SYNTHETIC STUDY OF SALINOMYCIN
(SYNTHESIS OF C_{18}-C_{29} FRAGMENT)

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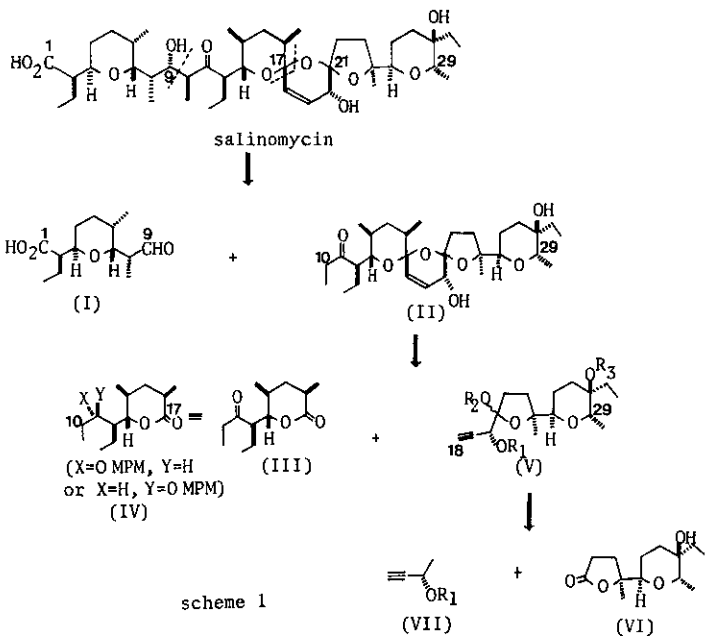
With regard to our continuing investigation in the total synthesis of salinomycin , a polyether ionophore antibiotic, preparation of the necessary three fragments, (I), (IV), (V) for the synthesis of salinomycin was accomplished.

Synthetic plane of salinomycin was shown in scheme 1. As reported in this congress last year, we already prepared C_1- C_9 fragment(I), C_{10}- C_{17} fragment(IV) and C_{21}- C_{29} part(VI) of the C_{18}- C_{29} fragment(V). Now the remaining problem for the introduction to the C_{21}-position of three carbon unit involving C_{20} hydroxy group was dissolved by means of Sharpless asymmetric epoxidation. In this stage we succeeded in connecting right fragment(V) with middle fragment(IV). Furthermore synthesis toward fragment(II) involving C_{18}- C_{21} bisspiroketal ring system was now in progress.



scheme 1