

Researchers

List of researchers and lecturers in various
fields of research and development

2021-2022

Software Engineering

Name	Telephone No.	Field of Research	Email
Prof. Shlomo Mark	054-7733842 08-8519078	Scientific computation, Agile software life cycle, Software Quality, ethics in Software engineering, simulations of Monte Carlo methods	marks@sce.ac.il
Dr. Marina Knyazhansky	054-5313189 08-8519314	1. Scientific visualization: the modeling, analysis and visualization of scientific processes and complex data 2. Visual Analytics: the integration of analysis and visualization In the field of: a. Structural Mechanics and Material Engineering b. Medical Physics and Cardiovascular Angioplasty c. Digital Health	marinak@sce.ac.il
Dr. Abed - El Karim Abu-Affash	050-6561712	Algorithms, Computational Geometry, Optimization Problems	abuaa1@sce.ac.il
Dr. Natalia Venetik	052-8824112 08-6475015	Text mining, data mining, data analysis, data science, combinatorial optimization	natalyav@sce.ac.il
Dr. Marina Litvak	054-2027451 08-6475065	Automatic multilingual text summarization, information, Extraction, recommender systems, graph mining, information retrieval, Social Media Analysis, Fake news detection	marinal@ac.sce.ac.il
Dr. Lior Aronshtam	052-3307157	Sport manipulation, scheduling, engineering education	liorar1@sce.ac.il
Dr. Tamar Shrot	054-4229670	Intelligent human computer interfaces and parameterized complexity - artificial intelligence, Software Engineering Education	tammash@sce.ac.il
Dr. Hadas Chasidim	052-3261493	Software quality, human-computer interaction, software development, software project management	hadasch@sce.ac.il
Dr. David Tankus	050-6974089	Combinatorics, well covered graphs, algorithms in graphs, NPC issues	davidt@sce.ac.il
Dr. Alexander Churkin	054-7652967	Optimization, pattern matching and search algorithms Machine learning, Bioinformatics, Computational genomics, Computational biology, Scientific computing, Data mining	alexach3@sce.ac.il
Dr. Haddasa Daltrophe	054-6822566 08-8519351	Communication networks algorithms, Blockchain, Social networks analysis, Big data research	hadasda1@sce.ac.il
Dr. Irina Rabaev	054-4715861	Document image analysis, computer vision, image processing	irinar@ac.sce.ac.il
Dr. Michael Kiperberg	050-8491275	Applications of virtualization in cyber security	michaki1@sce.ac.il
Dr. Yochai Twitto		Boolean Satisfiability, Domination Analysis, Combinatorial Optimization	yochait@sce.ac.il

