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SULPHONYL-ACTIVATED ELIMINATIONS: THE INVOLVEMENT OF CARBON LEAVING GROUPS

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Carbon leaving groups in elimination reactions are rarely observed except in formation of carbonyl groups. Their involvement in three types of reaction has been studied:

(i) Alkene-forming elimination:

$$G \xrightarrow{X} C -R \xrightarrow{Base} G \xrightarrow{X} + \overline{C} \xrightarrow{X} Y$$

where $G = RSO_2$ or $(RSO_2)_2$

(ii) Carbonyl-forming ring fission:

(iii) 1,3-Elimination:

$$RSO_2$$
 \xrightarrow{C} \xrightarrow{X} \xrightarrow{Base} RSO_2 + $\overline{C} \xrightarrow{X}$

Recent results on these systems will be reported and comparisons between carbon and other leaving groups in these systems will be drawn.