

**DISSOCIATIVE ELECTRON ATTACHMENT IN MOLECULES
- NEEDS AND CURRENT STATUS OF AVAILABLE DATA**

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A compact historical overview of the evolution of understanding of dissociative electron attachment (DEA) in molecules as well as on the increasing body of studied molecular species will be presented. Some experimental ambiguities which persist until modern time will be emphasised and discussed. Finally, current status of DEA studies and needs as well as perspective for the future development will be given.

Dissociative electron attachment in molecules is one of classical binary electron molecule collision processes which have been studied with variable intensity since late fifties. The fact that DEA is a resonant process on one side and a rearrangement process on another, make it an interesting case for the theory development and also an important process in various environments. New needs in advanced applications, more detailed modelling codes and also, the development of new experimental techniques enhanced the interest for DEA in recent years. The fields of research which are currently driving this interest for DEA are studies of free electrons in biological environment, astrochemistry (recent discovery of anions in space and planetary atmospheres), sensitive compound selective detection techniques, edge plasma in tokamaks and various technological plasmas.