Civil Engineering

Name	Telephone No.	Field of Research	Email
Prof. Wafa Elias	054-7787929 08-8519342	Travel behavior and road safety	wafael@sce.ac.il
Dr. Rami Eid	052-8722955 08-6475717	Retrofitting of structures for earthquake resistance, use of fiber-reinforced polymer (FRP) for structural elements, structural behavior of high-strength concrete (HSC), structural behavior of fiber-reinforced concrete (FRC), structural behavior of concrete elements reinforced with carbon fiber textiles (textile reinforced concrete –TRC), performance-based design	ramiei@sce.ac.il
Prof. Robert Levy	050-2029712	Geometrically nonlinear structures; Cablenets and Fabric Structures; Seismic upgrade of buildings using energy dissipation devices; Earthquake Engineering and Structural Dynamics; Structural Optimization	roberle@sce.ac.il
Dr. Dagan Bakun-Mazor	054-7636664 08-6475715	Geological engineering, rock mechanics, soil mechanics, seismic hazards and geotechnical site effects, geotechnical rock mass characterization using remote sensing technics	daganba@sce.ac.il
Dr. Vladislav Kholmer	054-4673707 08-6475805	Effect of vibration field characteristics on matter flow through a two phase environment, the development of methods for improving matter flow, the improvement of motor vehicle fuel efficiency and air pollution levels, motor vehicle safety	kholmer@sce.ac.il
Dr. Eduard Leibovitch	052-3404944 08-6475866	Structure design, Seismic design of structures, steel structures	edwardl@sce.ac.il
Dr. Marina Firer	050-7878438	Structure stability	marinaf@sce.ac.il
Dr. Amit Kenny	052-4769952	Marine concrete, Sustainable construction materials, Characterization of porous materials, Recycling in construction, physics education	amitke@sce.ac.il
Dr. Valdimir Frid	054-4761450	Rock physics, Geology and Geophysics including fracture, soil and rock mechanics, applied geophysics including acoustic/seismic methods, ground penetration radar, Electromagnetic methods	vladimirf@sce.ac.il
Dr. Itai Elkayam	054-6634219	Tunneling and soil structure interaction due to tunneling.	itaiel@sce.ac.il
Dr. Orit Leibovitch	052-3314301	Reinforced concrete , Bond mechanism in reinforced concrete, Punching shear, Design of concrete structures for earthquakes, Image correlation analysis. Strains measurements using optical fiber, The effect of using recycled aggregate on the bond mechanism.	oritle@ac.sce.ac.il
Dr. Uri Kushnir	054-7427880	Remote sensing in the ocean for environmental and engineering purposes, Electromechanical coupling and smart structures	uriku@ac.sce.ac.il
Dr. Sima-Michal Elkabets-sluki	050-6864890	Extreme event engineering and management; Risk analysis and management for Critical infrastructure, Stochastic modeling for preparedness, response and recovery; Risk and Reliability Analysis for Hazard Mitigation; Construction Safety; Quality and control of construction project; Stochastic and dynamic methods and algorithms for Decision Analysis; Optimization and mathematical modeling with applications in construction management.	simamel@sce.ac.il
Dr. Hazem Madah	0507753311	Optimization of structures. Geometry and material nonlinear analysis of skeletal structures. Strengthening of structures using composite materials.	madahha@sce.ac.il

