Prof. Benny Chefetz פרופ' בני חפץ
The Hebrew University Center for Sustainable Food System
האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM

Prof. Benny Chefetz
Professor of Soil and Environmental Chemistry
Director, The Hebrew University Center for Sustainable Food System (FOOJI)
The Hebrew University of Jerusalem

Research

My research interests relate to physico-chemical processes of organic pollutants occurring in water, reclaimed wastewater, soils and sediments. An overarching goal is to elucidate physical, chemical and biological processes that influence the fate of organic molecules in the environment with special emphasize on the agricultural environment. Special interests are: (1) Fate of pharmaceutical compounds in soil and water; (2) Sorption-desorption behavior of xenobiotics in soils and sediments; (3) Irrigation with reclaimed wastewater: effects on human health; (4) Nano particles in the environment; (5) Nature and reactivity of dissolved organic matter.

Tasks at the Hebrew University

2013 - 2017	Vice Dean for Research, Faculty of Agriculture, Food and Environment.
2017 - 2022	Dean, Faculty of Agriculture, Food and Environment.
2023 - to date	Director, The Hebrew University Center for Sustainable Food System

Editorial Services

2007- 2017	Editorial Board, Geoderma
2009 - 2019	Editorial Advisory Board, Environmental Science & Technology
2012 - 2017	Associate Editor, Journal of Environmental Quality
2022 - to date	Founding Editorial Board Member, Soil & Environmental Health

Selected Publications *(full list of publication can be found here)*

Malchi et al. 2014. Irrigation of root vegetables with treated wastewater: Evaluating uptake of pharmaceuticals and the associated human health risks. Environ. Sci. Technol. 48:9325−9333.

Paltiel et al. 2016. Human exposure to wastewater-derived pharmaceuticals in fresh produce: A randomized controlled trial focusing on carbamazepine. Environ. Sci. Technol. 50:4476-4482.

Goldstein et al. 2018. Pharmacokinetics in plants: Carbamazepine and its interactions with lamotrigine. Environ. Sci. Technol. 52:6957-6964.

Engel and Chefetz. 2019. The missing link between carbon nanotubes, dissolved organic matter and organic pollutants. Advances in Colloid and Interface Science 271:101933-101997.

Fu et al. 2019. Pharmaceutical and personal care products: From wastewater treatment into agro-food systems. Environ. Sci. Technol. 53:14083-14090.

Schapira et al. 2020. Involuntary human exposure to carbamazepine: A cross-sectional study of correlates across the lifespan and dietary spectrum. Environ. Int. 143:105951.

Topaz et al. 2020. Ecological risk dynamics of pharmaceuticals in micro-estuary environments. Environ. Sci. Technol. 54:11182-11190.

Karpov et al. Abiotic transformation of lamotrigine by redox-active mineral and phenolic compounds. Environ. Sci. Technol. 55:1535-1544.

Ben Mordechay et al. 2022. Wastewater-derived organic contaminants in fresh produce: Dietary exposure and human health concerns. Water Research 223:118986.

Department of Soil and Water Sciences
Institute of Environmental Sciences
Faculty of Agriculture, Food and Environment
Rehovot, Israel 7610001

המחלקה למדעי הקרקע והמים
המכון למדעי הסביבה
הפקולטה לחקלאות, מזון וסביבה
רחובות, 7610001

Office: +972-8-9489384; Cell: +972-54-8820492
benny.chefetz@mail.huji.ac.il