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DESCRIPTION OF THE INTERACTIONS AND PROCESSES THAT ARE INVOLVED IN TC-99 MOVEMENT AND CYCLING

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# DESCRIPTION OF THE INTERACTIONS AND PROCESSES THAT ARE INVOLVED IN TC-99 MOVEMENT AND CYCLING

## **Fact Sheet**



#### **Objective**

The biogeochemical cycle of technetium-99 has been studied and uncertainties associated with predictions have been investigated.

Research activities have been developed along 2 lines. Firstly, the study of bacterial growth as influenced by pertechnetate at different concentrations. Complementary to this approach, the search and identification of bacterial strains with properties of reducing and/or accumulating technetium 99 have been undertaken. Secondly, in order to describe quantitatively the movement of technetium 99 as pertechnetate through soils, the calibration of experimental method to study its sorption to soils has been investigated.

A study is being made of the biogeochemical cycle of technetium-99 and the uncertainties associated with predictions.

Firstly, the study of bacterial growth as influenced by pertechnetate at different concentrations was undertaken. Complementary to this approach, the search for and identification of bacterial strains with properties of reducing and/or accumulating technetium-99 was conducted.

Secondly, in order to describe quantitatively the movement of technetium-99 as pertechnetate through soils, the calibration of an experimental method to study its sorption to soils was investigated.

1. MODELLING OF TECHNETIUM MOVEMENT IN SOIL.

2. STUDY OF THE BIOGEOCHEMICAL CYCLE OF TC-99; UNCERTAINTIES ASSOCIATED WITH PREDICTIONS.

#### Fields of science (EuroSciVoc) 3

natural sciences > chemical sciences > inorganic chemistry > transition metals

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#### Programme(s)

<u>FP1-RADPROT 6C - Multiannual research and training programme (Euratom) in the field of radiation</u> <u>protection, 1985-1989</u>

## Topic(s)

Data not available

#### Call for proposal

Data not available

#### **Funding Scheme**

CSC - Cost-sharing contracts

#### Coordinator

#### UNIVERSITE CATHOLIQUE DE LOUVAIN

EU contribution

No data

Total cost

No data

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