

## Publicatii in reviste ale doctoranzilor si doctorilor

### Drd. Ing. Arthur-Maximilian Bathori

1. A.M. Bathori, C.C. Cormos, *Green hydrogen production by intensified biogas reforming via sorption-enhanced technology: An energy, exergy, economic and environmental (4E) analysis*, International Journal of Hydrogen Energy, 155, 2025, 150363;
2. C.C. Cormos, M. Dragan, L. Petrescu, A.M. Cormos, S. Dragan, A.M. Bathori, S.C. Galusnyak, *Synthetic natural gas (SNG) production by biomass gasification with CO<sub>2</sub> capture: Techno-economic and life cycle analysis (LCA)*, Energy, 312, 2024, 133507.

### Drd. Ing. Belcovici Alexandra

1. Belcovici A., Tocco D., Fratini E., Salis A., Turdean G. L. ✉, *Composite material based on ZIF-8, reduced graphene oxide, and Nafion as electrode modifier for dopamine electrooxidation*, Microchemical Journal, 2025, 216, 114769, DOI: 10.1016/j.microc.2025.114769; WOS:001555663400002
2. Perhația I., Mureșan L.E., Belcovici A., Popa A., Borodi G., Mesaroș A., Barbu Tudoran L. , *Influence of different additives on the morphology, defect state and luminescence of ZnO nanoparticles*, Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2024, 684, 133102, <https://doi.org/10.1016/j.colsurfa.2023.133102>
3. Belcovici A., Fort I. C., Mureșan L. E. ✉, Perhația I., Borodi G., Turdean G. L. ✉, *Zinc oxide nanostructured platform for electrochemical detection of heavy metals*, Electroanalysis, 2023, 35, e202200395, <https://doi.org/10.1002/elan.202200395>

### Drd. Ing. Biró Levente

1. L. Biró, A. M. Cormoș, *Simulation of fixed-reactor system for combined Ca-Cu chemical looping with integrated combustion and CO<sub>2</sub> capture*, System & Control Transactions, Special Issue ESCAPE 2026, (under review)

### Drd. Ing. Bodescu Adrian Gheorghe

1. Bodescu A. G, Dărăban R. G., Mihály N. B., Cristea C. E., Timis E. C., Kiss A. A., Cristea V. M., *Control of the WWTP Water Line Using Traditional and Model Predictive Approaches*, Systems and Control Transactions, 4, 1108-1113, <https://doi.org/10.69997/set.175378>, 2025.

### Dr. Ing. Boga Biborka

1. Bóborka Boga, Norbert Steinfeldt, Nikolaos G. Moustakas, Tim Peppel, Henrik Lund, Jabor Rabeah, Zsolt Pap Vasile Mircea Cristea, Jennifer Strunk, *Role of SrCO<sub>3</sub> on photocatalytic performance of SrTiO<sub>3</sub>-SrCO<sub>3</sub> composites*, Catalysts, 2022, 12(9), 978 (IF=4.2, DOI: 10.3390/catal12090978)

2. Bíborka Boga, Vasile-Mircea Cristea, István Székely, Felix Lorenz, Tamás Gyulavári, Lucian Cristian Pop, Lucian Baia, Zsolt Pap, Norbert Steinfeldt, Jennifer Strunk, Experimental data-driven and phenomenological modelling approaches targeting the enhancement of CaTiO<sub>3</sub> photocatalytic efficiency, *Sustainable Chemistry and Pharmacy*, 2023, 33, 101045 (IF=6, DOI: 10.1016/j.scp.2023.101045)
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4. Bíborka Boga, Kevin Baur, Vasile-Mircea Cristea, Norbert Steinfeldt, Norbert Kockmann, Experimental and numerical investigations of flow behavior in an open falling film microreactor equipped with curved flow splitting elements *Chemical Engineering Science*, 2024, 120338 (IF = 4.7, DOI: 10.1016/j.ces.2024.120338)
5. Bíborka Boga, Kevin Baur, Elisabeta-Cristina Timis, Henrik Lund, Tim Peppel, Vasile-Mircea Cristea, Norbert Kockmann, Norbert Steinfeldt, Photocatalytic antibiotic degradation in coated open microchannels by applying 2D and 3D flow modeling with kinetics, Submitted to *Journal of Environmental Chemical Engineering*, 2024

**Drd. Ing. Bogyor Andrea**

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**Drd. Ing. Borota Mihaela**

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2. L. Petrescu, S.C. Galusnyak, A.-C. Bozonc, C.-C. Cormos, R. Scaccabarozzi, M. Spinelli, E. Catalanotti, Bio-Combined Heat & power plant integrated with calcium looping: How

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3. A.-C. Bozonc, V.-C. Sandu, A.-M. Buzila, A.-M. Cormos, Multiscale 3D CFD Modeling of CO<sub>2</sub> Methanation over Ni/Al<sub>2</sub>O<sub>3</sub> in a Lab-Scale Sabatier Fixed-Bed Reactor, *Fuels* 2025, 6(4), 79; <https://doi.org/10.3390/fuels6040079>
  4. A.-C. Bozonc, V.-C. Sandu, S. Dragan, A.-M. Cormos, Mathematical modeling of interconnected absorber-desorber hollow-fiber membrane contactors for CO<sub>2</sub> capture using MEA solution, *Clean Technologies and Environmental Policy*, 2025, 27, 8249–8265; <https://doi.org/10.1007/s10098-025-03241-6>

#### **Dr. Ing. Chisalita Dora-Andreea**

1. S.C. Galusnyak, L. Petrescu, D.A. Chisalita, C.C. Cormos, *Techno-environmental assessment of methanol production using chemical looping technologies*, *Energy*, 318, 2025, 134808;
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#### **Drd. Ing. Dumbravă Ionela-Dorina**

1. C.C. Cormos, M. Sandru, C. Dinca, F.M. Ilea, A. Dudu, M.D. Lazar, N. Slavu, C. Sava, L. Petrescu, A.M. Cormos, I. Dumbrava, *Comparison of membrane-based pre- and post-combustion CO<sub>2</sub> capture options applied in energy-intensive industrial applications*, *STUDIA UBB CHEMIA*, LXVIII, 3, 2023 51-70;
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#### **Dr. Ing. Farkas Noemi Izabella**

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#### **Dr. Ing. Frîncu Marian-Iosif**

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**Dr. Hidalgo-Viteri Juan Santiago** (2021-2022 drd. la UBB, 2022-2025 drd la Universitatea Pannonia, Veszprem, in cotutela cu UBB)

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