Electrical & Electronic Engineering

Name	Telephone No.	Field of Research	Email
Prof. Victor Kagalovsky	054-7787938 08-6475090	Mesoscopic physics, topological insulators, quantum Hall effects	victork@sce.ac.il
Dr. Dmitri Baimel	052-9535880 08-6475872	Power Electronics, power systems, electric machines	dmitrba@sce.ac.il
Dr. Irit Juwiler	054-7733854 08-8519048	Nonlinear Optics, Quasi Phase Matching, Periodic and Quasi-Periodic Nonlinear Photonic Crystals, Biomedical Optics, Atmospheric Optics, Quantum Optics	iritj@sce.ac.il
Prof. Shlomo Hava	054-6775547	Nano-Photonic & Optonics	shlomoh@sce.ac.il
Dr. Tom Trigano	054-6427316 08-8519037	Statistical signal processing and applied statistics, Sparse signal processing, Image processing, Machine Learning	thomast@sce.ac.il
Dr. Yoram Horen	055-8828874 08-6475708	The study of non-linear dynamics, boundary control and optimal control, circuits, power systems and the physics of electronic devices	yoramh@sce.ac.il
Dr. Inna Katz	054-5991376 08-6475746	Analysis of operation of frequency converters - constant and fluctuating status	innak@sce.ac.il
Dr. Svetlana Bronstein	054-5462658 08-6475776	Power Electronics: analysis, models and control methods, Power quality aspects	svetlanab@sce.ac.il
Dr. Zion Menachem	054-7201780 08-6475745	Wave propagation in dielectric waveguides with circular and helical cross sections for applications in the microwave and infrared fields, qualities and behavior of artificial materials	zionme@sce.ac.il
Dr. Gregory Samelsohn		Electromagnetics and acoustics, Antennas, radars and sonar, Advanced imaging systems, inverse problems including tomography	gregosa@sce.ac.il
Dr. Zeev Fradkin	052-8026020	Ion traps and Mass-spectrometry, Nanophotonics and Nanotechnology, Optical waveguides, Ultrafastoptics	zeevfr@sce.ac.il
Dr. Dmitry Bykhovsky	054-8012685	Wireless optical communication, Physical layer communication and cyber-security	dmitrby@sce.ac.il
Dr. Peter Beker	052-6536364	Fabrications of Organic transparent solar cells, Electro Magnetic influence on biological world	bakap@sce.ac.il
Dr. Moshe Zohar	054-6237788 08-6475747	<ol style="list-style-type: none"> 1. Light management for energy harvesting optical devices using periodically patterned nanostructures and metasurfaces. 2. High sensitivity photodetectors based on nano-scale periodic multilayered structures. 3. Utilization of Dip-Pen Nanolithography (DPN) with Insulator and conductive materials to fabricate filters, microstrips, couplers, and sensors.. 	moshezo@ac.sce.ac.il
Dr. Marcus Roitman	053-8293918 08-8519354	Renewable energy sources, economic aspects in power systems and energetic efficiency	marcoro@sce.ac.il
Dr. Isaac August	055-8839348 08-6745037 08-6475059	Computational Optics and Imaging; Advance Image processing; Hyperspectral imaging and computational spectroscopy	isaacau@sce.ac.il
Dr. Martin Mellincovsky	050-8641426	Renewable and sustainable energies, sizing and management of energy storage systems and wireless energy systems, management of energy storage systems, renewable and sustainable energies, sizing and management of energy storage systems and wireless energy systems	malim1@sce.ac.il
Dr. Asher Perez	054-7290364	Electro-optics and statistical physics based models in image processing	asherpe@sce.ac.il
Dr. Shlomo Greenberg	052-6072911	Computer architecture, VLSI, Machine learning, and Deep Neural Networks	shlomo.greenberg@gmail.com

Chemical Engineering

Name	Telephone No.	Field of Research	Email
Prof. Ariela Burg	052-6433773 08-6475009	Development of Meta chemical surfaces, MCS, as sensors and biosensors, and as electrodes for water splitting by DPN method. Development of electron exchange columns and cation exchange columns for treatment of toxic organic compounds and for removal of heavy metals from water. Study the mechanism of Fenton reaction and oxidation processes in biological systems	arielab@sce.ac.il
Dr. Michal Goldenberg	054-5372378 08-8519302	Tissue Engineering heart tissue and ovarian follicle tissue, Biomaterials, bioreactors, bio-production	michalg@sce.ac.il
Prof. Dorith Tavor	054-7733826 08-6475634	Waste water treatments ,Development of two-phase flow system, Study of sprays reaction, Green Engineering	dtavor@sce.ac.il
Prof. Adi Wolfson	054-7733805 08-6475766	Environmentally friendly chemical process and sustainable services	adiw@sce.ac.il
Dr. Oshrat Ontman	052-8018062 08-6475007	Investigation the chemical composition, structure, physico-chemical nature and function/bioactivities of renewable polysaccharides; Elucidation the N- glycosylation pathway in red microalgae; Heterogenization of homogeneous catalysts in renewable polysaccharides; Studies of metal removal by renewable polysaccharide	oshrale@sce.ac.il
Dr. Yoram Shotland	054-3030736 08-6475731	1. Microbiology - Monovalent copper as an antibacterial substance 2. Bioinformatics: A. Analysis of the Khat (Catha edulis) plant transcriptome B. Identification of highly expressed genes in Pistacia palaestina galls C. Genome comparison for the identification of pathogenic genes in the Acidovorax bacterial famely 3. Analysis of the Khat (Catha edulis) plant transcriptome for the identification of biotechnology potential genes	yshotlan@sce.ac.il
Dr. Oshra Saphier	052-5891110 08-6475012	Study of anti-oxidative properties of human-source liquids. Study of bioactive properties of monovalent copper ions	oshras@sce.ac.il
Dr. Kfir Ben Harush	052-3202484 08-8519024	The structure and mechanics of fibrous proteins based biocomposite materials	kfirb@sce.ac.il
Dr. Tamar Barak	054-6300923 08-8519030	Excited state acidity and proton transfer; Fluorescence techniques for Diagnosis, and detection of fungal infections in plans through Fluorescent emissions	tamarb@sce.ac.il
Dr. Eyal Tzur	054-6813479 08-8519365	Organic Chemistry, Organometallics, Development of heterogeneous catalytic systems for various applications	eyalt@sce.ac.il
Dr. Yulia Penso	050-7989600 08-8519034	Hormonal and enzymatic markers of stress and anxiety	yuliap@sce.ac.il
Dr. Inna Levitsky	052-8389543 08-6475004	Development of a system for two-phase flow, Water and wastewater treatment	levii2@sce.ac.il

