Activity of radioactive substance

Rate of decay of radioactive substance

Literal mathematical Expression of activity of radioactivity substance

$$Activity = \frac{dN}{dt}$$

Derivation for expression of activity of radioactive substance

- $$R_0 = (\frac{dN}{dt})_{t=0} = -\lambda N$$
- $$R = (\frac{dN}{dt})_t = -\lambda N$$
- $$= \lambda N_0 e^{-\lambda t}$$
- $$R = R_0 e^{-\lambda t}$$

Expression for equation of activity of radioactive substance

- $$R = R_0 e^{-\lambda t}$$

List of units of radioactivity

- Curie
- Rutherford
- Bequerel

Notation of curie in radioactivity

Ci

Notation of rutherford in radioactivity

Rd

Notation of bequerel in radioactivity

Bq

One bequerel in radioactivity

Activity of one disintegration per second

One curie in radioactivity

$$3.7 \times 10^{10}$$

disintegration per second

One rutherford in radioactivity

$$10^{6}$$

disintegration per second