

## LISTA DE LUCRĂRI

### a) Lista celor maximum 10 lucrări considerate a fi cele mai relevante

1. Szőke, Á.F., **Szabó, G.S.**, Hórvölgyi, Z., Albert, E., Gaina, L., Mureşan L.M., Eco-friendly indigo carmine-loaded chitosan coatings for improved anticorrosion protection of zinc substrates, *Carbohydrate Polymers*, **2019**, 215, p. 63–72, (**I.f. 11.2**),  
<https://doi.org/10.1016/j.carbpol.2019.03.077>
2. Márton, P., Nagy, O.T., Kovács, D., Szolnoki, B., Madarász, J., Nagy, N., **Szabó, G.S.**, Hórvölgyi, Z.: Barrier behaviour of partially N-acetylated chitosan layers in aqueous media, *International Journal of Biological Macromolecules*, **2023**, 232, 123336, p. 1-8, (**I.f. 8.2**)  
<https://doi.org/10.1016/j.ijbiomac.2023.123336>
3. Szőke, Á. F., **Szabó, G.**, Hórvölgyi, Z., Albert, E., Végh, A. G., Zimányi, L., Mureşan, L.M., Accumulation of 2-Acetylaminio-5-mercapto-1,3,4-thiadiazole in chitosan coatings for improved anticorrosive effect on zinc. *International Journal of Biological Macromolecules* **2020**, 142, p. 423-431, (**I.f. 8.2**), <https://doi.org/10.1016/j.ijbiomac.2019.09.114>
4. **Szabó, G.**, Albert, E., Both, J., Kócs, L., Sáfrán, Gy., Szőke, A., Hórvölgyi, Z., Mureşan, L.M., Influence of embedded inhibitors on the corrosion resistance of zinc coated with mesoporous silica layers, *Surfaces and Interfaces*, **2019**, 15, p. 216–223, (**I.f. 6.2**),  
<https://doi.org/10.1016/j.surfin.2019.03.007>
5. Szőke, Á.F., **Szabó, G.**, Simó, Z., Hórvölgyi, Z., Albert, E., Mureşan, L.M., Chitosan coatings ionically cross-linked with ammonium paratungstate as anticorrosive coatings for zinc, *European Polymer Journal* **2019**, 118, p. 205-212, (**I. f. 6.0**) <https://doi.org/10.1016/j.eurpolymj.2019.05.057>
6. Albert, E., Cotolan, N., Nagy, N., Sáfrán, Gy., **Szabó, G.**, Mureşan, L., Hórvölgyi, Z., Mesoporous silica coatings with improved corrosion protection properties, *Microporous and Mesoporous Materials*, **2015**, 206, p. 102-113, (**I.f. 5.2**), <https://doi.org/10.1016/j.micromeso.2014.12.021>
7. Both, J., **Szabó, G.**, Katona, G., Mureşan, L.M. Tannic acid reinforced sol-gel silica coatings for corrosion protection of zinc substrates, *Material Chemistry and Physics*, **2022**, 282, p 1-11, (**I.f. 4.6**), <https://doi.org/10.1016/j.matchemphys.2022.125912>
8. Márton, P., Szolnoki, B., Nagy, N., Deák, A., Zámbó, D., **Szabó, G.S.**, Hórvölgyi, Z.: Wetting and swelling behaviour of N-acetylated thin chitosan coatings in aqueous media, *Heliyon*, **2024**, 10, p. 1-15 (**I.f. 4.0**), <https://doi.org/10.1016/j.heliyon.2023.e23201>
9. **Szabó, G.**, Csavdári, A., Onel, L., Bourceanu, G., Noszticzius, Z., Wittmann, M., Periodic CO and CO<sub>2</sub> evolution in the oscillatory Briggs-Rauscher reaction. *J. Phys. Chem. A*, **2007**, 111(4), p. 610-612, (**I.f. 2.9**), <https://doi.org/10.1021/jp067070y>
10. Muntean, N., **Szabó, G.**, Wittmann, M., Lawson, T., Fülöp J., Noszticzius, Z., Onel, L., Reaction Routes Leading to CO<sub>2</sub> and CO in the Briggs–Rauscher Oscillator: Analogies between the Oscillatory BR and BZ Reactions, *J. Phys. Chem. A*, **2009**, 113(32), p. 9102-9108 (**I.f. 2.9**),  
<https://doi.org/10.1021/jp905239w>

## b) Teza de doctorat

**Szabó, G.**, Studiul cinetic al recombinării unor acizi bazat pe curenți cinetici și catalitici, Universitatea Babeș-Bolyai din Cluj-Napoca. Conducător de doctorat: prof.dr. Ioan Bâldea, susținut în data de 22.03.2002.

