

## *Very Short Introduction*

# That's quite radical!

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What a lot of chemists across the world do for a living is to tame radicals. Yes, indeed, like the social connotation of the word, in the world of chemistry too, there are certain entities that are unstable, spontaneous, unpredictable and react extremely. One might not realize but we all make use of these entities. After all about half a billion dollars is spent per year in the US alone on sun screen lotions. And what do we buy them for? Here comes the sun and along comes the UV radiation. It is well known that exposure to UV radiation can give rise to free radicals in the body which in turn can cause skin cancer by damaging the DNA. But here is something that not many of us might know. Most of the *plastic fantastic* stuff around us (just looking around would suffice) are made of polymers that are the results of multi-million dollars industrial processes that only free radicals are capable of doing. And how is it that such a thing is possible? That is what one could call the power of science, the power of making something out of everything by the use of knowledge, innovation and determination. With the use of what we call catalysts, something that is recyclable and reusable, it is possible to produce free radicals at will and use them to do *radicalic* stuff indeed, but the desirable ones. In short, the radicals which cause cancer, when modified and used in a desirable way give rise to products that are indispensable to our lives today. Now, that is quite radical!