

**Dissemination of results – Stage II/2023**  
**Project PCE no. 117/2023**

**Deliverables:** 2 ISI papers + 1 submit, a patent application, 6 participations in conferences

**ISI Papers**

1. Brezoiu, AM; Deaconu, M.; Mitran, RA.; Prelipcean, AM ; Matei, C; Berger, D.\*, Optimisation of Polyphenols Extraction from Wild Bilberry Leaves-Antimicrobial Properties and Stability Studies, Molecules 23 (2023) 5795, eISSN 1420-3049, DOI10.3390/molecules28155795, WOS:001046268200001(zona Q2)
2. Deaconu, M.; Prelipcean, AM; Brezoiu, AM ; Mitran, RA ; Isopencu, G ; Matei, C ; Berger, D\*, Novel Collagen-Polyphenols-Loaded Silica Composites for Topical Application, Pharmaceutics 15 (2023), 312, eISSN 1999-4923, doi:10.3390/pharmaceutics15020312, WOS:000940774300001 (zona Q1)
3. A-M. Brezoiu, M. Deaconu, R.-A. Mitran, N.K. Sedky, I.S. Voicu, L. Ziko, C. Matei, D. Berger, Antioxidant and Anti-inflammatory Properties of Wild Bilberry Fruit Extracts Embedded in Mesoporous Silica-type Supports. A stability Study, Antioxidants (trimis).

**Patent Application**

A2023/00731 - Materiale compozite ce conțin extract polifenolic și silice mezoporoasă modificată cu nanoparticule anorganice cu proprietăți antibacteriene pentru aplicații topice. procedeu de obținere, inventors: BERGER Daniela-Cristina, BREZOIU Ana-Maria-Claudia, DEACONU Mihaela, MATEI Cristian, PRELIPCEAN Ana-Maria

**Conferences**

1. D. Berger, M. Deaconu, A.-M. Brezoiu, S. Ioniță, A.-M. Prelipcean, C. Matei, I. Irimescu, M. Mihailescu, R.-C. Popescu, D.-I. Savu, *Composite materials based on functionalized mesoporous silica with biomedical applications*, 21st International Balkan Workshop on Applied Physics and Materials Science, Constanta, Romania 11-14 July 2023 (invited lecture)
2. M. Deaconu, A.-M. Prelipcean, A.-M. Brezoiu, R.-A. Mitran, C. Matei, D. Berger, *Collagen-based materials with wild bilberry extract for wound healing*, 3<sup>rd</sup> International Conference on Bioengineering and Polymer Science, Bucharest, Romania (oral presentation)
3. Abduraman, A.-M. Brezoiu, M. Deaconu, S. Ioniță, N. Sedky, C. Matei, L. Ziko, D. Berger, *Studies on polyphenols extraction and their embedding in porous supports*, International Conference of Physical Chemistry, ROMPHYSCHM 17, September 25-27, 2023, Bucharest, Romania (poster).
4. D. Berger, M. Deaconu, A.-M. Brezoiu, A.-M. Prelipcean, S. Ioniță, R.-A. Mitran, C. Matei, Mesoporous silica-based composite materials for therapeutic applications, International Conference of Physical Chemistry, ROMPHYSCHM 17, September 25-27, 2023, Bucharest, Romania (keynote presentation)
5. M. Ghiuță, M. Deaconu, A.-M. Brezoiu, A.-M. Prelipcean, R.-A. Mitran, C. Matei, D. Berger, Pristine and modified hollow mesoporous silica spheres as carriers for polyphenols, XIX<sup>th</sup> edition of the International Symposium "Priorities of Chemistry for a Sustainable Development" PRIOCHEM 2023, Bucharest, 11-13 October 2023 (oral presentation).
6. I.-Ş. Voicu, Ana-Maria Brezoiu, M. Deaconu, N. K. Sedky, C. Matei, L. Ziko, D. Berger, Encapsulation of polyphenolic extracts from vaccinium myrtillus in functionalized mesoporous silica with anti-inflammatory activity, XIX<sup>th</sup> edition of the International Symposium "Priorities of Chemistry for a Sustainable Development" PRIOCHEM 2023, Bucharest, 11-13 October 2023 (oral presentation).