Mechanical Engineering

Name	Telephone No.	Field of Research	Email
Dr. Gedalia Mazor	054-7733802 08-6475756	Mechanical Engineering – fluid dynamics, fluid mechanics, numerical methods, shock wave reflections, cryogenic treatment	mazorg@sce.ac.il
Dr. Guy Yehuda Ben Hamu	054-7787911 08-8519089	Materials Science & Engineering; Manufacturing Technology	guy@sce.ac.il
Prof. Amir Eliezer	052-2701285	Stress corrosion, marine corrosion, corrosion processes, nanomaterials & biomaterials. Oil & Gas structural materials, Entrepreneurship	amir@sce.ac.il
Dr. Amir Zohar	052-7456755	Mechanical Engineering - engineering design and thermal sciences	amirzo@ac.sce.ac.il
Dr. Etan Fisher	054-9925404 08-6475028	Audio Control for Robots and Music	etanfi@sce.ac.il
Dr. Nir Trabelsi	052-4213972 08-6475884	Mechanical Engineering, Solid mechanics, Computational biomechanics, Finite element analysis, Renewable Energy, Product development	nirtr@sce.ac.il
Dr. Itzhak Levi	052-7909265	Control of autonomous systems, Control of robotics systems	itzhale1@sce.ac.il
Dr. Elad Priel	050-6232058 08-6475884	Mechanics of Solids, Fracture mechanics, Computational Bio-mechanics, Mechanics of Composites, Computational and experimental plastic forming and failure of metals	eladp@sce.ac.il
Dr. Yoav Yaakov Biton	058-6000595 08-6475023	DNA and DNA protein interaction mechanics, mechanic behavior of cells, bifurcations in stable elastic systems of elastic poles and polymers, molecular mechanics and Monte Carlo methods	yoavybi@sce.ac.il
Dr. Bela Gurevich	054-7648965 08-8519029	Cooling systems, absorption through diffusion, to-phase flow, thermodynamics, thermal energy	bellagu@sce.ac.il
Dr. Zuk Nechemia Turbovich	050-4483700 08-6475027	Design Methodologies for Product Designers in the Context of Personal 3D Printing	zuku@sce.ac.il
Dr. Shabtay Bilu	054-6543598	Human-like android for students differentiated teaching and tracking in the classroom. Lecturers' feelings towards distance synchronous teaching during the Corona 2020 crisis. Lecturers' Outcomes Using Project-Oriented Learning Methods. Students' Outcomes in Design & Development Mechatronics Systems Course Students' Outcomes in MATLAB Software Programming Course.	shaykbi@ac.sce.ac.il
Dr. Efi Zemach	050-6292235	Fluid Mechanics, Heat Transfer, Numerical Simulations	efize@sce.ac.il
Dr. Ziv Brand	08-6475025	Dynamics and Control of Machine Systems, including Machining Vibration, Rotating Machinery. Magnetic Bearings, and Active Vibration Control Systems.	zivbr@sce.ac.il
Dr. Chen Giladi	050-5972339	Artificial intelligence-based robotic solutions for sustainable, regenerative, & thriving future	chengj1@sce.ac.il
Dr. Alon Weiss	050-8258206	Biomimetic Design - Nature Based Solutions – Xylems Vessel Manipulations	alonwe@sce.ac.il
Dr. Merav Arogeti		Drop impact on different surfaces	meravar@sce.ac.il
Dr. Hofit Itzhak-Ben-Shalom	052-4550040	Urban warming and global warming (GW) climate change, with a special focus in arid zones. Sustainable architecture with a special focus on resources conservation Post-Occupancy Evaluation (POE) and Indoor Environment Quality (IEQ)	hofitben@gmail.com hofitit@sce.ac.il
Dr. Ronen Harari		Thermohydraulics, Nuclear reactor engineering, Nuclear reactor Safety	ronenha@sce.ac.il
Dr. Roman Golkov		Elasticity in biological systems	romango2@sce.ac.il

