

LIST OF PUBLICATIONS

PhD Candidate: Erika Nascimben Santos

Title of PhD Dissertation: Development of photocatalytic nanocomposite membranes for enhanced treatment of oily wastewaters

Supervisors: Prof. Dr. Cecilia Hodúr and Dr. Gábor Veréb

MTMT Author ID: 31359338

First author publications

1.) 2024. Nascimben Santos, E., Hodúr C., László Zs., Gyulavári T., Krishnan, S. A. G., Arthanareeswaran, G., Veréb G. Enhancing Membrane Performance for Oily Wastewater Treatment: Comparison of PVDF Composite Membranes Prepared by Coating, Blending and Grafting Methods Using TiO₂, BiVO₄, CNT and PVP. *Environmental Science and Pollution Research Journal*. **Impact factor: 5.80 (Q1/Q2) – under review – Thesis points n° 3, 4, and 5.**

2.) 2021. Nascimben Santos, E., Fazekas, A., Hodúr, C., László Zs., Beszédes, S., Firak, D.S., Gyulavári, T., Hernádi, K., Arthanareeswaran, G., Veréb, G. “Statistical Analysis of Synthesis Parameters to Fabricate PVDF/PVP/TiO₂ Membranes via Phase-Inversion with Enhanced Filtration Performance and Photocatalytic Properties.” *Polymers*, 14(1), 113; DOI: 10.3390/polym14010113. **Impact factor: 4.967 (Q1) – 8 Citations – Thesis point n° 2.**

3.) 2020. Nascimben Santos, E., Ágoston, Á., Kertész, S., Hodúr, C., László, Z., Pap, Z., Kása, Z., Alapi, T., Krishnan, S. A. G., Arthanareeswaran, G., Hernadi, K., & Veréb, G. “Investigation of the applicability of TiO₂, BiVO₄, and WO₃ nanomaterials for advanced photocatalytic membranes used for oil-in-water emulsion separation.” *Asia-Pacific Journal of Chemical Engineering*, 1–15. DOI: 10.1002/apj.2549. **Impact factor: 1.447 (Q3) – 19 Citations – Thesis point n° 1.**

4.) 2020. Nascimben Santos, E., László, Z., Hodúr, C., Arthanareeswaran, G., & Veréb, G. “Photocatalytic membrane filtration and its advantages over conventional approaches in the treatment of oily wastewater: A review.” *Asia-Pacific Journal of Chemical Engineering*, 1–29. DOI: 10.1002/apj.2533. **Impact factor: 1.447 (Q3) – 76 Citations – Literature review section.**

Co-author publications

- 5.) **2022.** Gokula Krishnan, S.A., Sasikumar B., Arthanareeswaran G., Laszló Zs., **Nascimben Santos, E.**, Veréb G., Kertész, Sz. “Surface-initiated polymerization of PVDF membrane using amine and bismuth tungstate (BWO) modified MIL-100(Fe) nanofillers for pesticide photodegradation”. *Chemosphere*, 304(135286). DOI: 10.1016/j.chemosphere.2022.135286. **Impact factor: 8.8 (Q1) – 16 Citations**
- 6.) **2020.** Veréb, G., Gayir, E., **Nascimben Santos, E.**, Fazekás, Á., Kertész, S., Hodúr, C., & László, Z. “Purification of real car wash wastewater with complex coagulation/flocculation methods using polyaluminum chloride, polyelectrolyte, clay mineral and cationic surfactant.” *Water Science & Technology*, 1–8. DOI: 10.2166/wst.2020.008. **Impact factor: 1.915 (Q3) – 18 Citations**
- 7.) **2020.** Veréb, G., Kassai, P., **Nascimben Santos, E.**, Arthanareeswaran, G., Hodúr, C., & László, Z. “Intensification of the ultrafiltration of real oil-contaminated (produced) water with pre-ozonation and/or with TiO₂, TiO₂/CNT nanomaterial-coated membrane surfaces.” *Environmental Science and Pollution Research*, 1–11. DOI: 10.1007/s11356-020-08047-1. **Impact factor: 4.223 (Q2) – 36 Citations**

Σ **Impact Factor = 22.799 (+ 5.8)**

Σ **Citations = 178**