

האגודה הישראלית להנדסת ביוטכנולוגיה
Israel Society for Biotechnology Engineering

The 5th Conference of the Israel Society for Biotechnology Engineering (ISBE)

December 22, 2019, Dan Panorama Hotel, Tel-Aviv

PROGRAM



TABLE OF CONTENTS

Welcome Letter	3
Conference Committee	3
Sponsors	4
Exhibitor	5
General Information	6
Scientific Program	7
Posters	22
Author Index	45

Dear Participants,

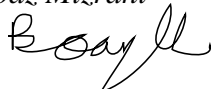
The 5th Conference of the Israel Society for Biotechnology Engineering (ISBE'19) continues a long tradition of bringing together academics, industrial leaders and policymakers from a broad variety of disciplines. ISBE'19 will provide an ideal environment to meet inspiring speakers and experts, to exchange ideas and information with colleagues and to develop new collaborations.

The ISBE conferences of recent years have made important strides in reducing the gap between industry and academia. ISBE'19 will continue focusing on multidisciplinary applied segments of biotechnology. This year we adopted the themes of “Big Data & Microbiome” and “Food Tech”, both in the top emerging trends in the biotech industry.

I would like to thank my colleagues on the organizing committee, Ayelet, Esty, Hana and Niv for helping to put together such an exciting program. Special thanks to our sponsors from the industry and the academia and a big thank you to Anat, Tsipi and Magali from Diesenhous-Unitours for their hard work, experience and dedication.

Enjoy the conference!

Boaz Mizrahi



Conference Chairperson

CONFERENCE COMMITTEE

Prof. Boaz Mizrahi, *Conference Chairperson*
Technion – Israel Institute of Technology

Prof. Ayelet Fishman, Technion – Israel Institute of Technology

Dr. Niv Papo, Ben-Gurion University of the Negev

Prof. Hanna Rapaport, Ben-Gurion University of the Negev

Prof. Ester Segal, Technion – Israel Institute of Technology

Sponsors



The Faculty of
Biotechnology &
Food Engineering



Russell Berrie Nanotechnology Institute
Technion - Israel Institute of Technology



The Larry S. Lasker Interdisciplinary Center
for Life Sciences and Engineering
מרכז בין-תחומי למדעי החיים
למנוחה לר"ס לסקר

הפקולטה למדעי ההנדסה
המחלקה להנדסת ביוטכנולוגיה
ע"ש אברהם ומסילה מולדשטיין-מור

אוניברסיטת בן-גוריון בנגב
Ben-Gurion University of the Negev



Ilse Katz Institute for Nanoscale
Science and Technology
Ben-Gurion University of the Negev



מרכז סגול לביוטכנולוגיה רגנרטיבית
Sagol Center for Regenerative Biotechnology



המכללה האקדמית להנדסה
אורט בראודה
ORT BRAUDE COLLEGE



DIESENHAUS UNITOURS
Incoming Tourism Ltd.

Conference Secretariat

Diesenhaus Unitours Incoming Tourism (1998) Ltd.
Conventions Department
3 Hamelacha Street, P.O.Box 57176
Tel Aviv 61571, Israel
Tel: +972-3-5651313; +972-3-5651344
Fax: +972-3-5610152
E-mail: meetings@diesenhaus.com

EXHIBITORS

<p>A2S Technologies Ltd. www.A2S.co.il</p>	<p>Bargal Analytical Instruments Ltd. www.bargal.co.il</p>
<p>BioAnalytics Creative Lab Solution www.bioanalytics.co.il</p>	<p>Biological Industries www.bioind.com</p>
<p>Danyel Biotech www.danyel.co.il</p>	<p>Dr. Golik Scientific Solutions www.golik.co.il</p>
<p>LifeGene Ltd. www.lifegene.co.il</p>	<p>Lumitron www.lumitron.co.il</p>
<p>Tetra Sense Scientific Tools Ltd. www.tetrasense.co.il</p>	

GENERAL INFORMATION

Conference Venue

Dan Panorama Hotel
10 Kaufman Street
Tel Aviv

Registration and Hospitality Desk

Diesenhous-Unitours will operate the registration desk throughout the conference.

Internet

Wi-Fi internet connection is available free of charge in all public areas.
No password is required.

Abstracts

Abstracts viewing is available via the on-line conference program at <https://www.isbe.org.il/program/>
To view an abstract, click on the presentation title.

Speakers and Session Chairpersons

Session chairpersons and speakers are requested to meet with each other 10 minutes prior to the commencement of their respective sessions, in the session hall. In order to make it possible for participants to plan attendance at different parallel sessions, it is essential that speakers do not depart from the time allocated for their presentation (speakers should allow time for some questions, excluding presenters of short talks).

Data Projection

Please bring your presentation on a “disk on key” memory stick to the A/V technician in the session hall, at least 30 minutes before the start of your session. The technician will load your presentation onto the conference computer. If using your own computer, please coordinate it in advance with the A/V technician.

Poster Presenters

Please refer to the poster program (pages 21-43) and check your final board number. Please place your poster on the board with the same number.

Mounting of posters: 08:00-09:00

Removal of posters: by 15:30

PROGRAM

Sunday, December 22, 2019

08:00-09:00 Registration, Light breakfast and Poster mounting

09:00-10:00 OPENING PLENARY SESSION

Hall A

Chair: **Boaz Mizrahi**, Technion – Israel Institute of Technology

09:00 *Welcome Address:*

Boaz Mizrahi, Conference Chair
Technion – Israel Institute of Technology

Plenary Lecture:

09:15 Seasonal hormone oscillations in humans governed by gland-size-control feedback loops

Uri Alon¹, Avihai Tandler¹, Alon Bar¹, Netta Mendelshon-Cohen², Omer Karin¹, Yael Korem¹, Lior Maimon¹, Tomer Milo¹, Moriya Raz¹, Avi Mayo¹, Amos Tanay², Uri Alon¹

¹*Molecular Cell Biology, Weizmann Institute of Science, Rehovot, Israel*

²*Computer Science, Weizmann Institute of Science, Rehovot, Israel*

10:00-10:30 Coffee break, Poster viewing and Exhibition

Chairs: **Ester Segal** and **Omer Yehezkeili**

Technion – Israel Institute of Technology

10:30 From biomineralization to functional bioinspired materials

Boaz Pokroy

Materials Science and Engineering, Technion – Israel Institute of Technology, Haifa, Israel

10:45 Designing new bioinspired 3D-hydrogels for bone-tissue regeneration

Lihl Adler-Abramovich

Department of Oral Biology, the Goldschleger School of Dental Medicine, Sackler Faculty of Medicine, the Center for Nanoscience and Nanotechnology, Tel Aviv University, Tel Aviv, Israel

11:00 Silica deposition by a unique protein in sorghum

Rivka Elbaum

Plant Sciences and Genetics in Agriculture, The Hebrew University of Jerusalem, Rehovot, Israel

11:15 Multiplexed biomarker detection with porous silicon-based aptasensors in 3D printed microfluidic devices

Sofia Arshavsky-Graham^{1,2}, Shanny Ackerman¹, Omer Sabah¹, Niklas Maximilian Epping², Thomas Scheper², Janina Bahnemann², Ester Segal^{1,3}

¹*Department of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel*

²*Institute of Technical Chemistry, Leibniz Universität Hannover, Hanover, Germany*

³*The Russell Berrie Nanotechnology Institute, Technion – Israel Institute of Technology, Haifa, Israel*

- 11:30 Engineering a DNAYme-based operon system for the production of DNA nanoscaffolds in living bacteria

Dan Alon¹, Johann Elbaz¹, Chris Voigt²

¹*School of Molecular Cell Biology and Biotechnology, Tel Aviv University, Tel Aviv, Israel*

²*Department of Biological Engineering, Massachusetts Institute of Technology, Boston, Massachusetts, USA*

- 11:45 NIR-light responsive biocompatible composites for on-demand healing and drug release

Alona Shagan, Tsuf Croitoru-Sadger, Enav Corem-Salkmon, Boaz Mizrahi

Biotechnology and Food Engineering, Technion - Israel Institute of Technology, Haifa, Israel

- 11:50 Amyloid fishing: Functionalized Titania nanoparticles for amyloid fibril targeting and inhibition

Elad Arad^{1,2}, Raz Jelinek^{1,2}, Hanna Rapaport^{1,3}

¹*Ilse Katz Institute for Nanoscale Science and Technology, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

²*Department of Chemistry, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

³*Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

- 11:55 Genetic code expansion of *Pseudomonas aeruginosa* and bio-tracking of flagella filaments

Eden Ozer¹, Karin Yaniv², Anastasya Boyarski³, Michael Meijler³, Ariel Kushmaro², Lital Alfonta¹

¹*Department of Life Sciences, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

