PREFACE

During the last few years, research work on resin finishing of textiles has been concerned mainly with the development of multi-functional finishes, that is, finishes in which two or more desirable properties are imparted to fabric in a single process. For a compound to act as a satisfactory multifinishing agent, it should not only have crosslinking groups but other atoms or functional groups which will impart the additional desirable property. Compounds containing halogens, phosphorus and nitrogen or a combination of these are effective in producing flame resistance and rot resistance. To be a satisfactory multifinishing agent, it should have as low a molecular weight as possible, since this will result in multiple finish being developed at a low level of add-on. In this connection, the methylol derivatives of substituted acid amides present interesting possibilities and seem to offer an attractive and simple way of imparting multiple finishes.

In order to ascertain the various types of influences on the methylolation of acid amides, the present study was undertaken. By means of model compounds, the relationship between chemical constitution and the rate and extent of methylolation has been studied.
With a view to evaluating these methylolated acid amides as textile crosslinking agents cotton poplin has been treated with methylol acid amides.