

SPECTROPHOTOMETER AIDED KINETIC AND MECHANISTIC STUDY OF OXIDATION OF ESMOLOL BY CERIUM (IV) IN AQUEOUS SULPHURIC ACID MEDIUM

Ram Gopal Amballa^{1,2*}, Ravi Kumar Ganta², Nowduri Annapurna²

¹ Dr V S Krishna Govt. Degree (A) & PG College, Visakhapatnam, AP, 530013, India

² Dept. of Engg. Chemistry, AUCE (A), Andhra University, Visakhapatnam, AP, 530003, India

E-mail: ram.fdps@cea.uvsp.edu.in, rag9srk@gmail.com

Contact number: 9441247706

SUPPLEMENTARY INFORMATION/ SUPPORTING INFORMATION

- I. IR spectrum of the main product, 3-(4-(2-hydroxy-3-oxopropoxy) phenyl) propanoate extracted with ether

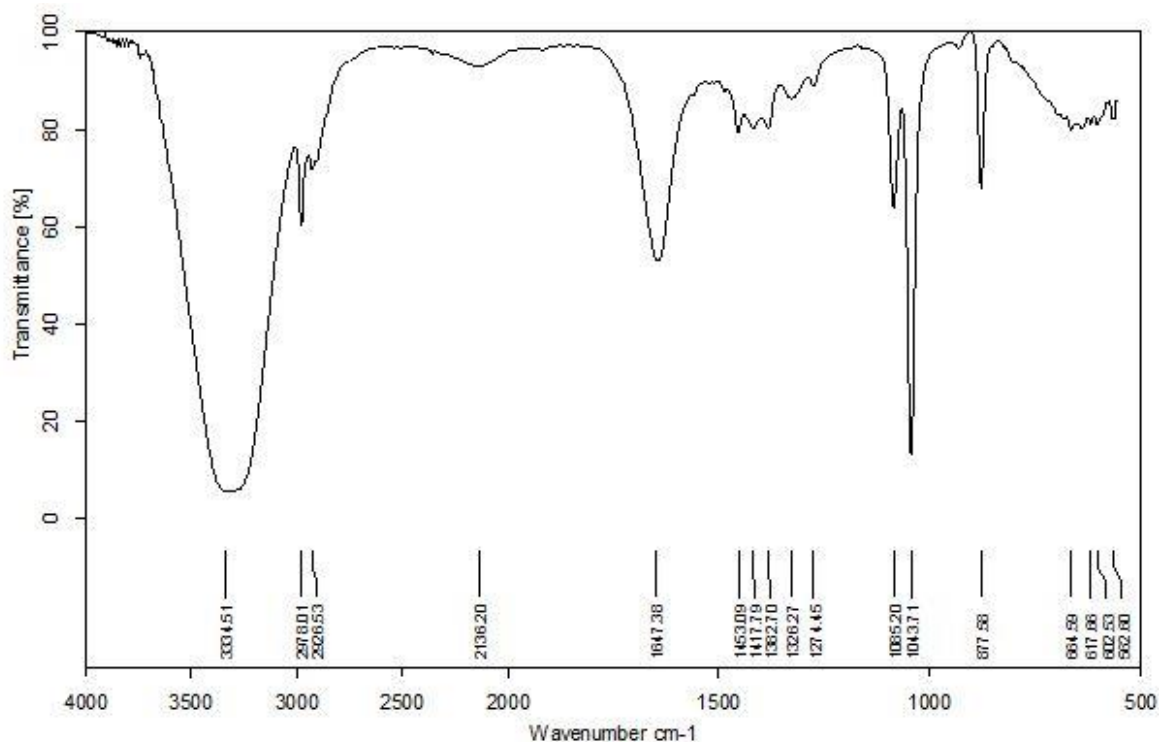


Fig. 1 IR spectrum of 3-(4-(2-hydroxy-3-oxopropoxy) phenyl) propanoate extracted with ether

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II. LC-MS spectrum of the main product, 3-(4-(2-hydroxy-3-oxopropoxy) phenyl) propanoate extracted with ether