²*Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

³*Department of Chemistry, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

- 12:00 Microstructure effect on plant-environment interaction – a biomimetic approach
Pallavi Kumari¹, Tali Sayas¹, Helen Rombach², Neta Ginzburg¹,
Maya Kleiman¹
¹*Plant Sciences Institute, Agricultural Research Organization, Rishon Lezion, Israel*
²*Department of Agriculture and Horticulture, Humboldt University Zu Berlin, Berlin, Germany*
- 12:05 Diffusion-based separation using bidirectional electroosmotic flow
Vesna Bacheva^{1,2}, Federico Paratore^{1,2}, Shimon Rubin¹, Govind Kaigala², Moran Bercovici¹
¹*Mechanical Engineering, Technion – Israel Institute of Technology, Haifa, Israel*
²*IBM Research - Zurich, Zurich, Switzerland*
- 12:10 Anti-VEGF-aptamer modified C-dots—a hybrid nanocomposite for topical treatment of ocular vascular disorders
Asaf Shoval^{1,2}, Amos Markus^{1,2}, Zhixin Zhou³, Xia Liu³, Rémi Cazelles³, Itamar Willner³, Yossi Mandel^{1,2}
¹*School of Optometry and Vision Science, Faculty of Life Sciences, Bar-Ilan University, Ramat-Gan, Israel*
²*Bar Ilan Institute for Nanotechnology and Advanced Materials (BINA), Bar-Ilan University, Ramat-Gan, Israel*
³*Institute of Chemistry, The Minerva Center for Biohybrid Complex Systems, The Hebrew University of Jerusalem, Jerusalem, Israel*

Session
sponsored by



Chairs: Ofra Benny, The Hebrew University of Jerusalem and Nati Korin, Technion – Israel Institute of Technology

10:30 Nanoinformatics for personalized cancer nanomedicine

Yosi Shamay

Biomedical Engineering, Technion – Israel Institute of Technology, Haifa, Israel

10:45 Bio-inspired functional coatings

Meital Reches

Institute of Chemistry, The Hebrew University of Jerusalem, Jerusalem, Israel

11:00 Dynamic three dimensional in vitro model for investigation of ovarian carcinoma progression

Aharon Shmuel Baskin^{1,2}, Reuven Reich², Ben Davidson³, Tali Tavor Reem¹

¹*Pharmaceutical Engineering, Azrieli College of Engineering, Jerusalem, Jerusalem, Israel*

²*School of Pharmacy, The Hebrew University of Jerusalem, Jerusalem, Israel*

³*The Medical Faculty, University of Oslo, Oslo, Norway*

11:15 Novel soy protein-based wound dressing, loaded with hemostatic agent and antibiotics

Lior Matsliah¹, Daniella Goder², Ariel Furer³, Meital Zilberman^{1,2}

¹*Department of Biomedical Engineering, Tel Aviv University, Tel Aviv, Israel*

²*Department of Materials Science and Engineering, Tel Aviv University, Tel Aviv, Israel*

³*Medical Corps, Israel Defense Forces, Tel Hashomer, Israel*

- 11:30 Towards bio-mimetics of the anterior cruciate ligament using collagen fiber reinforced bio-composites
Raz Agron^{1,2}, Amir Dolev³, Mustafa Yassin³, Rami Haj-Ali¹, Mirit Sharabi²
¹*School of Mechanical Engineering, Tel-Aviv University, Tel-Aviv, Israel*
²*Mechanical Engineering and Mechatronics, Ariel University, Ariel, Israel*
³*Orthopedic Surgery, Ha'Sharon Hospital, Petah Tikva, Israel*
- 11:45 Hybrid retinal implant composed of high-resolution electrode array integrated with glutamatergic neurons for restoration of sight
Yossi Mandel^{1,2}, Nairouz Farah¹, Gal Shpun^{1,2,3}, Amos Markus¹, Yoav Chemla^{1,2}, Assaf Beck¹, Aviad Slotky¹, Tamar Azrad-Leibovitch¹
¹*School Optometry and Vision Science, Faculty of Life Science, Bar-Ilan University, Ramat-Gan, Israel, Israel*
²*Bar-Ilan Institute for Nanotechnology and Advanced Materials (Bina), Bar-Ilan University, Ramat-Gan, Israel*
³*Faculty of Engineering, Bar-Ilan University, Ramat-Gan, Israel*
- 12:00 Porcine extracellular matrix hydrogel delivery incorporated with Nano-Ghosts for cardiac regeneration
Tzila Davidov, Nitzan Letko Khait, Marcelle Machluf
Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel
- 12:05 Cellulose-based biomaterials: A plot twist
Roi Rutenberg, Lynette Cegelski
Chemistry, Stanford University, Palo Alto, CA, USA
- 12:10 Rational design of light-responsive elastin-like polypeptides, using non-standard amino acids
Bar Israeli, Sigal Gelkop, Miriam Amiram
Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel

Chairs: **Uri Gophna**, Tel Aviv University
Omry Koren, Bar-Ilan University

10:30 The individual in the context of the whole: Gut microbiota-host interactions

Naama Geva-Zatorsky

Molecular Cell and Cancer Cell, Faculty of Medicine, Technion – Israel Institute of Technology, Haifa, Israel

10:45 Systems biology of the human microbiome: From big data to models

Elhanan Borenstein

*Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel
Blavatnik School of Computer Science, Tel Aviv University, Tel Aviv, Israel*

11:00 Methods for outcome prediction based on microbiome time series or can your microbiome dynamics predict when and will your future state happen?

Yoram Louzoun

Department of Mathematics, Faculty of Exact Sciences, Bar-Ilan University, Ramat-Gan, Israel

11:15 The effect of murine genetics on the gut microbiota

Hila Korach-Rechtman¹, Shay Freilich¹, Shiran Gerassy-Vainberg¹, Keren Buhnik-Rosenblau¹, Yael Danin-Poleg¹, Haim Bar², Yechezkel Kashi¹

¹*Department of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel*

²*Department of Statistics, UConn - the University of Connecticut, Storrs, Connecticut, USA*

10:30-12:00 Session C: BIG DATA & MICROBIOME (cont'd) Hall C

11:30 Spatial differences in the bacterial community along the digestive tract of sea urchin *Tripneustes gratilla elatensis*: a role of seaweed diet

Matan Masasa^{1,3}, Ariel Kushmaro², Nadav Shashar¹, Roy Barkan^{1,3}, Lior Guttman³

¹*Life Sciences, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

²*Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

³*National Center for Mariculture, Oceanographic and Limnological Research, Eilat, Israel*

11:45 Towards the harnessing of quorum quenching lactonases to fight plant bacterial pathogens

Livnat Afriat-Jurnou

Biotechnology, MIGAL- Galilee Research Institute, Kiryat-Shmona, Israel

Faculty of Sciences and Technology, Tel-Hai Academic College, Kiryat-Shmona, Israel

12:15-13:30 Lunch Break, Poster Viewing & Exhibition

12:45-13:45 POSTER SESSION

Posters Hall

13:45-15:15 Session D: DRUG DESIGN

Hall A

Chairs: **Eyal Arbely**, Ben-Gurion University of the Negev
Mickey Kosloff, Haifa University

13:45 Covalent inhibitor discovery by electrophile fragment screening

Nir London

Organic Chemistry, The Weizmann Institute of Science, Rehovot, Israel

14:00 Computational design of multispecific drugs for treatment of complex diseases

Yanay Ofran

Faculty of Life Sciences, Bar-Ilan University, Ramat-Gan, Israel

14:15 Insights into mechanisms of immunogenicity following treatment with therapeutic monoclonal antibodies

Yariv Wine

School of Molecular Cell Biology and Biotechnology, Faculty of Life Sciences, Tel Aviv University, Tel Aviv, Israel

14:30 Targeting calcineurin-NFAT system: Development of optimized dual-peptide immunosuppressant using proteins directed-evolution

Nesly Dotan, Einav Ashkenazi, Shiri Elmedvi, **Maayan Gal**, Itai Bloch

Biochemistry, MIGAL - Galilee Research Center, Kiryat Shmona, Israel

14:45 Engineering dual-specific M-CSF antagonists that inhibit c-FMS and $\alpha_v\beta_3$ integrin for osteoporosis therapy

Yuval Zur^{1,2}, Lior Rosenfeld¹, Svetlana Katchkovsky², Noam Levaot², Niv Papo¹

¹*Department of Biotechnology Engineering and the National Institute of Biotechnology in the Negev, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

²*Department of Physiology and Cell Biology, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

15:00 A low-cost, simple high throughput method for screening native *Helicobacter pylori* urease inhibitors

Yoram Gerchman^{1,2}, Natali Amar-Noam^{1,2}, Avi Peretz³

¹*Biology, Oranim College, Kiryat Tivon, Israel*

²*Evolutionary and Environmental Biology, University of Haifa, Haifa, Israel*

³*Clinical Microbiology Laboratory, Baruch Padeh Medical Center Poriya, Tiberias, Israel*

15:05 Developing prostate specific membrane antigen targeting nanobodies and small molecule conjugates for prostate cancer imaging and therapy

Lior Rosenfeld^{1,2}, Amiram Sananes^{1,2}, Yuval Zur^{1,2}, Catherine Foss³, Shira Cohen⁴, Sigal Gelkop⁵, Efrat Ben Zeev⁶, Anat Shahar², Leslie Lobel⁵, Barak Akabayov⁴, Martin Pomper³, Eyal Arbeli^{2,4,7}, Niv Papo^{1,2}

¹*Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

²*The National Institute of Biotechnology in the Negev, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

³*Russell H. Morgan Department of Radiology and Radiological Sciences, Johns Hopkins University, Baltimore, Maryland, USA*

