# APPLICATION OF CALIFORNIUM 252 PLASMA DESORPTION MASS SPECTROMETRY TO NATURAL PRODUCT CHEMISTRY

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Fast heavy ions i.e. fission fragments from a 252Cf-source, have been used to desorb and ionise organic molecules from a sample surface. Masses of the secondary ions have been determined by the time of flight technique. Some natural product samples namely Coumarine and Cholesterol have been tried out to demonstrate the usefulness of this technique in the field of natural product chemistry. In the case of Coumarine, peaks corresponding to (M+H)+ and (M-H)- ions were observed at respective positions on the spectra. The molecular peak with two other peaks on either side have been obtained for Cholesterol. One of the two peaks may be due to the hydration of the sample and the other is a fragment-ion, Further improvements are under way to the system which could increase the upper limit of the molecular weight range which could be handled by this technique as well as its resolution.