Updated Radical Reactions: New Developments in Medicinal Sciences

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Radical reactions have not often been employed in organic synthesis. This is due to the fact that radical species are generally too reactive to be controlled compared with ionic species. However, radical reactions are currently emerging as valuable tools for the construction of carbon-carbon bonds due to new radical species and precursors. The remarkable features of radical reactions are that they often give compounds that cannot be obtained in ionic reactions, protection of groups like the hydroxyl group is not needed, and the reactions occur in neutral conditions.

Furthermore, the use of water as a solvent for radical reactions opens up new possibilities for environmentally benign chemistry. These characteristics of radical reactions make them attractive in organic synthesis.

In this symposium, stimulating studies in the field of radical reactions will be presented and the role of radical chemistry in the practice of medicinal chemistry will be discussed.