⁴*Department of Chemistry, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

⁵*Department of Virology, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

⁶*The Nancy and Stephen Grand Israel National Center for Personalized Medicine, Weizmann Institute of Science, Rehovot, Israel*

⁷*Department of Life Sciences, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

15:10 Using functional screening of marine metagenomic libraries for anti-quorum sensing compounds as a platform for microbial ecology study and drug discovery

Karin Yaniv¹, Karin Golberg¹, Hana Barak¹, Pierre-Yves Chavant³, Oded Beja², Robert S. Marks¹, Serge Cosnier³, Ariel Kushmaro¹

¹*Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

²*Department of Biology, Technion – Israel Institute of Technology, Haifa, Israel*

³*Department of Molecular Chemistry Umr Cnrs, University of Grenoble-Alpe, Grenoble, France*

Chairs: **Ido Braslavsky**, The Hebrew University of Jerusalem
Avi Shpigelman, Technion – Israel Institute of Technology

13:45 Automated assembly and high throughput screening of vascularized human organoids from normal or tumorigenic tissues

Avner Ehrlich¹, Mohammad Ghosheh¹, Aaron Cohen¹, Konstantinos Ioannidis¹, Muneef Ayyash¹, Idit Goldfracht², Orian Leitersdorf¹, Merav Cohen¹, Christopher Hubert³, Lior Gepstein², **Yaakov Nahmias**¹

¹*Department of Cell & Developmental Biology, Alexander Grass Center for Bioengineering, The Hebrew University of Jerusalem, Jerusalem, Israel*

²*Sohnis Research Laboratory for Cardiac Electrophysiology and Regenerative Medicine, the Rappaport Faculty of Medicine and Research Institute, Technion – Israel Institute of Technology, Haifa, Israel*

³*Lerner Research Institute, Cleveland Clinic, Cleveland, Ohio, USA*

14:00 Oil structuring for improved nutrition

Maya Davidovich-Pinhas

Faculty of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel

14:15 Proton (H^1) Low Field (LF) NMR energy relaxation technology for material characterization of emulsions in oxidizing and non-oxidizing condition

Maysa Resende¹, Zeev Wiesman¹, Charles Linder²

¹*Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

²*Zuckerberg Institute for Water Research (ZIWR), Ben Gurion University of the Negev, Beersheva, Israel*

14:30 Is bitter actually better? machine learning predictions and analysis of tastants

Eitan Margulis¹, Yuli Slavutsky², Anne Tromelin³, Yuval Benjamini², Masha Y. Niv¹

¹*The Institute of Biochemistry, Food Science and Nutrition, Robert H. Smith Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem, Rehovot, Israel*

²*Center of Interdisciplinary Data Science Research, The Hebrew University of Jerusalem, Jerusalem, Israel*

³*Centre Des Sciences Du Goût Et De L'alimentation, Agrosup Dijon, CNRS, INRA, Université Bourgogne Franche-Comté, F-21000, Dijon, France*

14:45 Food for thought - The IP toolbox for nutraceuticals

Revital Duvdevani, Joseph Wyse, Eyal Bressler
Patents Department, Dr. Eyal Bressler & Co., Ramat-Gan, Israel

15:00 Characterization of biopolymeric compounds extracted from macroalgae

Meital Kazir¹, Daniel Gurevich¹, Ari Groobman¹, Meghanath Prabhu², Alvaro Israel³, Alexander Golberg², Yoav D. Livney¹
¹*Faculty of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel*

²*Porter School of the Environment and Earth Sciences, Tel Aviv University, Tel Aviv, Israel*

³*Israel Oceanographic and Limnological Research Ltd., The National Institute of Oceanography, Haifa, Israel*

15:05 High value products in crop waste

Yaara Danino, **Zachor Adler Agmon**
Post Harvest, Southern Arava R&d, Yotvata, Israel

15:10 Lipo-random peptide mixtures to fight against bacterial plant diseases

Shiri Topman^{1,2}, Einav Cohen-Malach², Zvi Hayouka², Saul Burdman¹

¹*Department of Plant Pathology and Microbiology, Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem, Rehovot, Israel*

²*Institute of Biochemistry, Food Science and Nutrition, Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem, Rehovot, Israel*

13:45-15:15 Session F: BIOENERGY & ENVIRONMENT

Hall C

Chairs: **Adi Radian**, Technion – Israel Institute of Technology
Isam Sabbah, Ort Braude

13:45 Engineering hyperthermostable designer cellulosomes

Edward A. Bayer

Department of Biomolecular Sciences, Weizmann Institute of Science, Rehovot, Israel

14:00 Evaluation of the economic feasibility of electrogenic bioreactors for wastewater treatment

Ronen Shechter

Technology, Fluence, Caesarea, Israel

14:15 Genomic and metabolic analyses of RDX degraders isolated from explosive contaminated environments

Paula Istvan, Zeev Ronen

Zuckerberg Institute for Water Research, Department of Hydrology and Water Quality, Ben-Gurion University of the Negev, Midreshet Ben-Gurion, Israel

- 14:30 Macroalgal biomass subcritical hydrolysates for the production of polyhydroxyalkanoate (PHA) by *Haloferax mediterranei*
Supratim Ghosh¹, Rima Gnaim¹, Semion Greiserman¹, Ludmila Fadeev², Michael Gozin², Alexander Golberg¹
¹*Porter School of the Environment and Earth Sciences, Faculty of Exact Sciences, Tel Aviv University, Tel Aviv, Israel*
²*School of Chemistry, Faculty of Exact Sciences, Tel Aviv University, Tel Aviv, Israel*
- 14:45 An electrode-assisted anaerobic digestion process for the production of high-quality biogas
Keren Yanuka-Golub¹, Katie Baransi-Karkaby², Alon Szczupak⁴, Leah Reshef³, Judith Rishpon³, Ronen Shechter⁴, Uri Gophna³, Isam Sabbah²
¹*Department of Earth and Planetary Sciences, Weizmann Institute of Science, Rehovot, Israel*
²*The Regional Research & Development Center, Galilee Society, Shefa-Amr, Israel*
³*School of Molecular Cell Biology and Biotechnology, Tel Aviv University, Tel Aviv, Israel*
⁴*Fluence Water Products and Innovation, Ltd., Caesarea, Israel*
- 15:00 Removal of soil pollutants by following metabolic modelling
Kusum Dhakar¹, Raphy Zarecki¹, Hammam Ziadne¹, Shlomit Medina¹, Jackline Abu-Nassar¹, Radi Aly¹, Zeev Ronen², Hanan Eizenberg¹, Shiri Freilich¹
¹*The Plant Science Department, Newe Ya'ar Research Center, Agricultural Research Organization, Ramat Yishay, Israel*
²*Department of Environmental Hydrology & Microbiology, Zuckerman Institute for Water Research, Jacob Blaustein Institutes for Desert Research, Ben-Gurion University of the Negev, Midreshet Ben-Gurion, Israel, Beer-Sheva, Israel*

15:05 Bioremediation using soil indigenous ureolytic bacteria

Hadas Raveh-Amit¹, Nissim Banano¹, Svetlana Gelfer¹, Andrey Nikolski¹, Michael Tsesarsky^{2,3}

¹*Department of Chemistry, Nuclear Research Center Negev, Beer-Sheva, Israel*

²*Department of Geological and Environmental Sciences, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

³*Department of Structural Engineering, Ben Gurion University of the Negev, Beer Sheva, Israel*

15:10 Protein-based conductive materials

Nadav Amdursky

Schulich Faculty of Chemistry, Technion – Israel Institute of Technology, Haifa, Israel

15:15-15:30 Coffee Break

15:30-16:40 CLOSING PLENARY SESSION

Hall A

Chair: Niv Papo, Ben-Gurion University of the Negev

15:30 Guest Lecture: Success as a way of life

Yoram Yovel, MD, PhD

Psychoanalyst, psychiatrist and brain researcher

16:30 Best Poster Awards

Presented by:

Ester Segal, Technion – Israel Institute of Technology

Hanukkah Candle Lighting

POSTERS

12:45-13:45 POSTER SESSION

Posters Hall

Poster topics

- P1 – P28 Bio-Nano
P29 – P50 Tissue Engineering & Bio-Materials
P51 – P56 Big Data & Microbiome
P57 – P77 Drug Design
P78 – P80 Food Tech
P81 – P95 Bioenergy & Environment

P1 – P28 BIO-NANO

- P-1 Probing the effect of all possible mutations on protein binding affinity without the need of protein purifications

Shay-lee Aharoni^{1,2}, Niv Papo^{1,2}

¹*Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

²*NIBN, National Institute of Biotechnology, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

- P-2 Revisiting thioflavin T (ThT) fluorescence as a marker of protein fibrillation – a prominent and overlooked role of electrostatic interactions

Elad Arad^{1,2}, Hodaya Green³, Raz Jelinek^{1,2}, Hanna Rapaport^{1,3}

¹*Ilse Katz Institute for Nanoscale Science and Technology, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

