Publications

Book chapters

[1] **Bilal M. Khan** & Yoram Cohen. Predictive nanotoxicology - Nanoinformatics approach to toxicity analysis of nanomaterials. John Wiley and Sons Limited, 2022. ISBN 111981748X, 9781119817482. Machine Learning in Chemical Safety and Health: Fundamentals with Applications

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Invited Talks and Workshop Presentations

[1] Yoram Cohen & **Bilal M. Khan**. Environmental Impact Assessment of Engineering Nanomaterials: Integration of Models, Data and the Body of Evidence for Decision-Support. Nanoinformatics: Spanning Scales, Systems and Solutions. Beilstein Nanotechnology Symposium 2022. https://www.beilstein-institut.de/en/symposia/nanoinformatics/

[2] **Bilal, M**, Yang Zhou, Nora Marki and Yoram Cohen. (2022). Modeling of RO System Water Treatment Operation for Nitrate and Salt Removal using Long-Short Term Memory (LSTM) Machine Learning Model with Attention Coefficient, (Contaminant Removal from Surface Water, Groundwater, and Wastewater session) North American Membrane Society (NAMS) annual meeting (Computing and Systems Technology Division), Tempe Arizona, May 18, 2022.

[3] **Bilal, M**, Yang Zhou, Nora Marki and Yoram Cohen. (2022). Monitoring Nitrate and Salt Passage, Their Correlation, and Data Imputation Via Data-Driven Process Models for Distributed Membrane-Based Water Purification Systems, AIChE annual meeting (Computing and Systems Technology Division), November 13-18, 2022.

[4] Yoram Cohen, **Bilal, M**, Yang Zhou, Nora Marki and Christian Aguilar. (2022). Remote Monitoring, Supervisory Control and Technoeconomic Evaluation of Advanced

High Recovery Wellhead Water Purification and Desalination Systems, AIChE annual meeting (Environmental Division), November 13-18, 2022.

[5] **Bilal, M** and Yoram Cohen. (2022). Association Rule Mining of the Relationships Among Biological Responses of Embryonic Zebrafish Exposed to Nanoparticles, AIChE annual meeting (Nanoscale Science and Engineering Forum), November 13-18, 2022.

[6] **Bilal, M**, Yang Zhou, Nora Marki and Yoram Cohen. (2022). Process Modeling of Intermittent Wellhead RO Water Treatment Operation Via Integration of Self-Organizing Maps and Long Short-Term Memory Recurrent Neural Network (RNN), AIChE annual meeting (Separations Division), November 13-18, 2022.

[7] **Bilal, M**, Yang Zhou, Jin Yong Choi and Yoram Cohen. (2020). Machine learning models for water use patterns analysis in small rural agricultural communities for informed decision and deployment of membrane-based water system, AIChE annual meeting - The increasing diversity of chemical engineering, November 15-20.

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