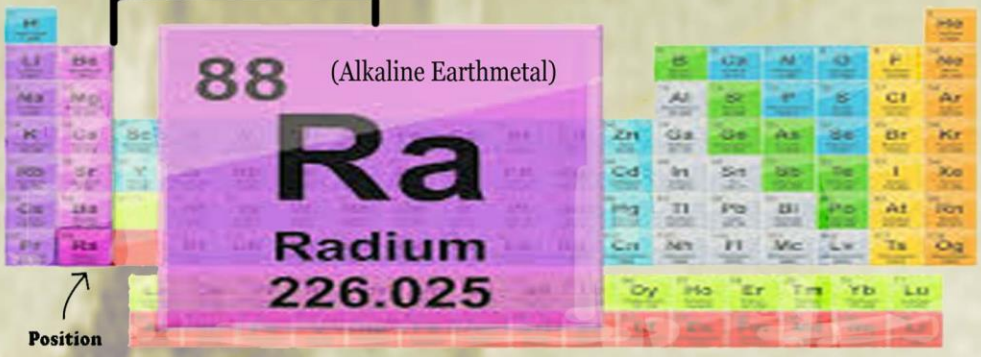
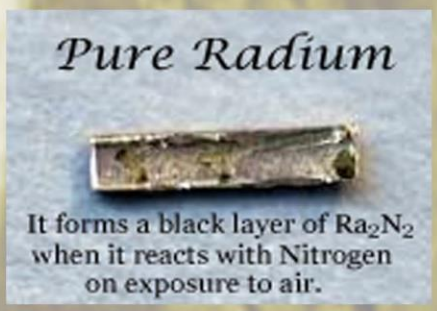


Discovery

BY Marie and Pierre curie

(In the form of $RaCl_2$, extracted from uraninite)

Chemical Properties



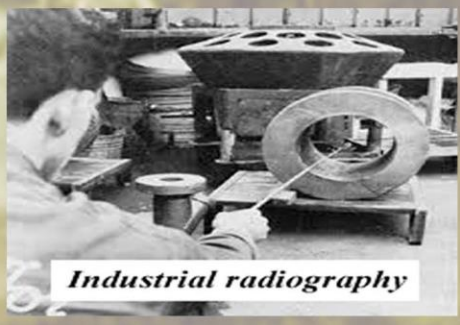
- Radioactive
- Highly reactive
- Forms mostly ionic compounds
- Always exhibits its group oxidation state of +2
- Ra^{2+} Cation – highly basic and does not form complexes readily

33 Isotopes

- All radioactive
- Have mass numbers from 202 to 234
- Most stable one - ^{226}Ra – half life of 1600 years and decays into radon gas
- Most have a half life of under a minute.

Uses

- Biologists used radium to induce mutations and study genetics.
- The isotope ^{223}Ra is used in medicine as a cancer treatment.
- The isotope ^{226}Ra is used in nuclear reactors
- Radium is used as a radiation source in industrial radiography devices to check for flawed metallic parts.



Highly toxic

Exposure to higher levels of radium over a long period of time is detrimental to human health and has been known to cause many defects. Handling of radium has been blamed for Marie Curie's death.

As radium decays into radon, it becomes even more dangerous. Being a gas, radon can enter into our body with ease.