²*Department of Chemistry, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

³*Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

- P-3 Assembly and co-assembly of novel organic supramolecular polymers

Zohar Arnon, Ehud Gazit

Biotechnology, Tel Aviv University, Tel Aviv, Israel

- P-4 Deciphering mass transfer limitations of porous silicon based aptasensors for protein detection
Sofia Arshavsky-Graham^{1,2}, Evgeiny Boyko³, Rachel Salama¹, Shanny Ackerman¹, Thomas Scheper², Moran Bercovici^{3,4}, Ester Segal^{1,4}
¹Department of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel
²Institute of Technical Chemistry, Leibniz Universität Hannover, Hannover, Germany
³Department of Mechanical Engineering, Technion – Israel Institute of Technology, Haifa, Israel
⁴The Russell Berrie Nanotechnology Institute, Technion – Israel Institute of Technology, Haifa, Israel
- P-5 CybOrg – bacteria with a nano-based organelle
Oren Bar Bachar, Matan M. Meirovich, Ronni Kurzion, Brooke Dubyna, Omer Yehezkeili
Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel
- P-6 Development of a miniaturized bio-barcode sensor array for detection of biological events
Marianna Beiderman, Menachem Motiei, Dror Fixler, Rachela Popovtzer
Faculty of Engineering, Bar-Ilan University, Ramat Gan, Israel
- P-7 Imaging and tracking of exosomes within the brain using gold nanoparticles
Oshra Betzer¹, Nisim Perets², Tamar Sadan¹, Uri Asheri², Daniel Offen², Rachela Popovtzer¹
¹Faculty of Engineering and the Institute of Nanotechnology & Advanced Materials, Bar-Ilan University, Ramat-Gan, Israel
²Sagol School of Neuroscience, Tel Aviv University, Tel Aviv, Israel

- P-8 Diagnostic system for rapid antimicrobial susceptibility testing of clinical samples
Talya Borkum¹, Heidi Leonard¹, Naama Massad – Ivanir¹, Raul Colodner², Merav Strauss², Ester Segal^{1,3}
¹*Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel*
²*Laboratory of Clinical Microbiology, Emek Medical Center, Afula, Israel*
³*The Russell Berrie Nanotechnology Institute, Technion – Israel Institute of Technology, Haifa, Israel*
- P-9 Antitumor effect of lonidamine-polypeptide-peptide nanoparticles in breast cancer models
Ifat Cohen Erez¹, Hanna Rapaport^{1,2}
¹*Biotechnology Engineering, Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer Sheva, Israel*
²*Ilse Katz Institute for Nanoscale Science and Technology (Iki), Ilse Katz Institute for Nanoscale Science and Technology (Iki), Ben-Gurion University of the Negev, Beer Sheva, Israel*
- P-10 The impact of cell type on exosome-GNP complex distribution to cancer
Noy Elmaliach, Oded Cohen, Oshra Betzer, Menachem Motiei, Rachela Popovtzer
Faculty of Engineering, Bar-Ilan University, Ramat-Gan, Israel
- P-11 The Glu452Asn replacement in the *B. subtilis* aminopeptidase (BSAP) increases the specificity constant by a 1000-fold
Rotem Faygenboim- Ornai¹, Raphael Alhadef², Shifra Lansky², Ellena Rogoulenko², Gil Shoham², Yuval Shoham¹
¹*Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel*
²*Institute of Chemistry, The Hebrew University of Jerusalem, Jerusalem, Israel*

- P-12 Integrin targeted self-assembled nano-carrier for $\alpha 2\beta 1$ overexpression in solid tumors
Arnon Fluksman, Jehohua Katzhendler, Ofra Benny, Philip Lazarovici
Institute for Drug Research, School of Pharmacy, Faculty of Medicine, The Hebrew University of Jerusalem, Jerusalem, Israel
- P-13 Porous silicon optical biosensor for highly sensitive detection of mycotoxins in field crops
Ilana Freidman², Giorgi Shtenberg¹
¹*Institute of Agricultural Engineering, Agricultural Research Organization – Volcani Center, Rishon LeZion, Israel*
²*Life Sciences, Bar-Ilan University, Ramat-Gan, Israel*
- P-14 Immobilized nanoparticles of copper and copper oxides for water disinfection
Yanna Gurianov, Faina Nakonechny, Yael Albo, Marina Nisnevitch
Chemical Engineering, Biotechnology and Materials, Ariel University, Ariel, Israel
- P-15 The influence of nanoparticles` coatings on drug delivery to mitochondria
Noa Harduf¹, Ifat Cohen-Erez^{1,2}, Hanna Rapaport^{1,2}
¹*Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
²*Ilse Katz Institute for Nanoscale Science and Technology (Iki), Ben-Gurion University of the Negev, Beer-Sheva, Israel*
- P-16 Rapid detection and characterization of botulinum neurotoxin using porous silicon interferometer
Nanda Kumar D., Giorgi Shtenberg
Institute of Agricultural Engineering, Agricultural Research Organization – Volcani Center, Rishon LeZion, Israel

- P-17 Porous silicon/carbon dot-hybrids for orthogonal molecular detection
Naama Massad-Ivanir¹, Susanta Kumar Bhunia², Raz Jelinek^{2,3}, Ester Segal^{1,4}
¹*Department of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel*
²*Department of Chemistry, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
³*Ilse Katz Institute for Nanotechnology, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
⁴*The Russell Berrie Nanotechnology Institute, Technion – Israel Institute of Technology, Haifa, Israel*
- P-18 Nitrogenase artificial activation
Matan Meirovich, Oren Bar-Bachar, Dina Mukha, Evan El-Halawani, Omer Yehezkeli
Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel
- P-19 Enzyme-based photoelectrochemical systems for photobiocatalytic processes
Dina Mukha, Yifat Cohen, Omer Yehezkeli
Faculty of Biotechnology & Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel
- P-20 Haptoglobin biomarker detection based on enhanced chemiluminescence of gold nanoparticles
Narsingh Raw Nirala, Giorgi Shtenberg
Institute of Agricultural Engineering, Agricultural Research Organization – Volcani Center, Rishon LeZion, Israel
- P-21 Modified halloysite nanotubes for manipulation of cells
Ofer Prinz Setter¹, Ariel Movsowitz¹, Ester Segal^{1,2}
¹*Department of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel*
²*The Russell Berrie Nanotechnology Institute, Technion – Israel Institute of Technology, Haifa, Israel*

- P-22 Aptamer-based biosensor for targeting biomarkers in the digestive tract fluids
Rachel Salama, Naama Massad-Ivanir, Ester Segal
Faculty of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel
- P-23 NanoPack: A nanotechnology – based antimicrobial packaging solution for extension of shelf life and food safety
Andy Sand¹, Naama Massad-Ivanir¹, Nadav Nitzan¹, Elisa Valderrama², Alfred Wegenberge³, Koranit Shlosman⁴, Rotem Shemesh⁴, Ester Segal¹
¹*Biotechnology and Food Engineering, Technion - Israel Institute of Technology, Haifa, Israel*
²*Centro Tecnológico Alimentario, Ctic-Cita, Aleson, La Rioja, Spain*
³*Muhlhofen 4, Constantia Teich GmbH, Weinburg, Austria*
⁴*Carmel Olefins Ltd., Haifa, Israel*
- P-24 Reduced graphene oxide and chitosan-carbon nanotube –modified microelectrodes for real-time detection of antipsychotic clozapine
Rajendra P. Shukla¹, Remi Cazelles¹, Deanna L. Kelly², Hadar Ben-Yoav¹
¹*Nanobioelectronics Laboratory (NBEL), Department of Biomedical Engineering, Ben-Gurion University of the Negev, Beer Sheva, 8410501, Israel*
²*Maryland Psychiatric Research Center, University of Maryland School of Medicine, Baltimore, Maryland, 21228, USA*
- P-25 Studying the “phagocytic” behavior of cancer cells in different mechanical conditions
Katerina Tischenko, Yifat Brill-Karniely, Ofra Benny
The Institute for Drug Research, The School of Pharmacy, Faculty of Medicine, The Hebrew University of Jerusalem, Jerusalem, Israel
- P-26 Development of highly specific biocompatible nanoparticles for differentiation between cancer and inflammation using conventional PET-CT
Chen Tzror-Azankot, Tamar Dreifuss, Menachem Motiei, Rachela Popovtzer
Faculty of Engineering, Bar-Ilan University, Ramat-Gan, Israel

- P-27 Tethered lipid bilayers within nanostructured porous silicon:
A biosensing platform for optical monitoring of membrane-associated processes

Liron Abrahami Pachuk¹, Omer Sabah¹, Elena Tenenbaum¹,
Naama Massad-Ivanir¹, Ester Segal^{1,2}

¹*Biotechnology and Food Engineering, Technion – Israel Institute of
Technology, Haifa, Israel*

²*The Russell Berrie Nanotechnology Institute, Technion – Israel
Institute of Technology, Haifa, Israel*

- P-28 Porous silicon Fabry–Pérot interferometer for rapid environmental
monitoring of copper

Anton Zaltzer, Mike Bismuth, Giorgi Shtenberg

*Institute of Agricultural Engineering, Agricultural Research
Organization – Volcani Center, Rishon LeZion, Israel*

P29 – P50 TISSUE ENGINEERING & BIO-MATERIALS

- P-29 Developing biodegradable nanoparticles loaded with steroid for
nasal drug delivery

