

פרופ' יואב שכטמן – ביוגרפיה יוני 2025

מוסד אקדמי: הטכניון - מכון טכנולוגי לישראל

תחום: הנדסה ביו-רפואית, הנדסת חשמל

תחומי מחקר: מיקרוסקופיה אופטית חישובית

פקולטות: הנדסה ביו-רפואית, הנדסת חשמל ומחשבים

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Yoav Shechtman is an Associate Professor at the Technion – Israel Institute of Technology, holding appointments in the Faculties of Biomedical Engineering and Electrical and Computer Engineering (secondary). He earned his BSc in Physics and Electrical Engineering (2007) and his PhD (2013) from the Technion, followed by a postdoctoral fellowship in Chemistry at Stanford University. He was a Harrington Faculty Fellow at the University of Texas at Austin in 2023–2024.

His research focuses on computational bio-microscopy, combining physical optical encoding with post-processing to advance imaging capabilities. Key research contributions include development of deep learning-based super-resolution and 3D localization microscopy, high-throughput 3D imaging of live flowing cells, additive manufacturing of diffractive optical elements, and computational methods for optical genome mapping. His group also contributed to modeling complex imaging systems and applying these technologies to biological studies such as chromatin dynamics and sensitive diagnostics.

Shechtman has authored over 60 peer-reviewed publications and holds several patents related to computational imaging. His research has been supported by the ERC, ISF, and the Israel Innovation Authority. Selected awards include the Hershel Rich Technion Innovation Award (2024, 2013), the Krill Prize (2021), the IUPAB Young Investigator Medal (2020), the Early Career Award of the International Association for Medical and Biological Engineering (2018), and the Zuckerman Faculty Scholarship (2017).