



Contribution ID: 8

Type: Poster

Translocation of radioactivity from substrate to macromycetes in some mining areas

Monday, 19 April 2010 11:45 (20 minutes)

The present study follows the extent of translocation radioactivity from substrates of uranium and sulphur mining area to the macromycetes spontaneously occurred during 2008-2009. To this end, radioactivity measurements (gross $\alpha+\beta$, ^{226}Ra , and ^{137}Cs) on both macromycetes and their substrates were made. The results obtained were confirmed by FT-IR spectroscopy, evidencing the presence of characteristic bands around of 910 cm^{-1} , corresponding to the asymmetric stretching vibration of the uranyl unit and to the interaction between the UO_2^{2+} ions and the group belonging to various cellular components.

Primary authors: Prof. TANASE, Catalin ("A.I. Cuza University", Department of Biology, 20A –Carol I Blvd., 700505 –Iasi, Romania); Prof. POPA, Karin ("A.I. Cuza University", Department of Chemistry, 11 –Carol I Blvd., 700506 –Iasi, Romania)

Co-authors: Prof. OPREA, Adrian ("A.I. Cuza University", Department of Biology, 20A –Carol I Blvd., 700505 –Iasi, Romania); Prof. PUI, Aurel ("A.I. Cuza University", Department of Chemistry, 11 –Carol I Blvd., 700506 –Iasi, Romania); Dr BIRSAN, Ciprian (A.I.Cuza University, Department of Biology, 20A-Carol I Blvd.;700505-Iasi, Romania)

Presenter: Prof. POPA, Karin ("A.I. Cuza University", Department of Chemistry, 11 –Carol I Blvd., 700506 –Iasi, Romania)

Session Classification: Poster Session - Radionuclides in the Environment, Radioecology

Track Classification: Radionuclides in the Environment, Radioecology