

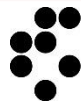


Radium in water - introduction

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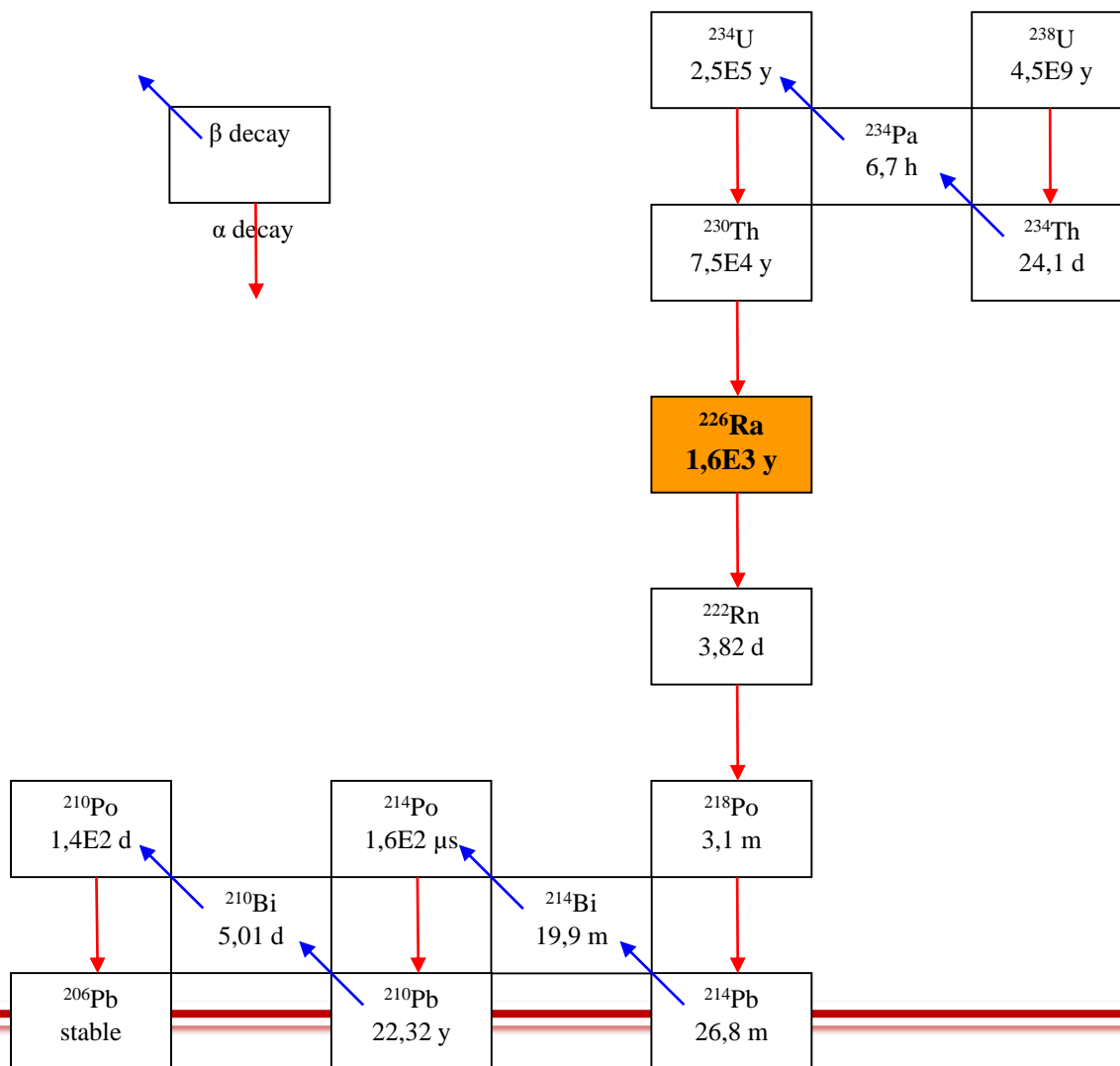
Radium - occurrence

- Discovered by Marie Skłodowska Curie and Pierre Curie in 1898
- Present in uranium and thorium ore