## c) Cărți și capitole din cărți

1. Capitol publicat în monografie:

Kékedy-Nagy, L., Bolla, Cs., **Szabó, G.**, *Egyes erdélyi felszíni vizek nehézfém-tartalmának meghatározása modern elektroanalitikai (stripping analízis) eljárással*, în "Erdély folyónak természeti állapota, Kémiai és ökológiai vízminősítés a rekonstrukció megalapozására" Editura Scientia, Cluj-Napoca, **2003** (publicat în 2004).

2. Îndrumător de laborator:

**Szabó, G.**, Bolla, Cs.: *Fizikai kémiai gyakorlatok*. Editura Egyetemi Műhely Kiadó, Cluj-Napoca, **2007**, ISBN 978-973-87783-5-1.

3. Culegere de probleme:

**Szabó, G.**, Bolla, Cs.: *Fizikai kémiai számítások*. Editura Egyetemi Műhely Kiadó, Cluj-Napoca, **2008**, ISBN 978-973-88620-4-3.

## d) Articole, studii

### Publicații ISI

1. Márton, P., Szolnoki, B., Nagy, N., Deák, A., Zámbó, D., **Szabó, G.S.**, Hórvölgyi, Z., Wetting and swelling behaviour of N-acetylated thin chitosan coatings in aqueous media, *Heliyon*, **2024**, 10, p 1-15, (**I.f. 4.0**), <https://doi.org/10.1016/j.heliyon.2023.e23201>
2. Buier, R., **Szabó, G.S.**, Katona, G., Muntean, N., Mureșan, L.M., Influence of pH on the Inhibiting Characteristics of Cresol Red Incorporated in Chitosan Coatings on Zinc. *Metals*, **2023**, 13, p.1958-1975, (**I.f. 2.9**), <https://doi.org/10.3390/met13121958>
3. Ovari, T.R., Katona, G., Coros, M., **Szabó, G.**, Mureșan, L.M., Corrosion behaviour of zinc coated with composite silica layers incorporating poly(amidoamine)-modified graphene oxide, *Journal of Solid-state Electrochemistry*, **2023**, 27, p. 1795-1811, (**I.f. 2.5**), <https://doi.org/10.1007/s10008-022-05358-w>
4. Ovari, T.-R., Toth, T., Katona, G., **Szabó, G.**, Mureșan, L.M., Epoxy Coatings Doped with (3-Aminopropyl)triethoxysilane-Modified Silica Nanoparticles for Anti-Corrosion Protection of Zinc, *Coatings*, **2023**, 13(11), p. 1844-1859, (**I.f. 3.4**), <https://doi.org/10.3390/coatings13111844>

5. Both, J., Fülop, A.-P., **Szabó, G.**, Katona, G., Ciorîtă, A., Mureşan, L.M., Effect of the preparation method on the properties of Eugenol-doped TiO<sub>2</sub> coating on Ti substrate, *Gels*, **2023**, 9(8), p. 668-685 (**I.f.4.6**), <https://doi.org/10.3390/gels9080668>
6. Ovari, T.-R., Szöke, Á.F., Katona, G., **Szabó, G.S.**, Mureşan, L.M., Temporary Anti-Corrosive Double Layer on Zinc Substrate Based on Chitosan Hydrogel and Epoxy Resin, *Gels*, **2023**, 9(5), p. 361-375 (**I.f.4.6**), <https://doi.org/10.3390/gels9050361>
7. Márton, P., Nagy, O.T., Kovács, D., Szolnoki, B., Madarász, J., Nagy, N., **Szabó, G.S.**, Hórvölgyi, Z., Barrier behaviour of partially N-acetylated chitosan layers in aqueous media, *International Journal of Biological Macromolecules*, **2023**, 232, 123336, p. 1-8, (**I.f. 8.2**), <https://doi.org/10.1016/j.ijbiomac.2023.123336>
8. **Szabó, G.S.**, Szabó, R., Szabó, L., A review of the mitigating methods against the energy conversion decrease in solar panels, *Energies*, **2022**, 15(18), p. 6558-6578, (**I.f. 3.2**), <https://doi.org/10.3390/en15186558>
9. Szöke, Á. F., **Szabó, G.**, Katona, G., Bliet, G., Mureşan, L.M., Correlations between the Chitosan Solution Viscosity and the Anticorrosive Protection Efficiency of Indigo Carmine-impregnated Chitosan Coatings on Zinc, *Protection of metals and Physical Chemistry of Surfaces*, **2022**, 58, p. 574-584, (**I.f. 1.1**), <https://doi.org/10.1134/S2070205122030224>
10. Óvári, T.R., Katona, G., **Szabó, G.**, Mureşan, L.M., Electrochemical evaluation of the relationship between the thermal treatment and the protective properties of thin silica coatings on zinc substrates, *Studia UBB Chemia*, **2022**, 67(1), p. 227-243, (**I.f. 0.3**), <https://doi.org/10.24193/subbchem.2022.1.15>
11. Both, J., **Szabó, G.**, Katona, G., Mureşan, L.M. Tannic acid reinforced sol-gel silica coatings for corrosion protection of zinc substrates, *Material Chemistry and Physics*, **2022**, 282, p. 1-11, (**I.f. 4.6**), <https://doi.org/10.1016/j.matchemphys.2022.125912>
12. Both, J., Mezei, R., **Szabó, G.S.**, Mureşan, L.M., Electrochemical investigation of the corrosion inhibiting effect of organic paints doped with benzotriazole coated on steel substrates, *Protection of metals and Physical Chemistry of Surfaces*, **2022**, 58(4), p. 822-833, (**I.f. 1.1**), <https://doi.org/10.1134/S2070205122040086>
13. Both, J., **Szabó, G.S.**, Katona, G., Mureşan, L.M., Anti-corrosive Polystyrene Coatings Modified with Tannic Acid on Zinc and Steel Substrates. *Journal of Electrochemical Science and Engineering*, **2022**, (**I.f. 2.2**), <https://doi.org/10.5599/jese.1293>
14. Both, J., **Szabó, G.S.**, Mureşan, L.M: Study on the corrosion inhibition efficiency of aluminum tripolyphosphate on zinc substrate, *Studia UBB Chemia*, **2022**, 67 (4), p. 261-272, (**I.f. 0.3**), <https://doi.org/10.24193/subbchem.2022.4.17>
15. **Szabó, G.S.**, Csiki, E., Szöke, Á. F., Muntean, N, Determination of the antioxidant activity of different types of coffee by means of Briggs-Rauscher analytical method, *Studia UBB Chemia*, **2022**, 67(3), p. 7-16, (**I.f. 0.3**), <https://doi.org/10.24193/subbchem.2022.3.01>
16. Szöke, Á.F., **Szabó, G.**, Hórvölgyi, Z., Albert, E., Végh, A. G., Zimányi, L., Mureşan, L.M., Accumulation of 2-Acetylaminio-5-mercaptop-1,3,4-thiadiazole in chitosan coatings for improved anticorrosive effect on zinc. *International Journal of Biological Macromolecules* **2020**, 142, p. 423-431, (**I.f. 8.2**), <https://doi.org/10.1016/j.ijbiomac.2019.09.114>