Jumana Far, **Aiman Abu Ammar**

*Department of Pharmaceutical Engineering, Azrieli College of
Engineering, Jerusalem, Israel*

- P-30 Live imaging flow bioreactor for the simulation of articular cartilage
regeneration after treatment with bioactive hydrogel

Assaf Bar¹, Emil Ruvinov¹, Smadar Cohen^{1,2}

¹*The Avram and Stella Goldstein-goren Department of
Biotechnology Engineering, Ben-Gurion University of the Negev,
Beer-Sheva, Israel*

²*Regenerative Medicine and Stem Cell (RMSC) Research Center,
Ben-Gurion University of the Negev, Beer-Sheva, Israel*

- P-31 Catalytically active peptides affected by self-assembly and residues order
Avigail Baruch¹, Ariel Kushmaro^{2,3}, Hanna Rapaport^{2,3}
¹*Unit of Environmental Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
²*Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
³*The Ilse Katz Institute for Nanoscale Science and Technology, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
- P-32 Self-assembly modifying role of metal ions in silk fibroin
Ori Brookstein, Ulyana Shimanovich
Department of Material and Interfaces, Weizmann Institute of Science, Rehovot, Israel
- P-33 A new image processing methodology to analyze local electromechanical properties of cardiomyocytes in 2D cultures
Alexander Chernyak¹, Assaf Arbelle², Tammy Riklin-Raviv², Smadar Cohen^{1,4}, Yoram Etzion^{3,4}
¹*Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
²*Electrical Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
³*Physiology and Cell Biology, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
⁴*Regenerative Medicine and Stem Cell Research Center, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
- P-34 Engineering tissue-specific bioactive microenvironment from porcine extracellular matrix hydrogels
Tzila Davidov, Marcelle Machluf
Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel

- P-35 Structure and biological properties of catheter injectable hydrogels
Shir Giladi¹, Helen Guez², Tiberiu Shulimzon³, Meital Zilberman^{1,2}
¹*Department of Materials Science and Engineering, Tel-Aviv University, Tel Aviv, Israel*
²*Department of Biomedical Engineering, Tel-Aviv University, Tel Aviv, Israel*
³*Institute of Pulmonology, Sheba Academic Medical Center Hospital, Ramat-Gan, Israel*
- P-36 Novel analgesic drug eluting soy protein films as wound dressings
Daniella Goder¹, Dana Egozi², Michael Harlev³, Shir Giladi¹, Ariel Furer⁴, Meital Zilberman^{1,5}
¹*Department of Materials Science and Engineering, Tel Aviv University, Tel Aviv, Israel*
²*Department of Plastic and Reconstructive Surgery, Kaplan Medical Center, Rehovot, Israel*
³*Veterinary Service Center, Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel*
⁴*Medical Corps, Israel Defense Forces, Ramat-Gan, Israel*
⁵*Department of Biomedical Engineering, Tel Aviv University, Tel Aviv, Israel*
- P-37 3D Printing as a tool for microfluidic devices fabrication
Yoel Goldstein, Ofra Benny
Faculty of Medicine, School of Pharmacy, The Hebrew University of Jerusalem, Jerusalem, Israel
- P-38 Evolution of translation machinery for high efficiency multi-site incorporation of alkyne bearing unnatural amino acids
Dagan Hadar, Sigal Gelkop, Miriam Amiram
Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel
- P-39 Coral skeleton regulates astrocytic reactivity and scar formation in injured nervous tissue in vitro
Roni Mina Hendler, Orly Eva Weiss, Eyal Aviv Canji, Tzachy Morad, Danny Baranes
Molecular Biology, Ariel University, Ariel, Israel

- P-40 Peptide-drug conjugate endocytosis intracellular traffic
Maysoon Kashkoosh, Michael Firer
Faculty of Engineering, Ariel University, Ariel, Israel
- P-41 In-vitro iPSC based neuro-vascular unit for drug screening
Roman Khourin^{1,2}, Tatiana Rabinski^{1,2}, Gad Vatine^{1,2}
¹*Department of Physiology and Cell Biology, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
²*The Regenerative Medicine and Stem Cell Research Center, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
- P-42 Functional abnormalities in iPSCs-derived cardiomyocytes generated from PLEKHM2-mutated patients with dilated cardiomyopathy
Nataly Korover¹, Tatiana Rabinski², Sharon Etzion², Yoram Etzion^{2,3}, Rivka Ofir², Smadar Cohen^{1,2}
¹*Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
²*Regenerative Medicine & Stem Cell Research Center, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
³*Department of Physiology and Cell Biology, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
- P-43 Smart biocompatible materials for on-demand drug release and tissue adhesion
Alona Shagan¹, Wei Zhang², Manisha Mehta², Shira Levi¹, Daniel Kohane², Boaz Mizrahi¹
¹*Biotechnology and Food Engineering, Technion - Israel Institute of Technology, Haifa, Israel*
²*Harvard Medical School, Boston Children's Hospital, Boston, MA, USA*

- P-44 Neural activation threshold reduction using 3D micro-well electrodes: Towards a high resolution retinal prosthesis
Gal Shpun^{1,2,3}, Nairouz Farah¹, Erel Lasnoy¹, Amos Markus¹, Zeev Zalevsky^{2,3}, Yossi Mandel^{1,3}
¹*School of Optometry and Visual Science, Faculty of Life Science, Bar-Ilan University, Ramat-Gan, Israel*
²*The Alexander Kofkin Faculty of Engineering, Bar-Ilan University, Ramat-Gan, Israel*
³*Bar-Ilan Institute for Nanotechnology and Advanced Materials (Bina), Bar-Ilan University, Ramat-Gan, Israel*
- P-45 Interconnection between tumor cells and endothelial cells in 3D hybrid spheroids
Eliana Steinberg, Natalie Orehov, Hila Shoval, Adi Karsch-Bluman, Yifat Brill-Karniely, Tal Stern, Ofra Benny
The Institute for Drug Research, The Hebrew University of Jerusalem, Jerusalem, Israel
- P-46 Artificial biomembranes for development of a drug permeation model for onychomycosis
Anton Valkov, Michael Zinigrad, Marina Nisnevitch
The Department of Chemical Engineering, Biotechnology and Materials, Ariel University, Ariel, Israel
- P-47 Migration-based neural cell culture developed by cultivating hippocampal slices on coral skeleton matrix
Orly Eva Weiss, Roni Mina Hendler, Eyal Aviv Canji, Tzachy Morad, Ido Merfeld, Danny Baranes
Molecular Biology, Ariel University, Ariel, Israel
- P-48 Cu-Polysaccharide complexes: Physico-chemical characterization & antimicrobial activity
Nofar Yehuda, Ariel Kushmaro, Shoshana Arad
Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel

- P-49 Organogels from essential volatile oils, characterization and applications

Sivan Yogev^{1,2}, Boaz Mizrahi²

¹*Polymers Engineering, Technion – Israel Institute of Technology, Haifa, Israel*

²*Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel*

- P-50 Rational design of light-responsive elastin-like polypeptides, using non-standard amino acids

Bar Israeli, Sigal Gelkop, Miriam Amiram

Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel

P51 – P56 BIG DATA & MICROBIOME

- P-51 Diversity of bacterial biota in *Capnodis tenebrionis* (Coleoptera: Buprestidae) larvae

Hana Barak¹, Pradeep Kumar^{1,2}, Arie Zaritsky², Zvi Mendel³, Dana Ment³, Ariel Kushmaro¹, Eitan Ben-Dov^{1,4}

¹*Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

²*Faculty of Natural Sciences, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

³*Department of Entomology, Agricultural Research Organization – Volcani Center, Rishon Lezion, Israel*

⁴*Department of Life Sciences, Achva Academic College, M.P. Shikmim, Israel*

- P-52 Characterization of date fruit microbiome (cv. Medjool) and development of biological control agents against fungal contamination and decay

Yaara Danino

Post Harvest, Southern Arava R&D, Yotvata, Israel

- P-53 Diversity and predicted function of non-ribosomal peptides and polyketides in root microbial communities
Barak Dror^{1,2}, Edouard Jurkevitch¹, Eddie Cytryn²
¹*Plant Pathology and Microbiology, The Hebrew University of Jerusalem, Rehovot, Israel*
²*Institute of Soil, Water and Environmental Sciences, Agricultural Research Organization – Volcani Center, Rishon Lezion, Israel*
- P-54 Sub-inhibitory membrane damage undermines *Staphylococcus aureus* virulence
Ayelet Hershkovits, Igor Pozdnyakov, Ohad Meir, Amram Mor
Department of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel
- P-55 Critical factors and insights in scaling up fermentation processes from lab to industrial scales, and scale down considerations
Moti Rebhun
Pilot plant, Better Air Ltd., Yokneam, Israel
- P-56 The biochemical characterization of a novel quorum quenching lactonase from *E.Amylovora* plant pathogen
Sapir Ya'ar-Bar^{1,2}, Livnat Afriat-Jurnou^{1,2}
¹*Biotechnology, Migal- Galilee Research Institute, Kiryat-Shmona, Israel*
²*Biotechnology, Tel-Hai Academic College, Kiryat-Shmona, Israel*

