

Lista Lucrarilor stiintifice:

DR. BEGY ROBERT-CSABA

Lucrari selectate:

1. **Begy R.-C.**, Savin C.-F., Süle D.-K., Nuhanovic M., Giagias E., Kovács T. **2022** *Radiological investigation of natural carbonated spring waters from Eastern Carpathians, Romania. Journal of Radioanalytical and Nuclear Chemistry* 331 (3), pp. 1439 – 1450. DOI: 10.1007/s10967-022-08195-3
2. **Begy R.-C.**, Savin C.-F., Timar-Gabor A. **2022** *Correction of the effects of carbon dioxide and hydrogen sulfide on electrostatic cell monitors measurements of radon in water. Journal of Environmental Chemical Engineering*, 10 (1), art. no. 107040. DOI: 10.1016/j.jece.2021.107040
3. **Begy R.-C.**, Savin CF, Kelemen S, Veres D, Muntean O-L, Malos CV, et al. (2021) *Investigation of the effect of anthropogenic land use on the Pănăzii Lake (Romania) catchment area using Cs-137 and Pb-210 radionuclides. PLoS ONE* 16(6): e0251603. <https://doi.org/10.1371/journal.pone.0251603>
4. **Begy, R.-C.**, Kelemen, S., Simon, H., Tănăselia, C. **2018** *The history of the sedimentation processes and heavy metal pollution in the Central Danube Delta (Romania). Geochronometria* 45(1), pp. 97-106
5. **Begy, R.-C.**, Simon, H., Kelemen, S., Preoteasa, L. **2018** *Investigation of sedimentation rates and sediment dynamics in Danube Delta lake system (Romania) by 210Pb dating method. Journal of Environmental Radioactivity* 192, pp. 95-104
6. **Begy, R.C.**, Simon, H., Vasilache, D., Kelemen, S., Cosma, C. **2017** *¹³⁷Cs contamination over Transylvania region (Romania) after Chernobyl Nuclear Power Plant Accident. Science of the Total Environment* 599-600, pp. 627-636
7. **Begy, R.C.**, Kovacs, T., Veres, D., Simon, H., **2016**. *Atmospheric flux, transport and mass balance of ²¹⁰Pb and ¹³⁷Cs radiotracers in different regions of Romania. Appl. Radiat. Isot.* 111, 31-39.
8. **Begy, R.-C.**, Preoteasa, L., Timar-Gabor, A., Mihaiescu, R., Tanaselia, C., Kelemen, S., Simon, H., **2016**. *Sediment dynamics and heavy metal pollution history of the Cruhlig Lake (Danube Delta, Romania). J. Environ. Radioact* 153, 167-175.
9. **Begy, R.C.**, Dumitru, O.A., Simon, H., Steopoaie, I., **2015**. *An improved procedure for the determination of ²¹⁰Po by alpha spectrometry in sediments samples from Danube Delta. J. Radioanal. Nucl. Chem.* 303 (3), 2553-2557.
10. **Begy, R.-C.**, Simon, H., Kelemen, S., Reizer, E., Preoteasa, L., **2015**. *Determination of sedimentation rates of a northern Danube Delta lake by ²¹⁰Pb method. Carpath. J. Earth Environ. Sci.* 10 (4), 191-194
11. **Begy, R.-C.**, Simon, H., Reizer, E., **2015**. *Efficiency testing of Red Lake protection dam on Rosu stream by ²¹⁰Pb method. J. Radioanal. Nucl. Chem.* 303 (3), 2539-2545.

12. **Begy, R.C.**, Timar-Gabor, A., Somlai, J., Cosma, C., **2011**. *A sedimentation study of St. Ana Lake (Romania) applying the ^{210}Pb and ^{137}Cs dating methods*. *Geochronometria* 38 (2), 93-100.

Teza de doctorat:

In domeniul Fizica, Fizica Nucleara in cadrul Facultatii de Stiinta si Ingineria Mediului, Universitatea Babeş-Bolyai, sub coordonarea Prof. Dr. Constantin Cosma. Titlu: “Studii de mediu prin utilizarea radionuclidului Pb-210”

Brevete:

Sistem automatizat de monitorizare si control a concentratiilor radonului rezidential”, autori Robert Begy, Constantin Cosma, Alexandra Cucos (Dinu), Carlos Sainz.Nr. 129264/G01T 1/16 http://www.osim.ro/publicatii/brevete/bopi_2014/bopi_inv_02_2014.pdf

Carte:

Constantin Cosma, Tiberius Dicu, Alexandra Dinu, **Robert Begy**, *Radonul si cancerul pulmonar* Editura Quantum, 2009, ISBN: 978-973-88835-2-9

Articole Stiintifice:

- **R. Begy**, C. Cosma, Z. Horvath, **2009**. *Sediment accumulation rate in the “Red Lake” (ROMANIA) determined by Pb-210 and Cs-137 radioisotopes* **Rom. J. Phys.** 54, 9-10
- **Begy R.**, Cosma C., **Timar A.**, **2009**. *Recent changes in Red Lake (Romania) sedimentation rate determined from depth profiles of ^{210}Pb and ^{137}Cs radioisotopes*. *Journal of Environmental Radioactivity*, nr. 100, 644-648.
- <http://www.sciencedirect.com/science/article/pii/S0265931X09001131>
- **Begy R. CS.**, Dreve S., Timar-Gabor A. , Rusu O.A., Cosma C., 2012. *Measurement of radium content in some spring waters from Romania*. *Environmetal Engineering and Management Journal*, vol 11, nr 2, 1005-1009.
- **R. Cs. Begy**, J. Somlai, T. Kovacs, O. A. Dumitru (Rusu) and C. Cosma *The activity concentration of ^{210}Po in romanian commercial cigarettes and the radiation exposure estimation derived from their regular consumption*. *Radiation Protection Dosimetry* **2013**. , pp. 1–5. doi:10.1093/rpd/nct121
- **Begy R.-C.**, Simon H., Kelemen S. *^{210}Po inhalation due to smoking: a dose estimation*. *Journal of Radioanalytical and Nuclear Chemistry* **2015**. Vol 306/1.1 257-261p
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- Florică, Ș., Burghele, B.-D., Bican-Brișan, N., **Begy, R.**, Codrea, V., Cucuș, A., Catalina, T., Dicu, T., Dobrei, G., Istrate, A., Lupulescu, A., Moldovan, M., Niță, D., Papp, B., Pap, I., Szacsvai, K., Țenter, A., Sferle, T., Sainz, C. 2020. The path from geology to indoor radon **Environmental Geochemistry and Health**, 42 (9), pp. 2655-2665
- Timar-Gabor, A., Chruścińska, A., Benzid, K., Fitzsimmons, K.E., **Begy, R.**, Bailey, M., 2020. Bleaching studies on Al-hole ([AlO₄/h]O) electron spin resonance (ESR) signal in sedimentary quartz **Radiation Measurements**, 130, art. no. 106221
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- Hutchinson, S.M. , Akinyemi, F.O. , Mîndrescu, M. , **Begy, R.** , Feurdean, A. *Recent sediment accumulation rates in contrasting lakes in the Carpathians (Romania): impacts of shifts in socio-economic regime* (Article in press) **Regional Environmental Change** 17 February 2015, 13p
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- Cosma C., Apostu A., Georgescu D., **Begy R.** *Evaluation of the radioactivity for different types of cements used in Romania, 2009 **Romanian Journal of Materials**, Vol. 39, 134-139p*

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Semăntură

Conf. dr. Begy Robert-Csaba