17. Márton, P., Albert, E., Nagy, N., Tegze, B., **Szabó, G.S.**, Hórvölgyi, Z., Chemically modified chitosan coatings: wetting and electrochemical studies, *Studia UBB Chemia*, **2020**, 65(3), p. 63-79, (**I.f. 0.3**), <https://doi.org/10.24193/subbchem.2020.3.05>
18. Szabó, L., **Szabó, G.S.**, Szabó, R.: Usage of graphene in power systems. A survey. Proceedings of the 11<sup>th</sup> International Conference on Electrical Power Drive Systems, *ICEPDS'2020* (**2020**), <https://doi.org/10.1109/ICEPDS47235.2020.9249296>
19. Szőke, Á.F., **Szabó, G.S.**, Hórvölgyi, Z., Albert, E., Gaina, L., Mureşan, L.M., Eco-friendly indigo carmine-loaded chitosan coatings for improved anticorrosion protection of zinc substrates, *Carbohydrate Polymers*, **2019**, 215, p. 63–72, (**I.f. 11.2**), <https://doi.org/10.1016/j.carbpol.2019.03.077>
20. **Szabó, G.**, Albert, E., Both, J., Kócs, L., Sáfrán, Gy., Szőke, A., Hórvölgyi, Z., Mureşan, L.M., Influence of embedded inhibitors on the corrosion resistance of zinc coated with mesoporous silica layers, *Surfaces and Interfaces*, **2019**, 15, p. 216–223, (**I.f. 6.2**), <https://doi.org/10.1016/j.surfin.2019.03.007>
21. Szőke, Á.F., **Szabó, G.**, Simó, Z., Hórvölgyi, Z., Albert, E., Mureşan, L.M., Chitosan coatings ionically cross-linked with ammonium paratungstate as anticorrosive coatings for zinc, *European Polymer Journal* **2019**, 118, p. 205-212, (**I.f. 6.0**) <https://doi.org/10.1016/j.eurpolymj.2019.05.057>
22. Barabás, R., Muntean, N., **Szabó, G.**, Maurer, K., Bizo, L., Preparation and Characterizations of New Biomaterials by Anthocyanins Adsorption on Hydroxyapatite-Based Materials, *Studia UBB Chemia*, **2017**, 62(4) II, 253-268 (**I.f. 0.3**), <https://doi.org/10.24193/subbchem.2017.4>
23. Cotolan, N., Varvara, S., Albert, E., **Szabó, G.**, Hórvölgyi, Z., Mureşan, L.M., Evaluation of corrosion inhibition performance of silica sol–gel layers deposited on galvanised steel, *Corrosion Engineering, Science and Technology*, **2016**, 51(5), p. 373-382, (**I.f. 1.8**), <https://doi.org/10.1080/1478422X.2015.1120404>
24. Albert, E., Cotolan, N., Nagy, N., Sáfrán, Gy., **Szabó, G.**, Mureşan, L., Hórvölgyi, Z., Mesoporous silica coatings with improved corrosion protection properties, *Microporous and Mesoporous Materials*, **2015**, 206, p. 102-113, (**I.f. 5.2**), <https://doi.org/10.1016/j.micromeso.2014.12.021>
25. **Szabó, G.**, Albert, E., Hórvölgyi, Z., Mureşan, L., Protective TiO<sub>2</sub> coatings prepared by sol-gel method on Zinc, *Studia UBB Chemia*, **2015**, 60(3), p. 225-235 (**I.f. 0.3**),
26. Turdean, G., **Szabó, G.** Nitrite detection in meat products samples by square-wave voltammetry at a new single walled carbon nanotubes – myoglobin modified electrode, *Food Chemistry*, **2015**, 179, p. 325-330, (**I.f. 8.8**), <https://doi.org/10.1016/j.foodchem.2015.01.106>
27. Muntean, N., **Szabó, G.**, Commonly used raw fruit and vegetable juices overall antioxidant activity determination by means of Briggs-Rauscher reaction, *Studia UBB Chemia*, **2015**, 60(3), 225-237, (**I.f. 0.3**)
28. Volentiru, E., Nyari, M., **Szabó, G.**, Hórvölgyi, Z., Mureşan, L.M., Silica sol – gel protective coatings against corrosion of zinc substrates, *Periodica Polytechnica Ser. Chem.*, **2014**, 58(sup), p. 61-66, (**I.f. 1.3**), <https://doi.org/10.3311/PPch.7302>

