אגריטק agritech Israel

OCTOBER 2023

The 21th Global Agricultural Technology Summit

Innovations in Agriculture, Food and Water Technologies

AGRICULTURE | WATER | FOOD

October 17-19, 2023 | Tel-Aviv

CONFERENCE PROGRAM

Scientific organizers

Dr. Ron Porat and Prof. Elazar Fallik, The Volcani Institute

Tuesday 17.10.2023

08:00-09:00 Registration & Refreshments

09:00-09:30 Opening Ceremony
Chairman: **Mr. Rafi Nevo,** CEO of Agritech

Mr. Avi Dichter, the Israeli Minister of Agriculture and Rural Development
Mr. Nir Barkat, the Israeli Minister of Economy
Mrs. Ayelet Nahmias Verbin, Chairperson of The Israel Export Institute
Dr. Shmuel Assouline, Head of the Volcani Institute
Guest Opener: Mr. Haim Taib, Founder and President, Mitrelli Group and Menomadin

09:30-11:00 Challenges in Food Security in a Disrupted Era
Chairman: **Prof. Ayal Kimhi,** Environmental Economics and Management, The Robert H Smith Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem

Adapting to the new normal: food security and nutrition in an era of multiple crisis
Dr. David Laborde, Director of Agrifood Economics, FAO

Food security in Israel: resilience to climate change and agricultural adaptation
Prof. Ayal Kimhi, The Hebrew University of Jerusalem

Food self-sufficiency under limited resources: the case of Israel
Prof. Iddo Kan, The Hebrew University of Jerusalem

Why meat reduction is the single most important strategy to achieve food security
Dr. Alon Shepon, Tel Aviv University

Trends and challenges in the FoodTech industry
Dr. Dorit Rozner, The Kitchen FoodTech Hub, Strauss Group

11:00-11:30 Coffee Break & Visit at the Exhibition

11:30-13:00 Innovations in Water Reclamation and Desalination
Chairman: **Mr. Ravid Levy,** Head of WaterEdge.IL, the Israeli Water Innovation Community at Kinneret Academic College

Leveraging sustainable irrigated agriculture via desalination and it's effects on recycled wastewater
Dr. Alon Ben-Gal, Gilat Center, the Volcani Institute

Health aspects considerations in Israeli regulations regarding treated effluents reuse
Mr. David Weinberg, National Planning & Reuse Manager, Israel Ministry of Health

Innovations in water and effluents desalination
Mr. Boaz Shitzer, CEO ROTEC ltd.

Phosphorous recovery: accelerating circular economy in effluent reuse
Mr. Eli Bergman, Nanoclear ltd.

Desalination and reuse as a strategy for climate adaptation
Panel discussion with Government-Industry-R&D representatives

13:00-14:00 Lunch Break & Visit at the Exhibition

14:00-15:00 Challenges in Crop Protection
Chairman: **Dr. Munir Mawassi**
Head of the Institute of Plant Protection, The Volcani Institute

Disinfection efficacy of Tobamovirus-contaminated soil and developing a novel platform for root protection
Dr. Aviv Dombrovsk, The Volcani Institute

Revolutionizing the pest management : Early and precise detection to reduce the use of chemicals
Yehonatan Ben Hamozeg, CEO of Agrint Sensing Solutions LTD.

Towards disease resistant crops: amplifying plant immunity by editing defense receptor activity
Dr. Maya Bar, The Volcani Institute

Innovative approaches: root phenotyping meets deep learning for soil-borne disease detection
Dr. Gadi Peleg, Founder and CEO of PhenoRoot Ltd.

15:00-16:00 Controlled Climates: Greenhouses and Vertical Farming
Chairwoman: **Prof. Rina Kamenetsky Goldstein,** Center for Urban Agro-Ecology, The Volcani Institute

Cultivating tomorrow: unveiling the power of indoor farming
Mr. Guy Barness, Founder & Head of Vertical Field Ltd.

