

## SYNTHETIC STUDY OF SALINOMYCIN

( SYNTHESIS OF C<sub>18</sub>-C<sub>29</sub> 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<sub>1</sub>-C<sub>9</sub> fragment(I), C<sub>10</sub>-C<sub>17</sub> fragment(IV) and C<sub>21</sub>-C<sub>29</sub> part(VI) of the C<sub>18</sub>-C<sub>29</sub> fragment(V). Now the remaining problem for the introduction to the C<sub>21</sub>-position of three carbon unit involving C<sub>20</sub> 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<sub>18</sub>-C<sub>21</sub> bisspiroketal ring system was now in progress.