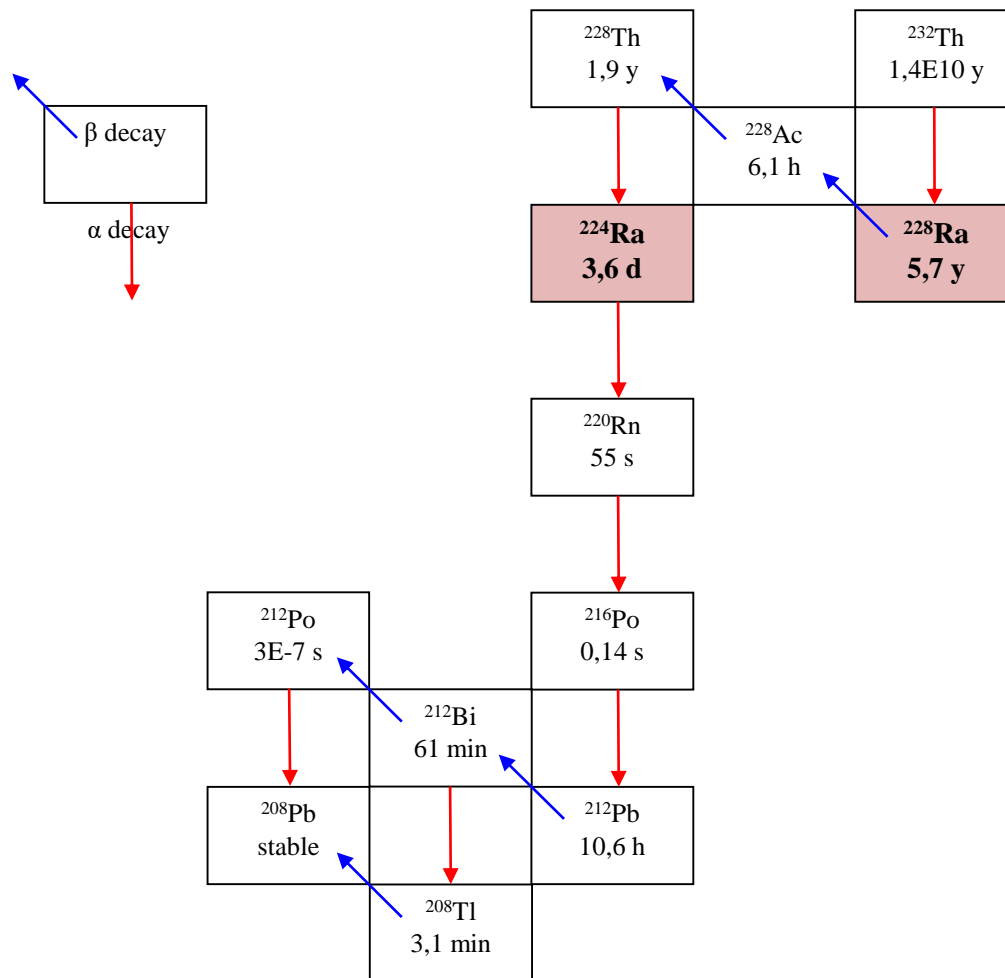


- The name from latin „radius“, meaning ray

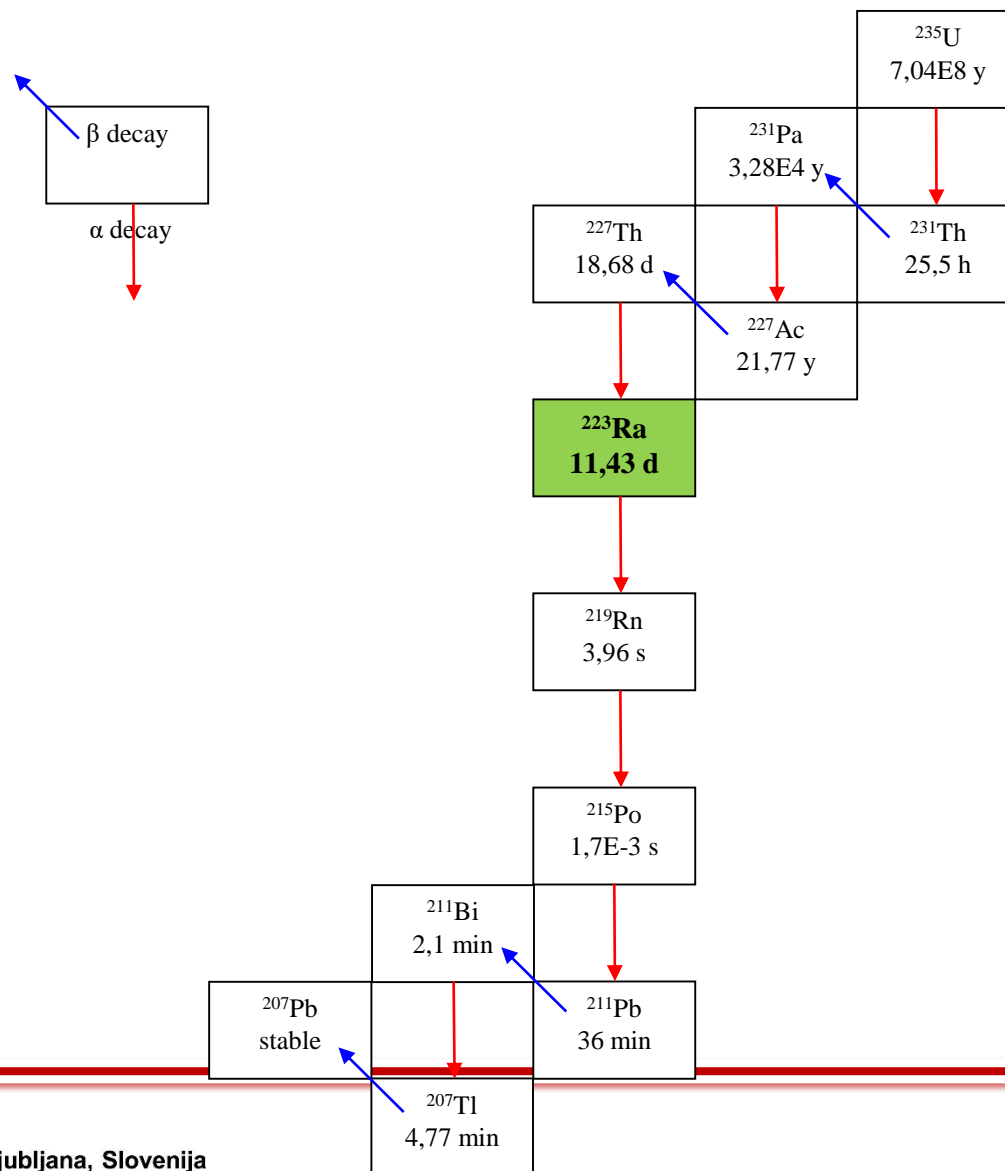
Radium – occurrence in uranium decay chain



