learning help optics and what o can do for deep learning?	
		Invited - 25' Dr. Richard Pitwon Seagate Research / Resolute Photonics Heat assisted magnetic recording - The path the utra- high volume co-packaged optical integration	15' Mr. Omer Luria Technion - Israel Institute of Technology In-situ optical surface reconstruction of liquid mirrors in microgravity experiments	15' Mr. Daniil Ansimov The laboratory of Nanoscale Electro Optics, Tel Aviv University Enhanced second harmonic generation from a nonlinear plasmonic metasurface coupled to an optical waveguide in a LiNbO thin film	Invited - 25' Dr. Erez Yosef Electrical Engineering, Tel Aviv University DifuzCam: Replacing camera lens with a mask diffusion model	
		Invited - 25' Dr. Roy Zekzter The Hebrew University of Jerusalem Electro-optic platforms for precision light-atom interactions	15' Mr. Mor Elgarisi Technion - Israel Institute of Technology Fluidic approach to corrective eyewear manufacturing	15' Mr. Yonatan Plotnik Momentum band gap engineering using noncolinear moving photonic time crystals	15' Prof. Alon Bahabad Tel-Aviv University Optical inference using nonlinear optical diffrac	
	15' Mr. Ron Ziv	15' Mrs. Vered Riven The Institute of Applied Physics, The Hebrew University of Jerusalem Line-by-line spectral amplitude/phase modulation of an optical frequency comb	15' Mr. Alon Geller Light Engineering Designing zoom lenses from scratch: using the varifocal differential equation	15' Dr. Miri Blau Columbia University, NY, USA Higher dimensional quantum photonics in the frequency domain	10' Mr. Matan Kleiner Technion - Israel Institute of Technology Coherence awareness in diffractive neural netw	
	15' Dr. Georgi Gary Rozenman MIT Department of Physics. Group of Wolfgang Ketterle at MIT, MA, USA Prospects of free-space quantum key distribution using spatial modes of light: Scaling-up the dimensionality and the distance		15' Mr. Arie Amitzi QCC Hazorea Calibration Technologies Using fluorescence for laser beam alignment and measurements	15' Mr. Yuval Reches Tel Aviv University Efficient robust spontaneous parametric down- conversion via detuning modulated composite segments designs	10' Mr. Nimrod Shabtay Tel-Aviv University Deep phase coded image prior	
				15' Mr. Barak Messika Department of Electrical and Computer Engineering and Solid-State Institute, Technion – Israel Institute of Technology Kerr beam self-cleaning of multi-millijoule pulses in large mode-area graded index fiber	10' Mr. Roy Maman The Hebrew University of Jerusalem Achromatic imaging systems with flat lenses er by deep learning	
3:20			Lunch Break	1	1	

13:20 - 13:50	Poster Review of Topics: Micro and Nano-Optics & Artificial Intelligence in Optics					
13:50 - 15:20	Parallel Session 5					
	Hall A	Hall B	Hall C	Hall D	Hall E	
	Ultrafast Phenomena Dr. Marcus Gilad	Optics in Defense Dr. Dov Oster	Spectroscopy and Optical Sensing Prof. Tal Ellenbogen	Electro-Optics in Industry Dr. Alex Ayalon	Micro and Nano Optics Prof. Alina Karabchevsky	
	Invited - 25' Prof. Michael Krueger Ultrafast Quantum Dynamics Group, Physics Department, Technion Attosecond physics in solids goes quantum	Invited - 30' Dr. Daniel Golubchik Rafael Advanced Defense Systems Adaptive optics for deep turbulence applications	15' Dr. Heinrich Ruser Institute for Applied Physics and Measurement Technology, University of the Bundeswehr Munich, Germany New single-particle TOF mass spectrometer coupled with deep learning for on-site classification of aerosol particles		Invited - 20' Prof. Stanislav Derevyanko Associate professor, School of Electrical and Computer Engineering, Ben Gurion University of the Negev, Beersheva, Israel Mode locking and rogue waves in Q-switched solid- state laser	