Industrial Engineering & Management

Name	Telephone No.	Field of Research	Email
Prof. Yossi Hadad	054-7733845 08-6475645	Ranking of Alternatives or organizational units	yossi@sce.ac.il
Dr. Adi Katz	050-6582103 08-8519325	HCI (Human-Computer Interaction), Interactive system design, CMC (computer mediated communication), collaborative computer supported work, IT aesthetics and usability, Databases conceptual modelling	adis@sce.ac.il
Prof. Baruch Keren	054-6964001 08-6475644	Operations management, project management, decision making and operation research	baruchke@sce.ac.il
Prof. Gregory Gurevich	054-5319747 08-8519068	Probability theory, statistics, change point problems, goodness-of-fit testing, nonparametric tests, statistical methods in medicine, empirical likelihood, stochastic models in project management, Operations Research	gregoryg@sce.ac.il
Dr. Hagai Ilani	054-7733846 08-8519025	Scheduling and Timetabling methods-theory and practice	hagai@sce.ac.il
Dr. Eleanor Eytam	054-7330198 08-8519059	Examination of users interfaces, interaction with information systems, Users experience	elinoet@sce.ac.il
Dr. Dimitri Alberg	054-5219604 08-6475638	Reading data, Data retrieval and filtering, Business Intelligence and Data Warehousing, cyber and fraud detection algorithms	dimitria@sce.ac.il
Dr. Svetlana Daichman	050-9436962 08-6475619	Operations research and its applications, multiple criteria decision analysis, cost-benefit analysis and cost-effective health care, social choice theory, voting in committees, public transportation, elderly population	daichman@sce.ac.il
Dr. Lev Khavatskin	050-7577709 08-6475789	Indicators for multi-state system subject to planning requirements, LZ conversion for ongoing and individual Markovian and their application for the reliability of multi-state systems, mathematical models and maintaining for the multi-state systems, the agreement for the for the optimal fraction maintenance of multi-state systems, general generating functions for the study of the reliability of multi-state systems	khvat@sce.ac.il
Dr. Rita Troitsky	054-4906296 08-6475624	Pension economics, aging, quality of life and poverty among elderly population	rita1@sce.ac.il
Dr. Yizhaq Minchuk	054-6883856 08-6475698	Game theory, auction theory and contest theory	yizhami@sce.ac.il
Dr. Ronit Shmallo	050-2381002 08-8519169	Teaching Computer Science in general and Object-Oriented Programming in particular, learning from errors, Analysis and Design of Information Systems, Teaching Semantic Database Modeling, Teaching Approaches in Higher Education, Education for Entrepreneurship and Innovation.	ronits1@sce.ac.il
Dr. Gali Naveh		Integration of technology in education, diffusion of innovation, technology in self-management of chronic diseases, animal-computer interaction	galinaveh@sce.ac.il
Dr. Alisa Voslinsky	052-8675032 08-8519392	Behavioral Economics, Decision Making	alisavo@ac.sce.ac.il
Dr. Elroi Hadad	054-2480424	Asset Pricing, Risk Management, Financial Markets	hadadel@sce.ac.il
Dr. Eyal Ben-Zion	054-4304926	Analyze a human mobility patterns for finding their lifestyles	eyalbe3@sce.ac.il

