

MEMORIU ȘTIINȚIFIC

Drd. Lincu Daniel-Florian

Studii de doctorat

Perioada: 2022-2025

Conducător științific: Prof. Dr. Ing. Berger Daniela-Cristina

Domeniu: Inginerie Chimică

Titlul tezei de doctorat: Studiul unor fenomene de nanoconstrângere în matrici mezoporoase anorganice

Activitate științifică

A. Lista de lucrări științifice (articole în reviste sau volume)

1. R.-A. Mitran, S. Ioniță, D. Lincu, D. Berger, C. Matei, A Review of Composite Phase Change Materials Based on Porous Silica Nanomaterials for Latent Heat Storage Applications, *Molecules* 26(1) (2021) 241.
2. D. Lincu, S. Ioniță, O.C. Mocioiu, D. Berger, C. Matei, R.A. Mitran, Aluminum doping of mesoporous silica as a promising strategy for increasing the energy storage of shape stabilized phase change materials containing molten NaNO_3 : KNO_3 eutectic mixture, *Journal of Energy Storage* 49 (2022) 104188.
3. D. Lincu, S. Ioniță, B. Trică, D.C. Culita, C. Matei, D. Berger, R.-A. Mitran, Bismuth-mesoporous silica-based phase change materials for thermal energy storage, *Applied Materials Today* 29 (2022) 101663.
4. R.-A. Mitran, D. Lincu, D. Berger, C. Matei, FDU-12 cubic mesoporous silica as matrix for phase change materials using bismuth or stearic acid, *Journal of Thermal Analysis and Calorimetry* (2022).
5. S. Ionita, D. LINCUI, O.A. MOCIOIU, R.-A. MITRAN, C. MATEI, D. BERGER, Optimization of shape –stabilized phase change materials containing NaCl – NaBr – Na_2MoO_4 and mesoporous silica, *U.P.B. Sci. Bull.* 85(4) (2023).
6. D. Lincu, S. Ioniță, M. Deaconu, F. Papa, B. Trică, C. Matei, D. Berger, R.-A. Mitran, Optimizing nanocasting techniques for stable bismuth-mesoporous silica composites in thermal energy storage application, *Sustainable Materials and Technologies* 42 (2024) e01157.

A. Participări la conferințe/workshop-uri

1. Daniel Lincu, Simona Ionita, Mihaela Deaconu, Ana-Maria Brezoiu, Raul-Augustin Mitran, Cristian Matei, Daniela Berger. Phase change materials based on porous silica. *ECerS Conference for Young Scientists in Ceramics - 14th Edition, Novi Sad, Serbia. 2021.*
2. Daniel Lincu, Raul-Augustin Mitran, Simona Ionita, Mihaela Deaconu, Cristian Matei, Daniela Berger. Mesoporous silica-based phase change materials for thermal energy storage. *PRIOCHEM "Priorities of Chemistry for a Sustainable Development", Bucharest, Romania. 2021.*
3. Daniel Lincu, Raul-Augustin Mitran, Simona Ionita, Mihaela Deaconu, Florica Papa, Cristian Matei, Daniela Berger. Mesoporous silica–metal composites for thermal energy storage. *20th International Balkan Workshop on Applied Physics and Materials Science, Universitatea Ovidius, Constanta, 2022.*

B. Proiecte de cercetare științifică

1. "Nanocompozite metal-ceramice: materiale de stocare de energie termica de ultima generatie", TE166/2020, Asistent cercetare științifică, 15.11.2020-30.09.2022.

Student-doctorand

