Synchrotron radiation & chemistry

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An outline of some applications of synchrotron radiation in chemistry research is drawn. The reported representative examples concern: i. catalysis; ii. materials; iii. model reactions. In the case studies presented, the use of synchrotron light is described and the advantages resulting from the complementary use of different experimental techniques are emphasized. Perspectives about the use of free-electron lasers for the investigation of ultra fast phenomena are also given.