29. Bogya, E.S., Czikó, M., **Szabó, G.**, Barabás, R., The red beetroot extract antioxidant activity and adsorption kinetics onto hydroxiapatite-based materials, *J. Iran. Chem. Soc.*, **2013**, 10(3), p. 491–503, (**I.f. 2.4**), <https://doi.org/10.1007/s13738-012-0183-3>
30. Muntean, N., **Szabó, G.**, The Antioxidant Activity of Tea Infusions Tested by Means of Briggs-Rauscher Oscillatory Reaction, *Studia UBB Chemia*, **2013**, 58(2), p. 175-183 (**I.f. 0.3**)
31. Muntean, N., Baldea, I., **Szabó, G.**, Noszticzius, Z., Antioxidant capacity determination by the Briggs-Rauscher oscillating reaction in flow system, *Studia UBB Chemia*, **2010**, 55(1), 121– 132, (**I.f. 0.3**)
32. Varvari, L., **Szabó, G.**, Nicoara, A.: E. Kinetic investigation in Trolox-DPPH system, *Studia UBB Chemia*, **2010**, 55 (2), p. 189-197, (**I.f. 0.3**)
33. Muntean, N., **Szabó, G.**, Wittmann, M., Lawson, T., Fülöp J., Noszticzius, Z., Onel, L., Reaction Routes Leading to CO<sub>2</sub> and CO in the Briggs–Rauscher Oscillator: Analogies between the Oscillatory BR and BZ Reactions, *J. Phys. Chem. A*, **2009**, 113(32), p. 9102-9108 (**I.f. 2.9**), <https://doi.org/10.1021/jp905239w>
34. Lawson, T., Fülöp J., Wittmann, M., Noszticzius, Z., Muntean, N., **Szabó, G.**, Onel, L., Iodomalic Acid as an “Anti” Inhibitor in the Resorcinol Inhibited Briggs-Rauscher Reaction, *J. Phys. Chem. A*, **2009**, 113, p. 14095-14098, (**I.f. 2.9**), <https://doi.org/10.1021/jp907364a>
35. Onel, L., Bourceanu, G., Wittmann, M., Noszticzius, Z., **Szabó, G.**, I(+) transfer from diiodomalonic acid to malonic acid and a complete inhibition of the CO and CO<sub>2</sub> evolution in the Briggs-Rauscher reaction by resorcinol, *J. Phys. Chem. A*, **2008**, 112(46), p. 11649-11655, (**I.f. 2.9**), <https://doi.org/10.1021/jp8064163>
36. **Szabó, G.**, Csavdári, A., Onel, L., Bourceanu, G., Noszticzius, Z., Wittmann, M., Periodic CO and CO<sub>2</sub> evolution in the oscillatory Briggs-Rauscher reaction. *J. Phys. Chem. A*, **2007**, 111(4), p. 610-612, (**I.f. 2.9**), <https://doi.org/10.1021/jp067070y>
37. Zsakó, J., **Szabó, G.**, Polarographic study on the kinetics and mechanism of the hydrolysis of 1, 2, 3 - cyclohexane-trione-1, 3 - dioxime.-*Periodica Polytechnica Ser. Chem.* **1999**, 43(1), pag 35.

