

งานพัฒนา เทคนิคการวัด

กลุ่มพัฒนาด้านความปลอดภัย

STRONTIUM-90 ANALYSIS

Sr-90 is a pure beta emitting nuclide, known as one of hazardous contaminants in the environment. It has a long physical half-life of 28.74 years and its chemical properties are similar to calcium that it is easy to deposit in bone.



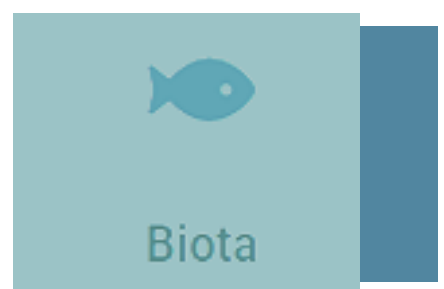
SEAWATER



A method of strontium monitoring of seawater around the Gulf of Thailand and Andaman using HDEHP extraction method. The Sr-90 activity is determined by liquid scintillation counting.

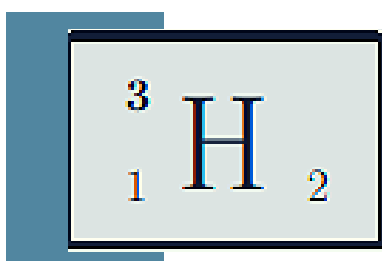
BIOTA (SEAFOOD)

The method of strontium in biota has been developed for the seawater methods. The Sr-90 activity is used liquid scintillation counting method.



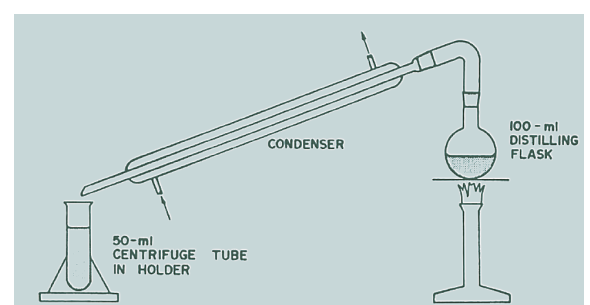
TRITIUM ANALYSIS

Tritium is a low beta emitter, it is not dangerous externally but it can be a radiation hazard when inhaled, ingested and absorbed through the skin. Tritium precluded long term from environmental for 12.8 years.



SEAWATER, WATER

Tritium measurement is an important factor in the determination of specific activity ex. concentration of sample, method to purify of sample, ratio of sample to scintillation cocktail, type of vial, type of scintillation etc.



PROFICIENCY TESTING

IAEA has been providing support of proficiency tests in seawater; IAEA-RML

IAEA-RML 2019	
Nuclide	Results
H-3	Not Accepted
Cs-134	Accept
Cs-137	Warning
Sr-90	Not Accepted

