

## Dates of important chemical events of 50, 100, 150 ... years ago from 2000

### Radio Chemistry

#### 100 years ago

1900

- *Antoine-Henri Becquerel* demonstrates the identity of  $\beta$ -rays from radioactive elements with cathode-rays
- *Ernest Rutherford* discovers the radioactive gas thorium-emanation, being an isotope of radon ( $^{220}\text{Rn}$ )
- *Friedric Ernst Dom* discovers radium-emanation, also being an isotope of radon ( $^{222}\text{Rn}$ )
- *Sir William Crookes* discovers uranium X, being an isotope of thorium
- *Paul Villard* discovers  $\gamma$ -rays in the radio-active radiation of uranium
- *Ernest Rutherford* and *Harriet Brooks* discover the penetration of emanations through many materials, as cotton, cardboard, thin foils of aluminium, silver and gold
- *Julius Elster* and *Hans Geitel* demonstrate the conductivity of air by radio-active materials
- *Sjögren* and *Steubeck* treat surface skin cancer with X-rays
- *Otto Walkhoff* discovers the web destroying by radium

#### 50 years ago

1950

- *S G Thompson, Albert Ghiorso and Glenn Theodore Seaborg* synthesise the element berkelium (97) by bombardment of americium with  $\alpha$ -particles
- The same researchers with *K Street Jr* synthesise the element californium (98) by bombardment of curium with  $\alpha$ -particles