## Publicații BDI

1. **Szabó, G.**, Bolla, Cs., János, L., Rácz, Cs., The influence of lipoic acid on Briggs-Rauscher oscillating reaction *Studia Univ. Babeş-Bolyai, Ser. Chem.* **2003**, 48(2) p. 181-184
2. Szabó, E., **Szabó, G.**, Bolla, Cs., Influence of iodate ion concentration on oscillations in the Briggs-Rauscher reaction. *Studia Univ. Babeş-Bolyai, Ser. Chem.* **2003**, 48(1), p. 103-108
3. **Szabó, G.**, Zsakó, J., Bolla, Cs., Temperature dependence of the dioximes hydrolysis reaction rate. *Studia Univ. Babeş-Bolyai, Ser. Chem.* **2003**, 48(1), p. 99-102.
4. **Szabó, G.**, Zsakó, J., Báldea, I., Bolla, Cs., Kinetic study on hydrolysis reaction of dioximes.- *Studia Univ. Babeş-Bolyai, Ser. Chem.* **2003**, 48(1), p. 93-97.
5. Fórizs, E., Veress, E., Mihălcioiu, F., Muzsnay, Cs., **Szabó, G.**, Argentometric titration of thiosulfate with conductometric and potentiometric end-point detection. *Studia Univ. Babeş-Bolyai, Ser. Chem.* **1997**, 42(1-2), p. 241.

6. Mánok, F., **Dénezsi (Szabó), G.**, Várhelyi, Cs., On the dioximine complexes of transition metals. Kinetics and mechanism of the hydrolysis of nyoxime in acidic medium. *Studia Univ. Babeş-Bolyai, Ser. Chem.*, **1987**, 32(2), p. 50.
7. Mánok, F., **Dénezsi (Szabó), G.**, Várhelyi, Cs., Polarographic study on the protonization of 1,2-cyclohexane-dione-dioxime in aqueous solutions. *Studia Univ. Babeş-Bolyai, Ser. Chem.* **1986**, 31(2), p. 3

#### Alte reviste

1. Szőke, E.Á.F., **Szabó, G.**, Mureşan, L.M., Albert, E., Hórvölgyi Z., Anticorrosive chitosan coatings on zinc obtained through ionic crosslinking by indigo carmine. *Acta Scientiarum Transylvanica*, **2019**, 27/3, p. 29-37.  
<https://eda.eme.ro/collections/6de6ef31-5369-4332-87f9-5d67479d20d5>
2. Szőke, E.Á.F., **Szabó, G.**, Mureşan, L.M., Hórvölgyi, Z., Volentiru, E., The Study of Porous Silica Coatings Impregnated with Methylene Blue, *Acta Scientiarum Transylvanica*, **2019**, 26/3, p. 38-46.
3. Turdean, G., Szőke, E.Á.F., Kerekes, E., Timár, D.K., Mureşan, L.M., **Szabó, G.**, Barabás, R., Kitozán korszerű alkalmazásai védőrétegekben és kompozitokban, *Acta Scientiarum Transylvanica*, **2017**, 25/3, p. 72-79.

#### e) Publicații în extenso, apărute în lucrări ale conferințelor

1. Szabó, L., **Szabó, G.S.**, Szabó, R.: Usage of graphene in power systems. A survey. Proceedings of the 11<sup>th</sup> International Conference on Electrical Power Drive Systems, *ICEPDS '2020*, (**2020**), <https://doi.org/10.1109/ICEPDS47235.2020.9249296>
2. Varvari, L., **Szabó, G.**: The Total Antioxidant Capacity of Different Red Cabbage Extracts Tested by Means of the Briggs-Rauscher Oscillatory Reaction. *Environment & Progress*, **2007**, 9, p 593.
3. **Szabó, G.**, Csavdári, A.: Possible application of oscillating reactions in testing antioxidant activity of various food products by means of kinetic methods, *Environment & Progress*, **2006**, 6, p. 473.
4. Csavdári, A., **Szabó, G.**, Bâldea, I.: A Novel Kinetic Method in to Determine Trace Cu (II) ions. *Conferința "XI. Vegyészkonferencia"*, **2005**, p. 133.
5. **Szabó, G.**, Bolla, Cs., Miklósi, L., Muntean, N., Csepei, L., Bogya, E.: Study on the modifying agents of Lipoic Acid Antioxidant Activity, *Conferința "X. Vegyészkonferencia"*, **2004**, p. 201.

