

Hong Kong-Israel Collaboration Workshop Series: AgriFood-Tech Speaker Bios - Keynote Address #2



Prof. Menachem Moshelion
Faculty of Agriculture
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Prof. Moshelion is a molecular physiologist interested in elucidating the molecular and cellular mechanisms controlling whole-plant Water-Use Efficiency, water-potential homeostasis and crop productivity, under normal and abiotic stress conditions. Mainly he focused on small membrane proteins which function as water channels – Aquaporins (AQPs).

His research hypothesis is that AQPs might be good candidates for controlling the plant's osmotic and hydraulic conductivity, and since some AQPs have been reported to conduct CO₂, there was a strong likelihood that they could be used to improve osmotic stress tolerance and Water-Use Efficiency in plants (Their agricultural model plant is tomato (*Solanum lycopersicom*)).

Prof. Moshelion is an expert in High-throughput functional phenotyping of whole-plant water relations and responses to environmental stresses, which led him to co-found Plant-DiTech (functional diagnostics tools for plant environment physiological interactions <https://www.plant-ditech.com/>).

Details: <https://plantscience.agri.huji.ac.il/menachemmoshelion>.