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## Phosphorus, Sulfur, and Silicon and the Related Elements

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## SYNTHETIC AND METABOLIC STUDIES OF SULPHAMATE SWEETENERS

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SYNTHETIC AND METABOLIC STUDIES OF SULPHAMATE SWEETENERS

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The synthesis of 20 new, aliphatic, alicyclic and heterocyclic sulphamates based on the cyclamate type structure i.e. cyclohexyl-sulphamate (I) is described. These and other compounds are used to extend our knowledge of the structure-activity (sweetness) relationships



I

governing sulphamate sweeteners.

<u>In vivo</u> feeding studies of rats and rabbits with some sweet sulphamates are described and the extent of metabolism of these sulphamates in the animal body has been assessed by gas-liquid chromatography.

Some details of the extraction and purification of the enzyme, sulphamatase, which is responsible for sulphamate metabolism, are given.