6. Rustoiu-Csavdári, A., **Szabó, G.**, Bâldea, I.: Kinetic Methods in Analytical Chemistry. A Non-linear Calibration Plot to Determine Trace Copper from Various Water Samples. *Conferința "X. Vegyészkonferencia"*, **2004**, p. 139.
7. Csepei, L., Muntean, N., Miklósi, L., **Szabó, G.**, Bolla, Cs.: Oscillation cessation in active Briggs-Rauscher mixture, *Conferința: "VII. Vegyészkonferencia"*, **2003**, p.123.
8. Szabó, L., **Szabó, G.**: Üzemanyagcellák gépjárművek számára (Pile de combustie pentru automobile.), *Conferința ENELKO*, **2003**, p.197.
9. Szabó, E., **Szabó, G.**, Bolla, Cs.: A Briggs-Rauscher oszcilláló reakció tanulmányozása (Studiul reacției oscilante Briggs-Rauscher.- *Conferința: "VII. Vegyészkonferencia"*, **2001**, p.162.
10. Zsakó, J., **Szabó, G.**: 1, 2, 3-ciklohexántrion-1, 3-dioxim-2-imin hidrolizisének vizsgálata polarografiás módszerrel *Conferința: "VI. Vegyészkonferencia"*, **2000**, p.113.

#### **f) Alte lucrări și contribuții științifice**

#### **Lucrări prezentate la conferințe naționale și internaționale**

1. Zsakó, J., **Szabó, G.**, Várhelyi, Cs.: 1, 2, 3-ciklohexántrion-1, 3-dioxim hidrolízis kinetikájának vizsgálata polarografiás módszerrel (Studiul cinematici reacției de hidroliză a 1, 2, 3-ciclohexantrion-1, 3-dioximei prin metoda polarografică.), *4th International Conference on Chemistry*, 21 noiembrie **1998**, Cluj-Napoca.
2. Zsakó, J., **Szabó, G.**, Várhelyi, Cs.: 1, 2, 3 – ciklohexántrion - 1, 3 - dioxim viselkedésének vizsgálata potenciometrikus titrálással (Studiul comportamentului 1, 2, 3-ciclohexantion-1, 3-dioximei prin titrări potențiometrice.), *Sesiunea de Comunicări Științifice a Secției de Matematică și Științe ale Naturii a Asociației Muzeului Transilvan*, 24 octombrie **1998**, Cluj-Napoca.
3. Bolla, Cs., **Szabó, G.**, Szabó, E., Pontos, I.: A Briggs-Rauscher reakció hőmérséklet függése (Influența temperaturii asupra reacției Briggs-Rauscher). “*5th International Conference on Chemistry*, 16-18 noiembrie **1999**, Cluj-Napoca.
4. Muntean, N., **Szabó, G.**, Lawson, T., Fülöp, J., Wittmann, M., Noszticzius, Z., Onel, L., Bourceanu, G.: Functional role of an inhibitor: complete inhibition of CO and CO<sub>2</sub> evolution in the Briggs-Rauscher reaction by resorcinol, prezentată la *Second ESF FUNCDYN: Conference on Functional Dynamics*, 15-18 September **2008**, Budapest, Ungaria.

5. Muntean, N., **Szabó, G.**, Lawson, T., Fülop, J., Wittmann, M., Noszticzius, Z., Onel, L.: IMA (iodomalonic acid) as an “anti” inhibitor in the resorcinol inhibited Briggs-Rauscher reaction, prezentată la *Second ESF FUNCDYN: Conference on Functional Dynamics*, 1-5 martie **2009**, Budapest, Ungaria.
6. Volentiru, E., Zámbó, D., Dabóczi, M., Basa, P., **Szabó, G.**, Mureşan, L.M., Kabai, J., Hórvölgyi, Z.: Multifunctional SiO<sub>2</sub> sol-gel coatings, "18<sup>th</sup> International Conference on Chemistry", 22-25 noiembrie, **2012**, Băile Felix.
7. Albert, E., Cotolan, N., Deák, A., Mureşan, L., Nagy, N., **Szabó, G.**, Hórvölgyi, Z.: Silylated coatings with improved anti-corrosion properties, "19<sup>th</sup> International Conference on Chemistry", 21-23 noiembrie. **2013**, Baia-Mare.
8. Szőke, A., Sanders, Q.J., **Szabó, G.**, Turdean, G., Mureşan, L.: Electrochemical sensors based on reduced grapheme oxide immobilized with chitosan, "22<sup>th</sup> International Conference on Chemistry", 3-6 noiembrie. **2016**, Timișoara.
9. Szőke, Á.F., Kerekes, E., Timár, D.K., Turdean, G.L., Mureşan, L.M., **Szabó, G.S.**, Barabás R., "15<sup>th</sup> Transilvanian Natural Science Conference", noiembrie **2016**, Cluj-Napoca.
10. Szőke, Á.F., **Szabó, G.S.**, Albert, E., Hórvölgyi, Z., Mureşan, L.M., "6<sup>th</sup> RSE-SEE International Conference", iunie **2017**, Balatonkenese, Ungaria.
11. Szőke, Á.F., **Szabó, G.S.**, Mureşan, L.M., Albert, E., Hórvölgyi, Z., "23<sup>rd</sup> International Conference on Chemistry", octombrie **2017**, Deva.
12. Szőke, Á.F., **Szabó, G.S.**, Mureşan, L.M., Hórvölgyi, Z., Albert, E., "16<sup>th</sup> Transilvanian Natural Science Conference", noiembrie **2017**, Cluj-Napoca.
13. Szőke, Á.F., **Szabó, G.S.**, Albert, E., Mureşan, L.M., Hórvölgyi, Z., "11<sup>th</sup> Conference on Colloid Chemistry – 11CCC", mai **2018**, Eger, Ungaria.
14. Szőke, Á.F., **Szabó, G.S.**, Mureşan, L.M., Albert, E., Hórvölgyi, Z., "24<sup>th</sup> International Conference on Chemistry", **2018**, Sovata, Romania
15. Szőke, Á.F., **Szabó, G.S.**, Mureşan, L.M., Hórvölgyi, Z., Albert, E., "17<sup>th</sup> Transilvanian Natural Science Conference", noiembrie **2018**, Cluj-Napoca
16. Szőke, Á.F., **Szabó, G.S.**, Hórvölgyi, Z., Albert, E., Mureşan, L.M., mai **2019**, Split, Croația.
17. Szőke, Á.F., Bliet, G., **Szabó, G.**, Mureşan, L., "International PhD Conference", mai **2019**, Pécs, Ungaria
18. Szőke, Á. F., **Szabó, G.**, T., Both, J., Buier, R.H., Mureşan, L.M, Korszerű anti-korróziós bevonatok fejlesztése. "20<sup>th</sup> Transilvanian Natural Science Conference", noiembrie **2020**, Cluj-Napoca, online.