Radium – occurrence in thorium decay chain



Radium – occurrence in actinium decay chain

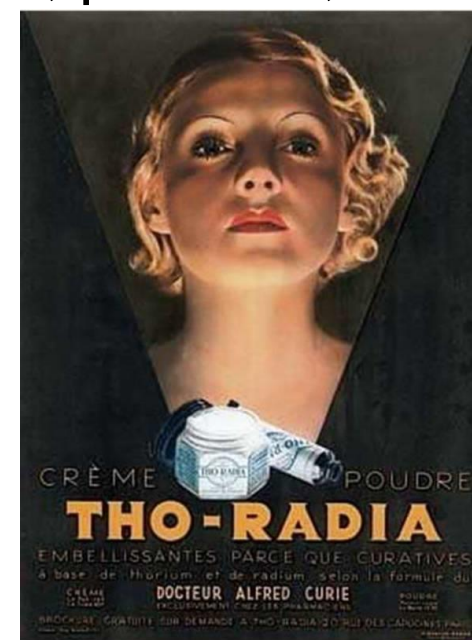


Radium - use

- Historic
Luminescen paint



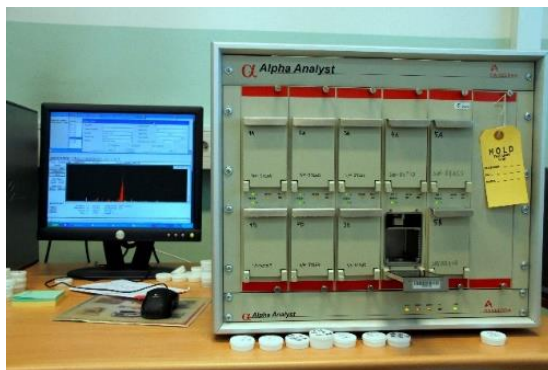
toothpastes, powders, food additives



Cancer treatment (radium chloride or bromide)

Detection of Ra-226

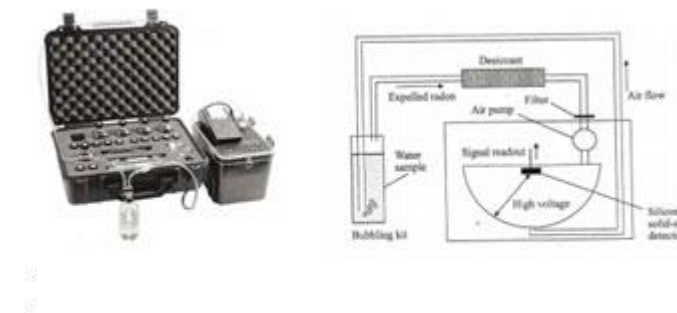
- Alpha spectrometry



- Gamma spectrometry



- Radon emanation



- Liquid scintillation counting



Detection of Ra-228

- Proportional counter



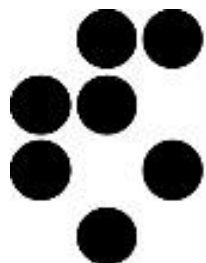
- Gamma spectrometry



- Liquid scintillation counting



meet cinch



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