

## Use of Gammacell in chemistry and materials treatment

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The Gammacell is an ISOF instrumentation that allows continuous irradiations of samples or device with  $\gamma$  rays from  $^{60}\text{Co}$ , i.e. with high energy radiations. Chemical effects of high energy radiations, emitted by radioactive substances or generated by high-energy machines, concern a branch of chemistry called Radiation Chemistry. In this short talk will be discussed some research and applicative aspects.

Early basic research studies have significantly contributed to the understanding of the mechanisms of a wide variety of radical reactions and have suggested that radiolytic induced chemical changes could profitably be used from the applicative point of view. Some recent and interesting topics have been collected by Margherita Venturi (University of Bologna) and Mila D'Angelantonio (ISOF-CNR Bologna) in the volume "Application of Radiation Chemistry in the fields of Industry, Biotechnology and Environment", Springer. The reading of this volume could represent a good opportunity for students or young scientists who are looking at new areas for their research activities or researchers and professionals in other specialties who need information about radiation science applications.

**Tuesday 15 May 2018, 14:30**  
ISOF 12 – Meeting Room (1<sup>st</sup> floor)  
CNR Research Area  
Via Gobetti 101, Bologna