

Ultrafast Radiation Chemistry

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The Radiation Chemistry and especially the pulse radiolysis technique, which enables the study of short-lived intermediates, are essential tools in the forefront of scientific progress and have been used for the elucidation of the mechanisms of many key processes. Here, the state of the art of the facilities used in radiation chemistry is described and actual hot topics are illustrated by experimental studies. In order to solve outstanding scientific problems the actual technical frontiers must often be overcome. We conclude with a wish list of characteristics that future laser driven particle facilities should provide to the communities of radiation chemistry and physics.