19. Szabó, G., Protective coatings against corrosion of hybrid and electric vehicles. "Conferinta: Autonóm Járművek konferencia", noiembrie **2020**, Győr, Ungaria, online.
20. Ovari, T.R., Katona, G., Coros, M., Szabó, G., Mureşan, L.M., Surface modified GO/silica composite coatings and their protective properties on Zn substrates, "1<sup>st</sup> Corrosion and Materials Degradation Web Conference", 17-19 mai, **2021**, online.

#### **Prezentări poster la conferințe naționale și internaționale**

1. Miklósi, L., Szabó, G., Rábai, Gy.: Creating, measuring and modeling pH-oscillations in presence of weak acids. "ESF-Reactor workshop "Nonlinear phenomena in chemistry", 24-26 ianuarie **2003**, Budapest, Ungaria.
2. Muntean, N. Boga, E. Szabó, G.: Study on alfa lipoic colloid system and determination of its antioxidant activity with Briggs-Rauscher oscillating reaction. "9<sup>th</sup> Conference on Colloid Chemistry", 3-5 octombrie **2007**, Siófok, Ungaria
3. Varvari, L., Szabó, G., Nicoară, A.: Kinetic investigation of reaction between DPPH<sup>·</sup> and Trolox employed on amperometric determination of antioxidant activity, "59<sup>th</sup> Annual Meeting of ISE", 7-12 septembrie **2008**, Sevilla, Spania.
4. Rácz L., Szabó, L., Szabó, G., Rácz, Cs.: About the stability of the aquos procaine solution in the presence of L-carnosine and electrolits, "17<sup>th</sup> International Conference on Chemistry", noiembrie **2011**, Cluj-Napoca.
5. Volentiru, E., Szabó, G., Hórvölgyi, Z., Mureşan, L.: Silica sol-gel coatings against corrosion, "10<sup>th</sup> Conference on Colloid Chemistry", august **2012**, Budapest, Ungaria.
6. Sipos, E., Borbély, B., Boga, E.S., Muntean, N., Szabó, G.: Spectrophotometric characterization and antioxidant activity determination of the antocyanins extracted from hibiscus flower petals, "18<sup>th</sup> International Conference on Chemistry", 22-25 noiembrie, **2012**, Băile Felix.
7. Albert, E., Cotolan, N., Nagy, E., Hórvölgyi, Z., Szabó, G., Mureşan, L.: The effect of modified silica coatings on the corrosion behaviour of Zn substrates: the role of silylating and templating agents, "19<sup>th</sup> International Conference on Chemistry", 21-23 noiembrie **2013**, Baia-Mare.
8. Cotolan, N., Albert, E., Nagy, E., Hórvölgyi, Z., Szabó, G., Mureşan, L.: Corrosion behaviour of silica coated Zn substrates: the role of thickness and thermal treatment of protective layers, "19<sup>th</sup> International Conference on Chemistry", 21-23 noiembrie. **2013**, Baia-Mare.
9. Cotolan, N., Albert, E., Szabó, G., Hórvölgyi, Z., Mureşan, L.: Improvement in the oxidation resistance of zinc coated steel substrates by sol-gel derived silica coatings, "20<sup>th</sup> International Conference on Chemistry", 6-9 noiembrie **2014**, Cluj-Napoca