How science fills gaps of knowledge in vertical farming
Dr. Elena Vitoshkin, The Volcani Institute

Panel discussion

Advanced technologies for indoor production of "gold spice" of saffron
Mr.Tal Glazer Wilk, CEO, SaffronTech

Vertical Field: new technologies and crops in indoor farming
Mr. Gilad Merk, VerticalField

Urban horticulture in changing climate
Dr. Yakir Preisler, The Volcani Institute

Grow-Tec: pioneer of indoor vertical farming of fruity vegetables
Mr. Shlomy Raziel, CEO, Grow-Tec

16:00-16:30 Coffee Break & Visit at the Exhibition

16:30-17:30 Robotics and Autonomic Harvesting
Chairman: **Prof. Avital Bechar,** Head of the Institute of Agricultural Engineering, The Volcani Institute

Innovations in Robotic harvesting
Prof. Yael Idan, Ben Gurion University

Robotics in agriculture
Prof. Amir Degani, Technion - Israel Institute of Technology.

Flying Autonomous Robots for fruit harvesting
Danielle Efargan Hager, Marketing & Communications Manager, Tevel

Autonomous robots for greenhouse tomato harvesting
Adi Nir, CEO of MetoMotion Ltd.

Questions and discussion

17:30-18:00 Agro-voltaic Systems
Chairman: **Mr. Eric Benmeir Kozakow,** Agri-photovoltaic (APV) Project lead and Business Development, MIGAL

Panel discussion

Prof. Vinnie Altstein, Israeli Ministry of Agriculture and Rural Development
Dr. Omer Crane, Researcher at MIGAL and Northern R&D, Israel
Dr. Doron Markel, Keren Kayemeth LeIsrael - Jewish National Fund (KKL-JNF)
Dovi Miller, Kibbutz Ma'ale Gilboa
Chanani Ladell, Doral Group Renewable Energy Resources Ltd.

Wednesday 18.10.2023

08:00-09:00 Registration & Refreshments

09:00-10:30 Agricultural Practices in Arid Zones and Precision Agriculture
Chairman: **Dr. Eran Raveh,** Head of the Gilat Center for arid & semi-arid agricul tural research, The Volcani Institute

Precision agriculture in the desert throughout history - challenges and solutions
Mr. Roy Galili, University of Haifa

Current developments in agriculture production in arid zones in Israel
Dr. Hagai Yasuor, Gilat Center, The Volcani Institute

Utilizing live plant measurement for irrigation management
Mr. Omer Sagee, Monitoring and Analysis products manager, Phytech Ltd.

Smart drip Irrigation control systems
Dr. Gidi Sagi, Drip Irrigation and water treatment specialist, Metzer Group

Precision Irrigation in arid areas - soil data
Mrs. Tal Maor, Founder & CEO of TheAgency.ag

Questions and discussion

10:30-11:30 Innovations in Animal Farming
Chairman: **Dr. Maya Zachut,** Institute of Animal Science, The Volcani Institute

Overview: Strategies to mitigate the adverse effects of global warming on livestock
Dr. Maya Zachut, The Volcani Institute

Lactating cow water management: challenges and opportunities
Dr. Yehoshav Ben Meir, The Volcani Institute

Improving broiler wellbeing and microclimate through precision livestock farming (PLF)
Dr. Shelly Druyan, The Volcani Institute

Modern Artificial Light at Night affects welfare, production and end products of livestock
Dr. Aviv Asher, MIGAL Galilee Research Institute

Gender sexing of one day old chicks for broilers
Mr. Menashe Tamir, Eshet Eilon Ltd.