	12' Ms. Or Refaely Bar Ilan University Temporal chirpless microscope	15' Dr. Dov Steiner IARD Sensing Solution New modeling features in TRM4 version 4	15' Mr. Omri Haim The Hebrew University of Jerusalem Image-guided computational holographic wavefront shaping	Invited - 20' Dr. Igor Turovets Nova Ltd. Optical methods for advanced packaging process control	20' Ms. Maya Shor Peled Ben Gurion University of the Negev Super-resolution imaging using photonic nanojet through tapered optical fiber	
	Ms. Michal Elkind	15' Dr. Eyal Agassi Independent Consultant Estimating probabilities of cloud-free lines-of-sight through the atmosphere – Lund and Shanklin method revisited	15' Ms. Anabel Atash Tel Aviv University On the optical modeling of excitons in 2D semiconductors	Invited - 20' Dr. Shay Joseph Rafael Methods for protection of electro-optical seeker heads against electro-magnetic radio frequency interference	15' Dr. Daniel Beitner Tel Aviv University Observation of localized resonant phonon polaritons in biaxial α-MoO3 nanoparticles	
	12' Ms. Shiri Gvishi Tel Aviv University Quantum paths interference signatures in trARPES	15' Dr. Ofer Yaron Rafael Advanced Defense Systems IR imaging quality prediction	15' Mrs. Shahaf Noimark Bar Ilan University Non-destructive opto-mechanical analysis of fiber coating layers	Invited - 15' Dr. Aviran Halstuch Ben-Gurion University of the Negev Femtosecond laser welding of BK7 glass to aluminium alloys for industrial applications	15' Mr. Oded Schiller Technion – Israel Institute of Technology Negative index makes a perfect time lens	
	12' Mr. Michael Tulchinsky The Hebrew University of Jerusalem Saturation model for photonic time crystals		15' Mr. Ya'akov Mandelbaum Jerusalem College of Technology (JCT) - Lev Academic Center & BINAH (Bar Ilan University) Tips vs. holes: x10 higher scattering in FIB-made plasmonic nanoscale arrays for spectral imaging	15' Mr. Efi Rotem MKS Instruments Design of reference optical receiver with 50GHz bandwidth for use in high speed fiber optic systems	10' Mr. Amit Kam Technion – Israel Institute of Technology Total Angular momentum as a pathway to entangle surface-plasmon polaritons	
	12' Mr. Aaron Liberman Weizmann Institute of Science Laser wakefield acceleration with an axiparabola and spatiotemporal couplings		15' Mr. Elad Zehavi Bar-Ilan University Generation of non-classical light in an all-fiber SU1,1 interferometer			
15:20 - 15:50		Coffee break and Pc	osters review of topics: Ultrafast Phenomena & Atomic	and Quantum Optics		

15:50 - 17:20	Parallel Session 6				
	Hall A	Hall B			
	Optics in Medicine and Biology Prof. Yuval Garini	Quantum Computers Prof. Nadav Katz			
	Invited - 25' Prof. Dvir Yelin Faculty of Biomedical Engineering, Technion Imaging tympanic membrane vibrations	Invited - 30' Prof. Netanel Linder Associate Professor, Department of Physics, Technion TBC			
	Invited - 25' Prof. Adrian Stern School of Electrical and Computer Engineering, Ben Gurion University Compressive sensing methods for rapid hyperspectral microscopy	ТВА			
	10' Prof. Salman Noach Jerusalem College of Technology Novel Ablative Tm :YAP pulsed laser for dermatology applications	15' Mr. Chen Scheim The Hebrew University of Jerusalem Quantum error correction with adiabatic quantum computation			
	10' Mrs. Eden Dotan Department of Biomedical Engineering, Tel Aviv University Label-free imaging flow cytometry using a motion sensitive camera for rare cell detection	15' Dr. Adi Pick The Hebrew University of Jerusalem Hybrid quantum annealing algorithms for combinatorial optimization with Rydberg qubits			
	10' Dr. David Sinefeld Jerusalem College of Technology Planar objective design for multiphoton mouse brain imaging				
	10' Mr. Ron Moisseev Technion – Israel Institute of Technology All-Optical approach to ultrasound transmission matrix measurement				