

ELECTRON TRANSFER IN ORGANIC FLUORINE CHEMISTRY

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A polemic will be delivered on the possible occurrence of electron transfer reactions in organic fluorine chemistry.

On the preparation side, transition metal fluorides (CoF₃, etc.) clearly involve electron transfer, electrochemical fluorination probably does, and a case can be made for it in some reactions of fluorine itself.

As far as reactions are concerned, there are examples of electron transfers in substitution reactions of fluorine compounds, and the occurrence of such mechanisms may be more frequent than is commonly believed. Possible electron transfers in elimination, addition, and other reactions will also be considered.