11:30-12:00 Coffee Break & Visit at the Exhibition

12:00-12:45 Aquaculture
Chairman: **Prof. Sheenan Harpaz,** Institute of Animal Science, The Volcani Institute

Growth of Acipenser fish for quality Kaviar production
Dr. Avshalom Horowitz, Karat caviar, Kibbutz Dan

Breakthrough in CRISPR genomic editing in Tilapia fish
Dr. Jacob Biran, The Volcani Institute

Commercial aquaculture as a platform for innovation and startups
Yonatan Musnikow, ARDAG Aquaculture

12:45-13:30 Cannabis cultivation and processing
Chairwoman: **Prof. Nirit Bernstein,** Institute of Soil, Water and Environmental Sciences, The Volcani Institute

Cannabis medicalization - from theory to practice
Mr. Yuval Landschaft, Head of the Israel Medical Cannabis Unit, Ministry of Health, Israel

Innovations in cultivation technologies for medical cannabis
Prof. Nirit Bernstein, Head of cannabis Physiology and Agronomy lab, Institute of Soil, Water and Environmental Sciences, The Volcani Institute

Technological post-harvest air treatments
Mr. Matan Henan, Profit-Agro Ltd.

13:30-14:30 Lunch Break & Visit at the Exhibition

14:30-15:30 FoodTech ,Cultured Meat and Alternative Proteins
Chairman: **Dr. Ofir Benjamin,** Dept. of Food Science, Tel Hai College, and CTO of the Israeli National Food Institute

The North Israel FoodTech ecosystem - innovations in plant-based proteins
Dr. Ofir Benjamin, Tel Hai College

FoodTech and alternative proteins as an Israeli national food security asset
Mr. Nir Goldstein, Good Food Institute (GFI), Israel

Addressing the challenges of animal-free meat via plant based tissue engineering
Dr. Daniel Dikovsky, CTO of Redefine Meat

Plant molecular farming - harvesting the potential of natural bio reactors
Dr. Yulia Fridman, VP Research, Imagene Foods

A game changing solution to address the costly medium dilemma for cultivated meat
Mrs. Shelly Lotan, Co-founder & CEO of Medium Well

15:30-16:00 Advances in Post Harvest Practices
Chairman: **Dr. Ron Porat,** Institute of Postharvest and Food Science, The Volcani Institute

Global food loss and waste: challenges in improving our food system
Dr. Ron Porat, The Volcani Institute

Commercial implementations of postharvest innovations: examples of a new steam sanitization technology and NIR sorting
Mr. Menashe Tamir, Eshet Eilon Ltd.

Development of automated modified atmosphere packaging solutions for fresh produce
Mr. Amnon Sandman, StePac Ltd.

16:00-16:30 Coffee Break & Visit at the Exhibition

16:30-17:00 Food and Water Innovations for Emerging Markets
Chairman: **Prof. Ram Fishman,** Associate Professor of Public Policy, Tel Aviv Universit

Panel discussion

Adapting and selling modern irrigation systems to small-scale producers in emerging markets
Mr. Dubi Raz, VP Agronomy, Netafim

Bayer's Agri-Impact program for piloting and commercialization of Israeli innovations in India: announcing the second call for application
Mrs. Naama Caspi, Project Manager Innovation, Bayer Israel

Fostering innovation for emerging markets
Mrs. Hagit Freud, The Pears program for global innovation, Jerusalem Institute for policy research

Government models for supporting technology adaptation to emerging markets
Neta Gruber, Israel Innovation Authority

Israel's international development cooperation
Eynat Shlein, Head of MASHAV, Deputy Director of the Israel Ministry of Foreign Affairs

17:30-18:10 Bio-convergence applications for food and agriculture
Chairman: **Dr. Sefi Vernick,** Institute of Agricultural Engineering, The Volcani Institute

Bio-convergence in agriculture: an introduction
Dr. Sefi Vernick, The Volcani Institute

Convergence science in the one health paradigm for global sustainability & planetary, population and personal health
Dr. John Paul SanGiovanni, Director of Food and Nutrition Programs, The University of Arizona

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Prof. emeritus Yosi Shacham-Diamand, Faculty of Engineering, University of Tel Aviv

18:05-18:10 Startup company

18:10-18:30 Concluding remarks
Chairman: **Dr. Ron Porat,** Scientific organizer, The Volcani Institute