The Physics Department

Name	Telephone No.	Field of Research	Email
Prof. Leonid Oster	050-7523217 08-6475039	Experimental solid state physics	leonido@sce.ac.il
Prof. Ahmad Salman	054-6206714 08-6475794	Infrared spectroscopy, Raman spectroscopy, fluorescence, and using these methods in the study of various biological systems such as colonic cancer, bacteria attacking agricultural crops and abnormal cell cultures. Rapid Diagnosis of Bacterial and Viral Human Infections Using Infrared Microscopy of Peripheral Blood Samples and Machine Learning Algorithms. Detection of Antibiotic Resistant Bacteria Using Infrared Microscopy and Advanced Multivariate Analysis	ahmad@sce.ac.il
Dr. Elad Shufan	052-3869335 08-8519372	1. Designing vehicle routes and schedules in problems of pickup and delivery; generalised open shop problems; generalised assignment problems. 2. Machine learning and spectroscopy aimed to characterise and identify biological systems	elads@sce.ac.il
Dr. Doron Braunstein	054-5938053 08-6475704	Laser theory, quantum optics and radiation matter interactions, Investigation of waves in excitable media and especially the development of fibrillatory activity in the heart and brain	doronb@sce.ac.il
Dr. Ella Smolik	050-2255298 08-8519375	Wave development inside excitable medium. Modeling of the heart. Lasing without inversion. Plasma instabilities and their application in the creation of radiation mechanisms in astrophysics.	elag@sce.ac.il
Dr. Dmitry Nemirovsky	08-8519061	Neutron and electron Compton scattering heat transfer enhancers, flow theory, Molecular Spectroscopy, Vibrational Normal Modes, Neutron Compton scattering, Heat Transfer enhancement, Underground Heat Storage, Phase Change Materials	demitryn@sce.ac.il
Dr. Galina Reshes	053-2862696 08-6475240	Dosimetry	galina@sce.ac.il

The Mathematics Department

Name	Telephone No.	Field of Research	Email
Prof. Semyon Levitsky	054-3103368 08-6475734	Applied mathematics, modeling of dynamic processes in multi-phase systems	levits@sce.ac.il
Dr. Meirav Topol	054-8311081 08-8519065	Algebraic geometry, topology, knot theory, Mathematics teaching	meiravt@sce.ac.il
Dr. Arthur Mouftakhov	054-5395529 08-8519353	Inverse problem of boundary conditions, Teaching of math. Didactics	artourm@sce.ac.il
Dr. Shai Sarussi	050-7508977 08-6475895	Quasi-valuations, extensions of valuation domains, the prime spectra of rings, topological aspects of extensions of integral domains	sarussh@sce.ac.il
Dr. Itamar Shmuel Stein	054-7824661	Representation theory of monoid and category algebras. String rewriting systems	itamast@sce.ac.il
Dr. Natalia Krapivnik		Applied Mathematics, Mathematical Models of Chemical Kinetics and Combustion	natalkr@sce.ac.il
Dr. Avner Segal	052-8616188	Automorphic representations and representations of p-adic groups and Lie groups https://sites.google.com/view/segalavner/	avnerse@sce.ac.il
Dr. Ari-Meir Brodsky	058-7141592 08-6475656	Set theory https://en.sce.ac.il/faculty/ari_brodsky	arimebr@sce.ac.il
Dr. Mariana Durcheva	054-7321325	Teaching of mathematics, Public key cryptography, Semiring Theory, Graph Theory, Discrete mathematic	mariadu@sce.ac.il

The information listed in this booklet is correct for the 2021-2022 academic year
For more information please contact the PR and Marketing Communications department at: marinagr@sce.ac.il