P57 – P77 DRUG DESIGN

- P-57 Virtual smart white cane for obstacle detection
Pnina Ari-Gur¹, Justin Rittenhouse¹, Julia Strauss², Anna Puca²
¹*Mechanical & Aerospace Engineering, Western Michigan University, Kalamazoo, Michigan, USA*
²*High-School Talent Program, Kalamazoo Area Mathematics & Science Center, Kalamazoo, Michigan, USA*

- P-58 Organophosphate detoxification treatment by peptides
Avigail Baruch¹, Ariel Kushmaro^{2,3}, Hanna Rapaport^{2,3}
¹*Unit of Environmental Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
²*Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
³*The Ilse Katz Institute for Nanoscale Science and Technology, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
- P-59 Natural and modified quorum sensing inhibitors to overcome oral bacteria biofilms
Yifat Baruch, Karin Golberg, Robert Marks, Ariel Kushmaro
Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel
- P-60 Wnt signaling inhibition using IWP-2 loaded polypeptide-peptide nanoparticles for decreasing tumor progression
Noa Ben Ghedalia-Peled, Razi Vago, Hanna Rapaport
Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer -Sheva, Israel
- P-61 Developing a PCSK9-competitive inhibitor as a therapeutic agent for reducing blood cholesterol levels
Lital Ben-Naim^{1,2}, Niv Papo^{1,2}, Isam Khalaila¹
¹*Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
²*National Institute of Biotechnology, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
- P-62 Discovery of novel prostate cancer targeted peptides and their use in drug delivery
Anna Cohen, Michael A Firer
Chemical Engineering, Ariel University, Ariel, Israel

- P-63 Receptor-directed delivery of dsRNA into crustacean oocytes
Shany Cohen¹, Noa Frishman-Martsiano¹, Rivka Manor^{2,3}, Amit Savaya Alkalay², Amir Sagi^{2,3}, Isam Khalaila¹
¹*Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
²*The Department of Life Sciences, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
³*The National Institute for Biotechnology in the Negev, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
- P-64 Shaped gold nanoparticles as a designed drug carrier to the hair follicles
Nethanel Friedman
Institution for Drug Research, The Hebrew University of Jerusalem, Jerusalem, Israel
- P-65 Incorporation of light-sensitive nonstandard amino acids in pH low insertion peptide for conformation control by light
Dor Gozlan, Miriam Amiram
Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel
- P-66 Unraveling an unexpected function of kunitz family members: potent Amyloid-beta aggregation inhibitors
Shiran Lacham^{1,2}, Ofek Oren³, Niv Papo^{1,2}
¹*Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
²*The national Institute of Biotechnology in the Negev, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
³*The Shruga Segal Department of Microbiology, Immunology and Genetics, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

- P-67 Utilizing bioorthogonal chemistry for improving the pharmacokinetic properties and inhibitory potency of N-TIMP2
Hezi Hayun^{1,2}, Eden Ozer³, Ashok Kumar Bhagat³, Lital Alfonta^{3,4}, Eyal Arbely^{2,4}, Niv Papo^{1,2}
¹*Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
²*National Institute of Biotechnology in the Negev, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
³*Department of Life Sciences, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
⁴*Department of Chemistry, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
- P-68 Developing a bispecific Amyloid β and Tau aggregation inhibitor
Segev Naveh Tassa^{1,2}, Ofek Oren^{2,3}, Shiran Lacham^{1,2}, Niv Papo^{1,2}
¹*Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
²*National Institute of Biotechnology, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
³*The Shraga Segal Department of Microbiology, Immunology and Genetics, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
- P-69 Polyethylenimine coated TiO₂ nanoparticles as antimicrobial agents
Rotem Nevo, Hanna Rapaport
Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel
- P-70 Mapping the binding interface in a ligand to create specificity in target affinities
Naama Shafir², Lidan Aharon¹, Niv Papo¹
¹*The Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
²*The Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Jusidman Science Center for Youth, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

- P-71 A double mutant A β 42 inhibits A β 42-induced plasma and mitochondrial membrane disruption in artificial membranes and intact cells

Ofek Oren¹, Shani Ben Zichry², Raz Jelinek², Ran Taube¹, Niv Papo^{3,4}

¹*Shraga Segal Department of Microbiology, Immunology and Genetics, Ben-Gurion University of the Negev, Beer-Sheva, Israel, Israel*

²*Department of Chemistry, Ben-Gurion University of the Negev, Beer-Sheva, Israel, Israel*

³*Avram and Stella Goldstein-Goren Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel, Israel*

⁴*The National Institute of Biotechnology in the Negev, Ben-Gurion University of the Negev, Beer-Sheva, Israel, Israel*

- P-72 Combinatorial engineering of APPI variant with improved proteolytic resistance and KLK6 selectivity for cancer imaging and therapy

Amiram Sananes^{1,2}, Itay Cohen^{1,2}, Anat Shahar², Alexandra Hockla³, Elena De Vita⁴, Aubry K. Miller⁴, Evette S. Radisky³, Niv Papo^{1,2}

¹*Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

²*NIBN, The National Institute for Biotechnology in the Negev, Beer-Sheva, Israel*

³*Department of Cancer Biology, Mayo Clinic Comprehensive Cancer Center, Jacksonville, Florida, USA*

⁴*Cancer Drug Development Group, German Cancer Research Center (DKFZ), Heidelberg, Germany*

- P-73 CRISPR knockout in the red microalga *Porphyridium* sp.

Maayan Shamsian, Isam Khalaila, Shoshana Arad
Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel

P-74 Patent protection trends in medical CRISPR technology

Joseph Wyse

Patents Department, Dr. Eyal Bressler & Co., Ramat-Gan, Israel

P-75 Targeting the MMP-9/CD44 axis for cancer treatment

Gal Yosef, Niv Papo

Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel

P-76 Developing prostate specific membrane antigen targeting nanobodies and small molecule conjugates for prostate cancer imaging and therapy

Lior Rosenfeld^{1,2}, Amiram Sananes^{1,2}, Yuval Zur^{1,2}, Catherine Foss³, Shira Cohen⁴, Sigal Gelkop⁵, Efrat Ben Zeev⁶, Anat Shahar², Leslie Lobel⁵, Barak Akabayov⁴, Martin Pomper³, Eyal Arbeli^{2,4,7}, Niv Papo^{1,2}

¹*Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

²*The National Institute of Biotechnology in the Negev, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

³*Russell H. Morgan Department of Radiology and Radiological Sciences, Johns Hopkins University, Baltimore, Maryland, USA*

⁴*Department of Chemistry, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

⁵*Department of Virology, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

⁶*The Nancy and Stephen Grand Israel National Center for Personalized Medicine, Weizmann Institute of Science, Rehovot, Israel*

⁷*Department of Life Sciences, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

- P-77 Using functional screening of marine metagenomic libraries for anti-quorum sensing compounds as a platform for microbial ecology study and drug discovery

Karin Yaniv¹, Karin Golberg¹, Hana Barak¹, Pierre-Yves Chavant³, Oded Beja², Robert S. Marks¹, Serge Cosnier³, Ariel Kushmaro¹

¹*Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

²*Department of Biology, Technion – Israel Institute of Technology, Haifa, Israel*

³*Department of Molecular Chemistry Umr Cnrs, University of Grenoble-Alpe, Grenoble, France*

P78 – P80 FOOD TECH

- P-78 Transglutaminase modifies the stability and digestibility of chickpea- protein-stabilized oil-in-water emulsions

Jovana Glusac, Sivan Isaschar-Ovdat, Ayelet Fishman

Department of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel

- P-79 Modulating Gram-positive bacteria quorum sensing systems

Avishag Yehuda¹, Leyla Slamti², Didier Lereclus², Zvi Hayouka¹

¹*The Robert H. Smith Faculty of Agriculture, Food and*

Environment, The Hebrew University of Jerusalem, Rehovot, Israel

²*Micalis Institute, Inra, Jouy-En-Josas, France*

- P-80 Characterization of biopolymeric compounds extracted from macroalgae

Meital Kazir¹, Daniel Gurevich¹, Ari Groobman¹, Meghanath Prabhu², Alvaro Israel³, Alexander Golberg², Yoav D. Livney¹

¹*Faculty of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel*

²*Porter School of the Environment and Earth Sciences, Tel Aviv University, Tel Aviv, Israel*

³*Israel Oceanographic and Limnological Research Ltd., The National Institute of Oceanography, Haifa, Israel*

- P-81 Enzyme-PEI-clay composites for chemical and biological remediation of formaldehyde
Or Argaman¹, Sivan Gelly², Zohar Ben-Barak Zelas², Ayelet Fishman², Adi Radian¹
¹*Faculty of Civil and Environmental Engineering, Technion – Israel Institute of Technology, Haifa, Israel*
²*Faculty of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel*
- P-82 Kinetic and structural studies reveal two crucial residues enhancing GH52 XynB2 glycosynthetic activity by a 100-fold
Oleg Chmelnik¹, Alon Ben-David¹, Tomer Cohen², Shifra Lansky², Gil Shoham², Yuval Shoham¹
¹*Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel*
²*Institute of Chemistry, The Hebrew University of Jerusalem, Jerusalem, Israel*
- P-83 Identifying arabinoxylan utilization genes regulated by alternative sigI5 in *Clostridium thermocellum*
Sari Cohen, Tal Zeltzer, Smadar Shulami, Yuval Shoham
Department of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel
- P-84 Analysis of bacterial communities by metagenome sequencing in a partial nitrification fixed bed reactor at low ammonium concentration
Anwar Dawas¹, Isam Sabbah², Ali Nejidat³, Samy Abu-Salih⁴, Carlos G. Dosoretz¹
¹*Environmental Engineering, Technion – Israel Institute of Technology, Haifa, Israel*
²*Biotechnology Engineering, Braude College, Karmiel, Israel*
³*Department of Environmental Hydrology and Microbiology, Ben-Gurion University of the Negev, Sede Boqer Campus, Israel*
⁴*Mechanical Engineering, Braude College, Karmiel, Israel*