10. Szőke, Á.F., **Szabó, G.S.**, Hórvölgyi, Z., Albert, E., Végh, A.G., Zimányi, L., Filiatre, C., Mureşan, L.M.: Tailoring the permeability of chitosan-based coatings deposited on zinc substrates with different methods, "*71<sup>th</sup> Annual Meeting International Society of Electrochemistry*", **2020**, Belgrade, Serbia, online.
11. Buier, R.H., **Szabó, G.**, Szőke, Á. F., Fülöp, P.A., Muntean, N., Katon,a G., Mureşan, L.M,: Metilénkékkel impregnált szilika nanokonténerek hatása a kitozán vékonyrétegre, "*26<sup>th</sup> International Conference on Chemistry*", octombrie **2020**, online.
12. Márton, P., Albert, E., Nagy, N., Tegze, B., **Szabó, G.**, Hórvölgyi, Z: Kémiaileg módosított kitozánbevonatok: felületi és elektrokémiai vizsgálatok. ,"*26<sup>th</sup> International Conference on Chemistry*", octombrie **2020**, online.
13. Both, J., **Szabó, G.**, Mureşan, L.M: Investigation of the anti-corrosive effect of tannic acid embeded in silica coatings on Zn substrates, "*1<sup>st</sup> Corrosion and Materials Degradation Web Conference*", 17-19 mai **2021**, online.
14. Buier, R.H., **Szabó, G.**, Mureşan, L.M: Cresol red as corrosion inhibitor in chitosan thin layers on Zn, "*1<sup>st</sup> Corrosion and Materials Degradation Web Conference*", 17-19 mai **2021**, online.
15. Buier, R.H., **Szabó, G.**, Mureşan, L.M: Phenolphthalein as a corrosion inhibitor in chitosan layers on Zn substrate, "*26<sup>th</sup> International Conference on Chemistry*", Octombrie **2021**, online
16. Both, J., **Szabó, G.**, Katona, G., Mureşan, L.M: Investigation of the anti-corrosive effect of polystyrene coatings doped with silica nanocontainers impregnated with tannic acid on different substrates, "*26<sup>th</sup> International Conference on Chemistry*", Octombrie **2021**, online.
17. Ovari, T.R., **Szabó, G.**, Mureşan, L.M.: Investigation of the anticorrosive effect of epoxy-silica nanoparticles composite coatings on Zn substrate, "*26<sup>th</sup> International Conference on Chemistry*", octombrie **2021**, online.
18. Márton, P., **Szabó, G.**, Nagy, O.T., Hórvölgyi, Z: Effect of acylation on surface and bulk properties of thin chitosan coatings., *26<sup>th</sup> International Conference on Chemistry*, Octombrie **2021**, online.
19. Buier, R.H., Szőke, K., **Szabó, G.**, Mureşan, L.M: Electrochemical study of chitosan coated Zn substrates, doped with ZnO nanoparticles previously modified with Rb phenothiazine carboxylate, "*73<sup>th</sup> Annual Meeting International Society of Electrochemistry*", **2022**, online.
20. Ovari, T.R., **Szabó, G.**, Mureşan, L.M.: Modified graphene-oxide reinforced epoxy coating on Zn with self-cleaning abilities, "*73<sup>th</sup> Annual Meeting International Society of Electrochemistry*", **2022**, online.

## **Conferințe studențești (studenți îndrumați)**

1. Szőke, Á.F., 17. Erdélyi Tudományos Diákköri Konferencia (ETDK), mai **2014**, Cluj-Napoca.
2. Szőke, Á.F., 32. Országos Tudományos Diákköri Konferencia (OTDK), aprilie **2015**, Veszprém, Ungaria.
3. Simó, Z., Szőke, Á., Albert, E., Hórvölgyi, Z., **Szabó, G.**, Mureșan, L., *15<sup>th</sup> Students for Students International Conference*, aprilie **2018**, Cluj-Napoca.
4. Both, J., Szőke, Á., Albert, E., Hórvölgyi, Z., Mureșan, L., **Szabó, G.**, *15<sup>th</sup> Students for Students International Conference*, aprilie, **2018**, Cluj-Napoca.
5. Gyéresi, K.: *Erdélyi Tudományos Diákköri Konferencia (ETDK)*, mai **2019**, Cluj-Napoca.
6. Simo, Z.: *Országos Tudományos Diákköri Konferencia (OTDK)*, martie **2019**, Budapest, Ungaria.
7. Fülöp, P.: *Erdélyi Tudományos Diákköri Konferencia (ETDK)*, octombrie **2020**, online.
8. Trufan, B.: *Erdélyi Tudományos Diákköri Konferencia (ETDK)*, octombrie **2021**, online.
9. Gyéresi K.: *Országos Tudományos Diákköri Konferencia (OTDK)*, mai **2021**, online.
10. Szőke, K.: *Erdélyi Tudományos Diákköri Konferencia (ETDK)*, mai **2022**, Cluj-Napoca.
11. Trufan B.: *Országos Tudományos Diákköri Konferencia (OTDK)*, aprilie **2023**, Szeged, Ungaria.