CI&CEQ
Chemical Industry & Chemical Engineering Quarterly
Available online at
Association of the Chemical Engineers of Serbia AChE
www.ache.org.rs/CICEQ
*Chem. Ind. Chem. Eng. Q.* 31 (1) S1–S3 (2025) CI&CEQ

Supplementary material to

# PREDICTION OF DOXYCYCLINE REMOVAL BY PHOTO-FENTON PROCESS USING AN ANN-MLP MDEL

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*Chem. Ind. Chem. Eng. Q.* 31 (1) 13–21 (2025)

*Table S1. Characteristics of the ANN structure.*

| Network type | Number of neurons in hidden layer | Transfer function | | Training function | Iteration number |
|---|---|---|---|---|---|
| | | Hidden layer | Output layer | | |
| Single MLP | 18 Neurons | Tangent sigmoid | Purelin | Levenberg-Marquardt | 150000 |

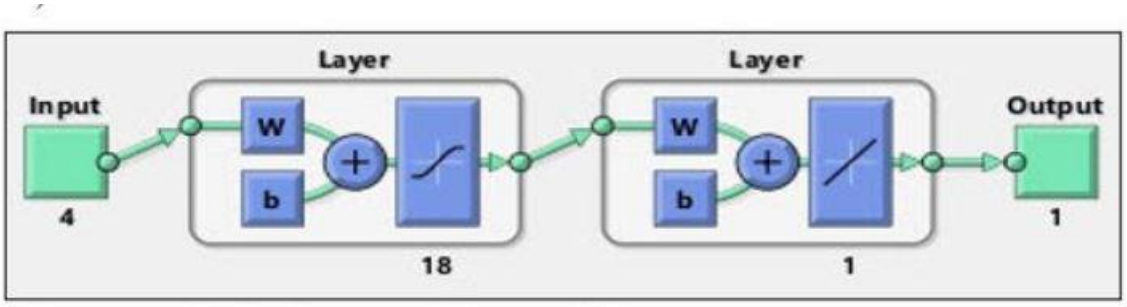


*Figure S1. Block diagram of the model.*

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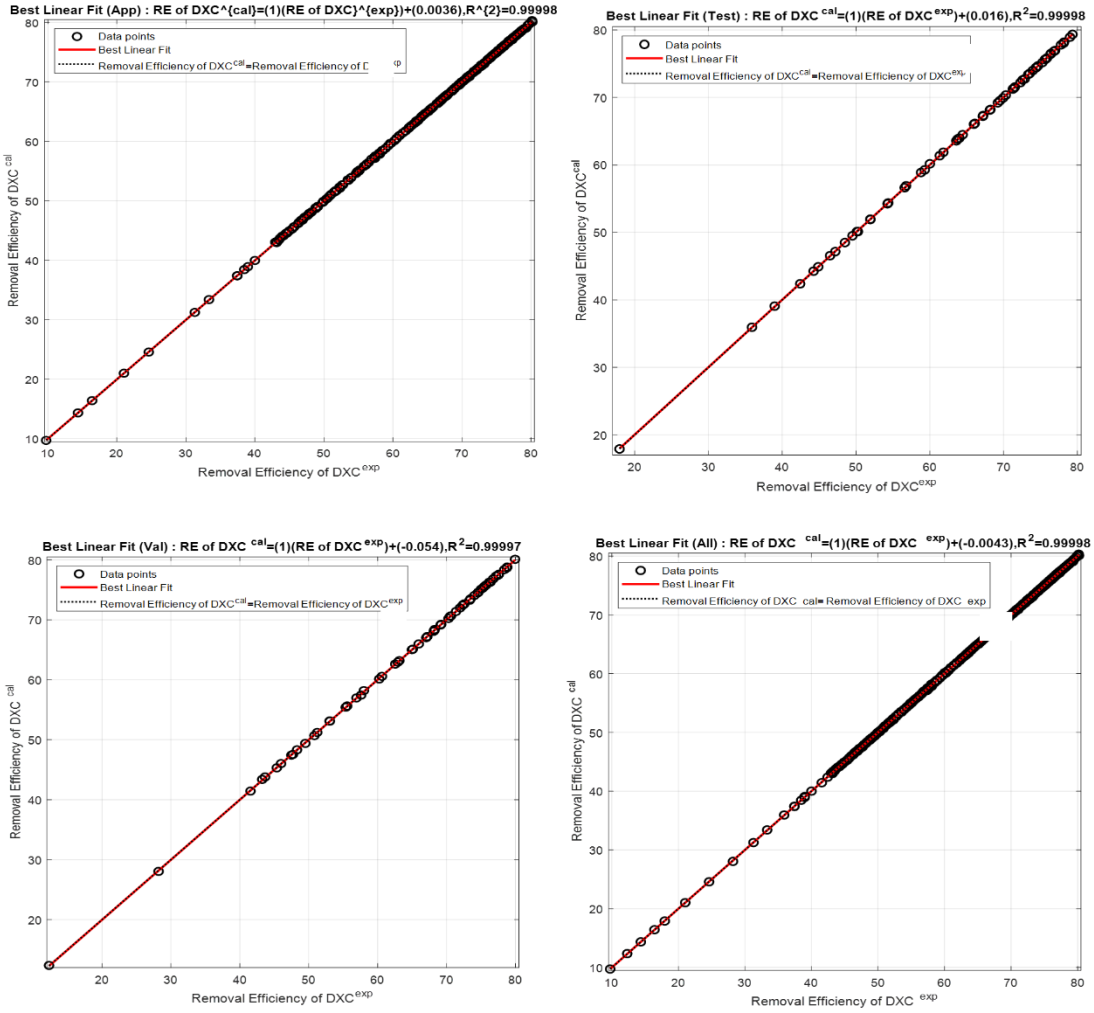


*Figure S2. Linear regression curve of the experimental with the calculated RE of DXC by the ANN optimized for a) the training, b) testing, c) validation, and d) overall phase, with topology: 4:18:1.*

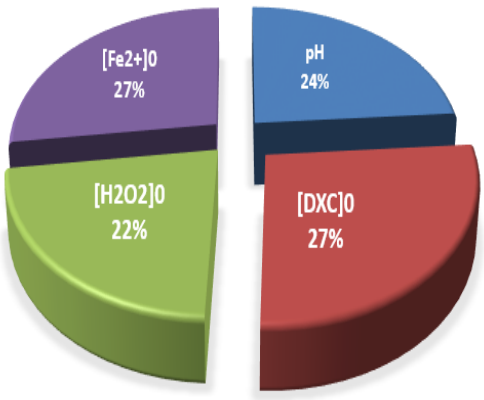


*Figure S3. Relative importance of the input variables on the RE of DXC.*

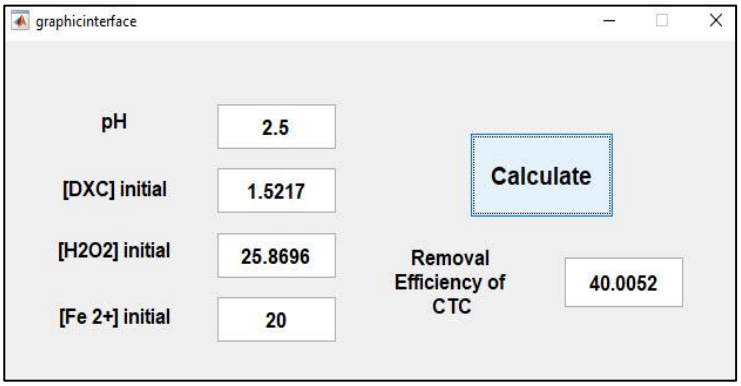


*Figure S4. MATLAB interface for DXC removal efficiency prediction via OANN.*