- P-85 Can a laboratory scale bioreactor predict industrial scale hydrodynamic parameters of microorganism growth in stirred tank bioreactors (STR)?
Tamar Gilon¹, Moshe Bentolila²
¹*The Department of Pharmaceutical Engineering, Azrieli College of Engineering, Jerusalem, Israel*
²*The Department of Organic Chemistry, The Hebrew University of Jerusalem, Jerusalem, Israel*
- P-86 Better air enviro biotics - the first biological solution for indoor pathogens, molds and allergens
Hilla Weissman, Michael Hoffman
Better Air Ltd., Yokneam, Israel
- P-87 Production of biodiesel from brown grease under ultrasonic activation
Mirit Kolet, Daniel Zerbib, Yael Albo, Faina Nakonechny, Marina Nisnevitch
Chemical Engineering, Biotechnology and Materials, Ariel University, Ariel, Israel
- P-88 Characterization of the microbial diversity of groundwater in water wells in the Arava valley Israel
Michal Liddor Naim¹, Hana Barak², Dalit Vaizel-Ohayon³, Yoav Moyal³, Yuval Plaut³, Sharon Zmora³, Oded Swed³, Ariel Kushmaro^{1,4}
¹*Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
²*Environmental Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel*
³*Mekorot, the National Water Company of Israel, Tel Aviv, Israel*
⁴*The National Institute for Biotechnology, Ben-Gurion University of the Negev, Beer-Sheva, Israel*

- P-89 Evaluation of encapsulated lipase activity within cellulose emulsion droplets
Itzhak Meir, Gilad Alfassi, Dimtry Rein M., Yachin Cohen
Faculty of Chemical Engineering, Technion - Israel Institute of Technology, Haifa, Israel
- P-90 Short ozonation of lignocellulosic waste as energetically favorable pretreatment
Yan Rosen
Faculty of Engineering, Tel Aviv University, Tel Aviv, Israel
- P-91 A machine learning approach to select the type of intermittent fasting in order to improve health by effects on type 2 diabetes
Shula Shazman
Mathematics and Computer science, The Open University of Israel, Raanana, Israel
- P-92 The crystallographic structure of GH5-106: A new biomass degrading enzyme from thermal spring bacteria
Yael Sivron¹, Ellena Rogoulenko¹, Alon Romano², Noa Lavid², Yuval Shoham², Gil Shoham¹, Sergey Pomyalov¹
¹*Institute of Chemistry, the Hebrew University of Jerusalem, Jerusalem, Israel*
²*Department of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel*
- P-93 Deep water nutrient supply for an offshore *Ulva sp.* Cultivation project in the eastern Mediterranean sea: Experimental simulation and modeling
Meiron Zollmann¹, Hadar Traugott², Alexander Chemodanov¹, Alexander Liberzon², Alexander Golberg¹
¹*Porter School of Environmental and Earth Sciences, Tel Aviv University, Tel Aviv, Israel*
²*School of Mechanical Engineering, Tel Aviv University, Tel Aviv, Israel*

P-94 Self-regenerating bio-clays for formaldehyde wastewater remediation

Yael Zvulunov¹, Zohar Ben-Barak Zelas², Ayelet Fishman², Adi Radian¹

¹*Faculty of Civil and Environmental Engineering, Technion – Israel Institute of Technology, Haifa, Israel*

²*Faculty of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel*

P-95 Protein-based conductive materials

Nadav Amdursky

Schulich Faculty of Chemistry, Technion – Israel Institute of Technology, Haifa, Israel

AUTHOR INDEX

A

Abrahami Pachuk, Liron 27
Abu Ammar, Aiman 27
Abu-Nassar, Jackline 19
Abu-Salih, Samy 40
Ackerman, Shanny 7, 22
Adler Agmon, Zachor 17
Adler-Abramovich, Lihl 7
Afriat-Jurnou, Livnat 13, 33
Agron, Raz 11
Aharon, Lidan 36
Aharoni, Shay-lee 21
Akabayov, Barak 15, 38
Albo, Yael 24, 41
Alfassi, Gilad 42
Alfonta, Lital 8, 36
Alhadeff, Raphael 23
Alon, Dan 8
Alon, Uri 6
Aly, Radi 19
Amar-Noam, Natali 14
Amdursky, Nadav 20, 43
Amiram, Miriam 11, 29, 32, 35
Arad, Elad 8, 21
Arad, Shoshana 31, 37
Arbeli, Eyal 15, 38
Arbelle, Assaf 28
Arbely, Eyal 36
Argaman, Or 40
Ari-Gur, Pnina 33
Arnon, Zohar 21
Arshavsky-Graham, Sofia 7, 22
Asheri, Uri 22
Ashkenazi, Einav 14
Ayyash, Muneef 16
Azrad-Leibovitch, Tamar 11

B

Bacheva, Vesna 9
Bahnemann, Janina 7
Banano, Nissim 20
Bar Bachar, Oren 22
Bar, Alon 6
Bar, Assaf 27
Bar, Haim 12
Barak, Hana 15, 32, 39, 41

Baranes, Danny 29, 31
Baransi-Karkaby, Katie 19
Bar-Bachar, Oren 25
Barkan, Roy 13
Baruch, Avigail 28, 34
Baruch, Yifat 34
Baskin, Aharon Shmuel 10
Bayer, Edward A. 18
Beck, Assaf 11
Beiderman, Marianna 22
Beja, Oded 15, 39
Ben Ghedalia-Peled, Noa 34
Ben Zeev, Efrat 15, 38
Ben Zichry, Shani 37
Ben-Barak Zelas, Zohar 40, 43
Ben-David, Alon 40
Ben-Dov, Eitan 32
Benjamini, Yuval 17
Ben-Naim, Lital 34
Benny, Ofra 24, 26, 29, 31
Bentolila, Moshe 41
Ben-Yoav, Hadar 26
Bercovici, Moran 9, 22
Betzer, Oshra 22, 23
Bhagat, Ashok Kumar 36
Bhunja, Susanta Kumar 25
Bismuth, Mike 27
Bloch, Itai 14
Borenstein, Elhanan 12
Borkum, Talya 23
Boyarski, Anastasya 8
Boyko, Evgeiny 22
Bressler, Eyal 17
Brill-Karniely, Yifat 26, 31
Brookstein, Ori 28
Buhnik-Rosenblau, Keren 12
Burdman, Saul 18

C

Canji, Eyal Aviv 29, 31
Cazelles, Remi 26
Cazelles, Rémi 9
Cegelski, Lynette 11
Chavant, Pierre-Yves 15, 39
Chemla, Yoav 11

Chemodanov, Alexander 42
Chernyak, Alexander 28
Chmelnik, Oleg 40
Cohen Erez, Ifat 23
Cohen, Aaron 16
Cohen, Anna 34
Cohen, Itay 37
Cohen, Merav 16
Cohen, Oded 23
Cohen, Sari 40
Cohen, Shany 35
Cohen, Shira 15, 38
Cohen, Smadar 27, 28, 30
Cohen, Tomer 40
Cohen, Yachin 42
Cohen, Yifat 25
Cohen-Erez, Ifat 24
Cohen-Malach, Einav 18
Colodner, Raul 23
Corem-Salkmon, Enav 8
Cosnier, Serge 15, 39
Croitoru-Sadger, Tsuf 8
Cytryn, Eddie 33

D

D., Nanda Kumar 24
Danino, Yaara 32
Danino, Yaara 17
Danin-Poleg, Yael 12
Davidov, Tzila 11, 28
Davidovich-Pinhas, Maya 16
Davidson, Ben 10
Dawas, Anwar 40
De Vita, Elena 37
Dhakar, Kusum 19
Dolev, Amir 11
Dotan, Nesly 14
Dreifuss, Tamar 26
Dror, Barak 33
Dubyna, Brooke 22
Duvdevani, Revital 17

E

Egozi, Dana 29
Ehrlich, Avner 16
Eizenberg, Hanan 19
Elbaum, Rivka 7
Elbaz, Johann 8
El-Halawani, Evan 25
Elmaliach, Noy 23

Elmedvi, Shiri 14
Epping, Niklas Maximilian 7
Etzion, Sharon 30
Etzion, Yoram 28, 30

F

Fadeev, Ludmila 19
Far, Jumana 27
Farah, Nairouz 11, 31
Faygenboim-Ornai, Rotem 23
Firer, Michael A. 30, 34
Fishman, Ayelet 39, 40, 43
Fixler, Dror 22
Fluksman, Arnon 24
Foss, Catherine 15, 38
Freidman, Ilana 24
Freilich, Shay 12
Freilich, Shiri 19
Friedman, Nethanel 35
Frishman-Martsiano, Noa 35
Furer, Ariel 10, 29

