

Radioactive decay

Radioactive decay is a phenomenon in which unstable atoms emit their energy in the form of particles or electromagnetic waves. It is a random event, so we are not able to predict what core and when it will transform. Radioactive decay is determined by the so-called **decay constant**, which has a different value for each radioisotope. There are 3 basic types of decay – alpha, beta and gamma.

Table showing the characteristics of individual types of decay:

	character of the elements	emitted particles	radiation character	spectrum type	absorption	degree of ionization in the organism
alpha decay	heavy and naturally radioactive	alpha particle (helium)	it often deviates	linear	paper, layer of air	big
beta decay	light (artificial radionuclides)	electron neutrino	it often deviates	continuous	aluminum sheet	medium
gamma decay	photons emitted by the nucleus	photons	it does not deviate	linear	lead, duralumin	weak

Links

Related Articles

- Effective, physical and biological half-life

Resources

- BENEŠ, Jiří – JIRÁK, Daniel – VÍTEK, František. *Základy lékařské fyziky*. 4. edition. nakladatelství Karolinum, 2015. ISBN 978-80-246-2645-1.

