

Articole științifice publicate – Reviste ISI:

1. **S.C. Galusnyak**, L. Petrescu, V.-C. Sandu, C.-C. Cormos, Environmental impact assessment of green ammonia coupled with urea and ammonium nitrate production, Journal of Environmental Management, 2023, 343, 118215, DOI: <https://doi.org/10.1016/j.jenvman.2023.118215> (IF. 8.91)
2. **S.C. Galusnyak**, L. Petrescu, D.-A. Chisalita, C.-C. Cormos, M. Ugolini, From secondary biomass to bio-methanol through CONVERGE technology: an environmental analysis, Energies, 2023, 16, 2726. DOI: <https://doi.org/10.3390/en16062726> (IF 3.252)
3. **S.C. Galusnyak**, L. Petrescu, D.-A. Chisalita, C.-C. Cormos, Life cycle assessment of methanol production and conversion into various chemical intermediates and products, Energy, 2022, 259, 124784. DOI: <https://doi.org/10.1016/j.energy.2022.124784> (IF 8.857)
4. **S.C. Galusnyak**, L. Petrescu, C.-C. Cormos, Environmental impact assessment of post-combustion CO₂ capture technologies applied to cement production plants, Journal of Environmental Management, 2022, 320, 115908. DOI: <https://doi.org/10.1016/j.jenvman.2022.115908> (IF 8.91)
5. **S.C. Galusnyak**, L. Petrescu, C.-C. Cormos, Classical vs. reactive distillation technologies for biodiesel production: an environmental comparison using LCA methodology, Renewable Energy, 2022, 192, 289-299. DOI: <https://doi.org/10.1016/j.renene.2022.04.110> (IF 8.001)
6. D.-A. Chisalita, L. Petrescu, **S.C. Galusnyak**, C.-C. Cormos, Environmental evaluation of hydrogen production employing innovative chemical looping technologies – A Romanian case study, International Journal of Hydrogen Energy, 2022. DOI: <https://doi.org/10.1016/j.ijhydene.2022.06.029> (IF 7.139)
7. A. Mio, L. Petrescu, A.-V. Luca, **S.C. Galusnyak**, M. Fermeglia, C.-C. Cormos, Carbon dioxide capture in the iron and steel industry: thermodynamic analysis, process simulation, and life cycle assessment, Chemical and Biochemical Engineering Quarterly, 2022, 36, 255-271. DOI: <https://doi.org/10.15255/CABEQ.2022.2123> (IF 1.677)
8. **S.C. Galusnyak**, L. Petrescu, C.-C. Cormos, Techno-economic and environmental assessment of hydrogen production based on natural gas steam reforming process, STUDIA UBB CHEMIA, 2020, 65(4), 7-19. DOI: <https://doi.org/10.24193/subbchem.2020.4.01> (IF 0.558)

9. **S.C. Galusnyak**, S. Dragan, Mathematical modeling of steam methane reforming process, STUDIA UBB CHEMIA, 2019, 64(4), 7-18. DOI: <https://doi.org/10.24193/subbchem.2019.4.01>
10. **S.C. Galusnyak**, I.D. Dumbrava, L. Petrescu, S. Dragan, C.-C. Cormos, Assessment of CO₂ utilization technologies into valuable C₁ organic chemicals: a modelling and simulation analysis, Chemical Engineering Transactions, 2022, 94, 397-402. DOI: <https://doi.org/10.3303/CET2294066>

Publicații – Conferințe

1. *C.-C. Cormos, M. Dragan, L. Petrescu, S. Dragan, A.-M. Cormos, S.C. Galusnyak, F.M. Ilea, A.-M. Bathori, Techno-economic evaluation of synthetic natural gas production based on biomass gasification with CO₂ capture, Chemical Engineering Transactions, 2023, 103, 7-12, DOI: <https://doi.org/10.3303/CET23103002>*
2. *S.C. Galusnyak, I.D. Dumbrava, L. Petrescu, S. Dragan, C.-C. Cormos, Assessment of CO₂ utilization technologies into valuable C₁ organic chemicals: a modelling and simulation analysis, Chemical Engineering Transactions, 2022, 94, 397-402. DOI: <https://doi.org/10.3303/CET2294066>*
3. *C.-C. Cormos, M. Dragan, C. Dinca, A.-M. Cormos, S. Dragan, I.D. Dumbrava, F.M. Ilea, S.C. Galusnyak, Economic assessment of green hydrogen production from biomass gasification with chemical absorption and membrane-based CO₂ capture, Chemical Engineering Transactions, 2022, 94, 277-282. DOI: <https://doi.org/10.3303/CET2294046>*
4. *S.C. Galusnyak, L. Petrescu, D.-A. Chisalita, C.-C. Cormos, Life cycle assessment of bio-methanol derived from various raw-materials, Chemical Engineering Transactions, 2021, 86, 667-672. DOI: <https://doi.org/10.3303/CET2186112>*
5. *C.-C. Cormos, S. Dragan, A.-M. Cormos, L. Petrescu, V.C. Sandu, I.D. Dumbrava, S.C. Galusnyak, Application of carbonate looping cycle as an energy-efficient decarbonization process of key fossil-intensive industrial applications, 10th International Conference on Energy and Environment (CIEM), 2021, 1-5. DOI: <https://doi.org/10.1109/CIEM52821.2021.9614941>*