G

G. Dosoretz, Carlos 40
Gal, Maayan 14
Gazit, Ehud 21
Gelfer, Svetlana 20
Gelkop, Sigal 11, 15, 29, 32, 38
Gelley, Sivan 40
Gepstein, Lior 16
Gerassy-Vainberg, Shiran 12
Gerchman, Yoram 14
Geva-Zatorsky, Naama 12
Ghosh, Supratim 19
Ghosheh, Mohammad 16
Giladi, Shir 29
Gilon, Tamar 41
Ginzburg, Neta 9
Glusac, Jovana 39
Gnaim, Rima 19
Goder, Daniella 10, 29
Golberg, Alexander 17, 19, 39, 42
Golberg, Karin 15, 34, 39
Goldfracht, Idit 16
Goldstein, Yoel 29
Gophna, Uri 19
Gozin, Michael 19
Gozlan, Dor 35
Green, Hodaya 21
Greiserman, Semion 19

Groobman, Ari 17, 39
Guez, Helen 29
Gurevich, Daniel 17, 39
Gurianov, Yanna 24
Guttman, Lior 13

H

Hadar, Dagan 29
Haj-Ali, Rami 11
Harduf, Noa 24
Harlev, Michael 29
Hayouka, Zvi 18, 39
Hayun, Hezi 36
Hendler, Roni Mina 29, 31
Hershkovits, Ayelet 33
Hockla, Alexandra 37
Hoffman, Michael 41
Hubert, Christopher 16

I

Ioannidis, Konstantinos 16
Isaschar-Ovdat, Sivan 39
Israel, Alvaro 17, 39
Israeli, Bar 11, 32
Istvan, Paula 18

J

Jelinek, Raz 8, 21, 25, 37
Jurkevitch, Edouard 33

K

Kaigala, Govind 9
Karin, Omer 6
Karsch-Bluman, Adi 31
Kashi, Yechezkel 12
Kashkoosh, Maysoon 30
Katchkovsky, Svetlana 14
Katzhendler, Jehohua 24
Kazir, Meital 17, 39
Kelly, Deanna L. 26
Khalaila, Isam 34, 35, 37
Khourin, Roman 30
Kleiman, Maya 9
Kohane, Daniel 30
Kolet, Mirit 41
Korach-Rechtman, Hila 12
Korem, Yael 6
Korover, Nataly 30

Kumar, Pradeep 32
Kumari, Pallavi 9
Kurzion, Ronni 22
Kushmaro, Ariel 8, 13, 15, 28, 31, 32,
34, 39, 41

L

Lacham, Shiran 35, 36
Lansky, Shifra 23, 40
Lasnoy, Erel 31
Lavid, Noa 42
Lazarovici, Philip 24
Leitersdorf, Orian 16
Leonard, Heidi 23
Lereclus, Didier 39
Letko Khait, Nitzan 11
Levaot, Noam 14
Levi, Shira 30
Liberzon, Alexander 42
Liddor Naim, Michal 41
Linder, Charles 16
Liu, Xia 9
Livney, Yoav D. 17, 39
Lobel, Leslie 15, 38
London, Nir 13
Louzoun, Yoram 12

M

Machluf, Marcelle 11, 28
Maimon, Lior 6
Mandel, Yossi 9, 11, 31
Manor, Rivka 35
Margulis, Eitan 17
Marks, Robert 34
Marks, Robert S. 15, 39
Markus, Amos 9, 11, 31
Masasa, Matan 13
Massad-Ivanir, Naama 23, 25, 26, 27
Matsliah, Lior 10
Mayo, Avi 6
Medina, Shlomit 19
Mehta, Manisha 30
Meijler, Michael 8
Meir, Itzhak 42
Meir, Ohad 33
Meirovich, Matan 25
Meirovich, Matan M. 22
Mendel, Zvi 32
Mendelshon-Cohen, Netta 6
Ment, Dana 32

Merfeld, Ido 31
Miller, Aubry K. 37
Milo, Tomer 6
Mizrahi, Boaz 8, 30, 32
Mor, Amram 33
Morad, Tzachy 29, 31
Motiei, Menachem 22, 23, 26
Movsowitz, Ariel 25
Moyal, Yoav 41
Mukha, Dina 25

N

Nahmias, Yaakov 16
Nakonechny, Faina 24, 41
Naveh Tassa, Segev 36
Nejdat, Ali 40
Nevo, Rotem 36
Nikolski, Andrey 20
Nirala, Narsingh Raw 25
Nisnevitch, Marina 24, 31, 41
Nitzan, Nadav 26
Niv, Masha Y. 17

O

Offen, Daniel 22
Ofir, Rivka 30
Ofran, Yanay 13
Orehov, Natalie 31
Oren, Ofek 35, 36, 37
Ozer, Eden 8, 36

P

Papo, Niv 14, 15, 21, 34, 35, 36, 37, 38
Paratore, Federico 9
Perets, Nisim 22
Peretz, Avi 14
Plaut, Yuval 41
Pokroy, Boaz 7
Pomper, Martin 15, 38
Pomyalov, Sergey 42
Popovtzer, Rachela 22, 23, 26
Pozdnyakov, Igor 33
Prabhu, Meghanath 17, 39
Prinz Setter, Ofer 25
Puca, Anna 33

R

Rabinski, Tatiana 30

Radian, Adi 40, 43
Radisky, Evette S. 37
Rapaport, Hanna 8, 21, 23, 24, 28, 34, 36
Raveh-Amit, Hadas 20
Raz, Moriya 6
Rebhun, Moti 33
Reches, Meital 10
Reich, Reuven 10
Rein M., Dimtry 42
Resende, Maysa 16
Reshef, Leah 19
Riklin-Raviv, Tammy 28
Rishpon, Judith 19
Rittenhouse, Justin 33
Rogoulenko, Ellena 23, 42
Romano, Alon 42
Rombach, Helen 9
Ronen, Zeev 18, 19
Rosen, Yan 42
Rosenfeld, Lior 14, 15, 38
Rubin, Shimon 9
Rutenberg, Roi 11
Ruvinov, Emil 27

S

Sabah, Omer 7, 27
Sabbah, Isam 19, 40
Sadan, Tamar 22
Sagi, Amir 35
Salama, Rachel 22, 26
Sananes, Amiram 15, 37, 38
Sand, Andy 26
Savaya Alkalay, Amit 35
Sayas, Tali 9
Scheper, Thomas 7, 22
Segal, Ester 7, 22, 23, 25, 26, 27
Shafir, Naama 36
Shagan, Alona 8, 30
Shahar, Anat 15, 37, 38
Shamay, Yosi 10
Shamsian, Maayan 37
Sharabi, Mirit 11
Shashar, Nadav 13
Shazman, Shula 42
Shechter, Ronen 18, 19
Shemesh, Rotem 26
Shimanovich, Ulyana 28
Shlosman, Koranit 26
Shoham, Gil 23, 40, 42
Shoham, Yuval 23, 40, 42
Shoval, Asaf 9

Shoval, Hila 31
Shpun, Gal 11, 31
Shtenberg, Giorgi 24, 25, 27
Shukla, Rajendra P. 26
Shulami, Smadar 40
Shulimzon, Tiberiu 29
Sivron, Yael 42
Slamti, Leyla 39
Slavutsky, Yuli 17
Slotky, Aviad 11
Steinberg, Eliana 31
Stern, Tal 31
Strauss, Julia 33
Strauss, Merav 23
Swed, Oded 41
Szczupak, Alon 19

T

Tanay, Amos 6
Taube, Ran 37
Tavor Reem, Tali 10
Tendler, Avihai 6
Tenenbaum, Elena 27
Tischenko, Katerina 26
Topman, Shiri 18
Traugott, Hadar 42
Tromelin, Anne 17
Tsesarsky, Michael 20
Tzror-Azankot, Chen 26

V

Vago, Razi 34
Vaizel-Ohayon, Dalit 41
Valderrama, Elisa 26
Valkov, Anton 31
Vatine, Gad 30
Voigt, Chris 8

W

Wegenberge, Alfred 26
Weiss, Orly Eva 29, 31
Weissman, Hilla 41
Wiesman, Zeev 16
Willner, Itamar 9
Wine, Yariv 14
Wyse, Joseph 17, 38

Y

Ya'ar-Bar, Sapir 33
Yaniv, Karin 8, 15, 39
Yanuka-Golub, Keren 19
Yassin, Mustafa 11
Yehezkeili, Omer 22, 25
Yehuda, Avishag 39
Yehuda, Nofar 31
Yogev, Sivan 32
Yosef, Gal 38

Z

Zalevsky, Zeev 31
Zaltzer, Anton 27
Zarecki, Raphy 19
Zaritsky, ArieH 32
Zeltzer, Tal 40
Zerbib, Daniel 41
Zhang, Wei 30
Zhou, Zhixin 9
Ziadne, Hammam 19
Zilberman, Meital 10, 29
Zinigrad, Michael 31
Zmora, Sharon 41
Zollmann, Meiron 42
Zur, Yuval 14, 15, 38
Zvulunov, Yael 43