

## Seznam publikací za rok 2023 / List of publications in 2023

### Recenzované s IF - vyšlé

1. **Š. Rýglová, M. Braun, T. Suchý, M. Hříbal, M. Žaloudková**, L. Vištějnová, The investigation of batch-to-batch variabilities in the composition of isolates from fish and mammalian species using different protocols, *Food Research International* 169 (2023) 112798. <https://doi.org/10.1016/j.foodres.2023.112798> (IF 8,1; D10)
2. **M. Šupová, T. Suchý**, H. Chlup, M. Šulc, T. Kotrč, L. Šilingová, **M. Žaloudková, Š. Rýglová, M. Braun**, D. Chvátil, Z. Hrdlička, M. Houška. The electron beam irradiation of collagen in the dry and gel states: The effect of the dose and water content from the primary to the quaternary levels, *International Journal of Biological Macromolecules* 253 (2023) 126898. <https://doi.org/10.1016/j.ijbiomac.2023.126898> (IF 8,2; D10)
3. C.M. Saratti, N. Scotti, A. Comba, J. Bijelic-Donova, **T. Suchý**, M. Abdelaziz, J.G. Leprince, G.T. Rocca. Exploring the influence of placing bi-directional E-glass fibers as protective layer under a CAD-CAM resin composite on the fracture pattern, *Dental Materials* 39 (2023) 986-993. <https://doi.org/10.1016/j.dental.2023.09.003> (IF 5,0; D10)
4. I. Perná, T. Hanzlíček, A. Lučaník, **M. Šupová**. Geopolymer-based grinding stones utilizable in metal machining, *Construction and Building Materials* 363 (2023) 129869, <https://doi.org/10.1016/j.conbuildmat.2022.129869> (IF 7,4; D10)
5. **M. Šupová, T. Suchý**, H. Chlup, J. Štípek, R. Žitný, A. Landfeld, J. Skočilas, **M. Žaloudková, Š. Rýglová, M. Braun**, J. Štancl, M. Houška, The comprehensive evaluation of two collagen gels used for sausage casing extrusion purposes: The role of the structural and mechanical properties, *Journal of Food Engineering* 343 (2023) 111387. <https://doi.org/10.1016/j.jfoodeng.2022.111387> (IF 5,5; Q1)
6. H. Chlup, **T. Suchý, M. Šupová**. The electron beam induced cross-linking of bovine collagen gels with various concentrations: The mechanical properties and secondary structure, *Polymer* 287 (2023) 126423. <https://doi.org/10.1016/j.polymer.2023.126423> (IF 4,6; Q1)
7. M. Houška, A. Landfeld, P. Novotná, J. Strohalm, **M. Šupová, T. Suchý**, H. Chlup, J. Skočilas, J. Štípek, **M. Žaloudková**, M. Šulc. Properties of Bovine Collagen as Influenced by High-Pressure Processing. *Polymers*. 2023; 15(11):2472. <https://doi.org/10.3390/polym15112472> (IF 5,0; Q1)
8. E. Filova, **M. Šupová**, A. Eckhardt, M. Vrbacky, A. Blanquer, M. Travnickova, J. Knitlova, **T. Suchý, S. Rýglová, M. Braun**, Z. Burdikova, M. Schätz, V. Jencova, M. Lisnenko, L. Behalek, R. Prochazkova, R. Sedlacek, K. Kubasova, L. Bacakova. Adipose-Derived Stem Cells in Reinforced Collagen Gel: A Comparison between Two Approaches to Differentiation towards Smooth Muscle Cells, *International Journal of Molecular Sciences*. 24(6) (2023) 5692. <https://doi.org/10.3390/ijms24065692> (IF 5,6; Q1)

### Evropský patent:

1. T. Grus, **T. Suchý, M. Šupová**, H. Chlup, J. Hartinger. Sandwich and composite collagen sponge for controlled release of active substances, and method of preparation thereof. EP 3 838 302, European Patent Office, *date of publication 23.08.2023*

2. T. Grus, **T. Suchý**, **M. Šupová**, H. Chlup, J. Hartinger. Composite collagen sponge for controlled release of active substances and method of preparation thereof. EP 22 170 293.9, European Patent Office, *intention to grant 26.10.2023*

**Užitný vzor:**

1. L. Bačáková, E. Filová, Š. Pražák, I. Vacková, **T. Suchý**, **M. Šupová**, J. Šepitka, R. Procházková, V. Jenčová, E. Kuželová Košťáková, M. Lisnenko, D. Lukáš, J. Valtera. Vyztužený kompozitní hydrogel s buňkami. [Reinforced composite hydrogel with cells.] 2023. Majitel: Fyziologický ústav AV ČR, Technická univerzita v Liberci, Ústav struktury a mechaniky hornin AV ČR, České vysoké učení technické v Praze, Krajská nemocnice Liberec. Datum udělení vzoru: 1.11.2023. Číslo vzoru: 37438.