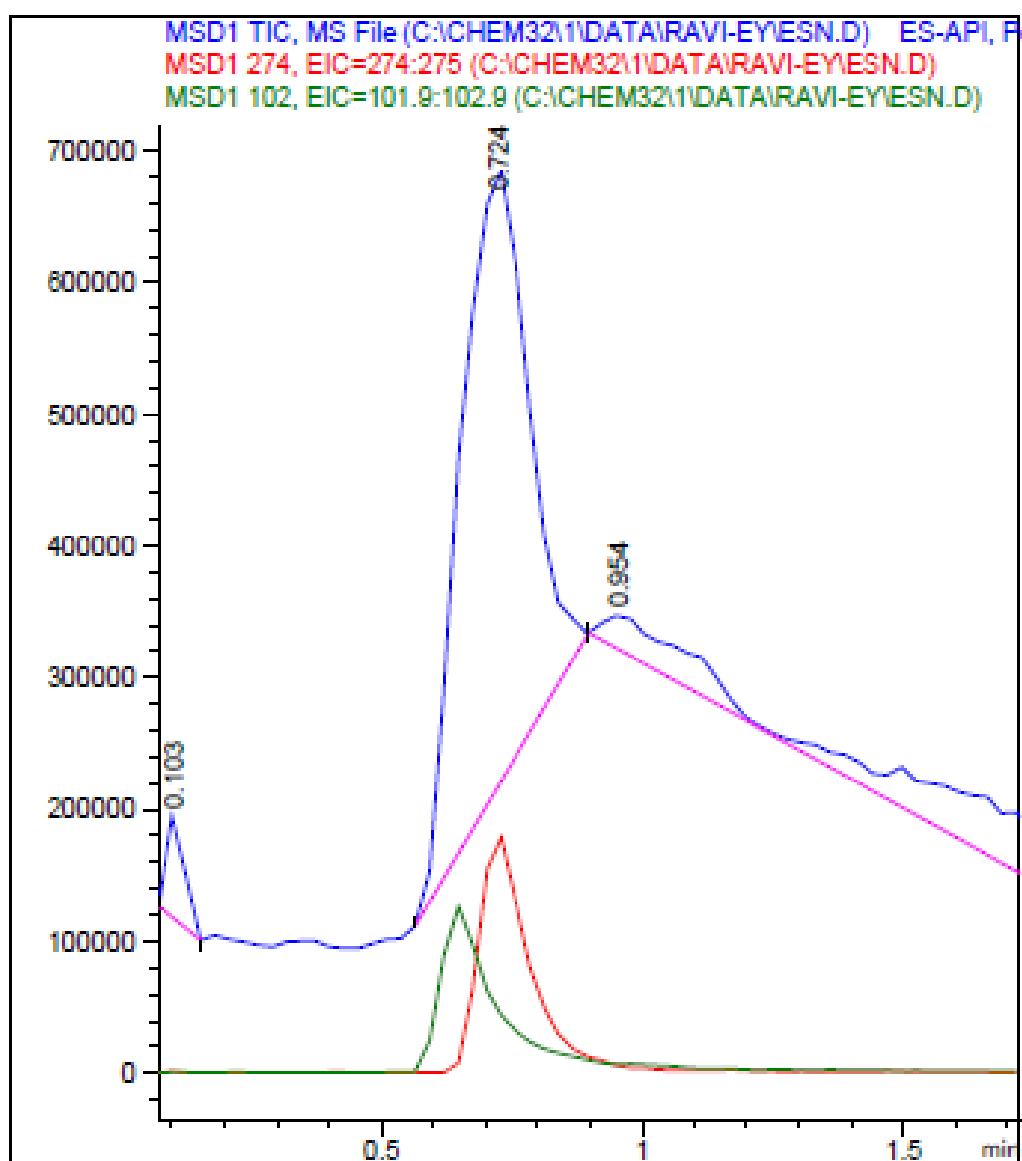


Fig. 2 Showing LC major fraction at 0.724 min after injection of 10 μ L of the product sample extracted with ether

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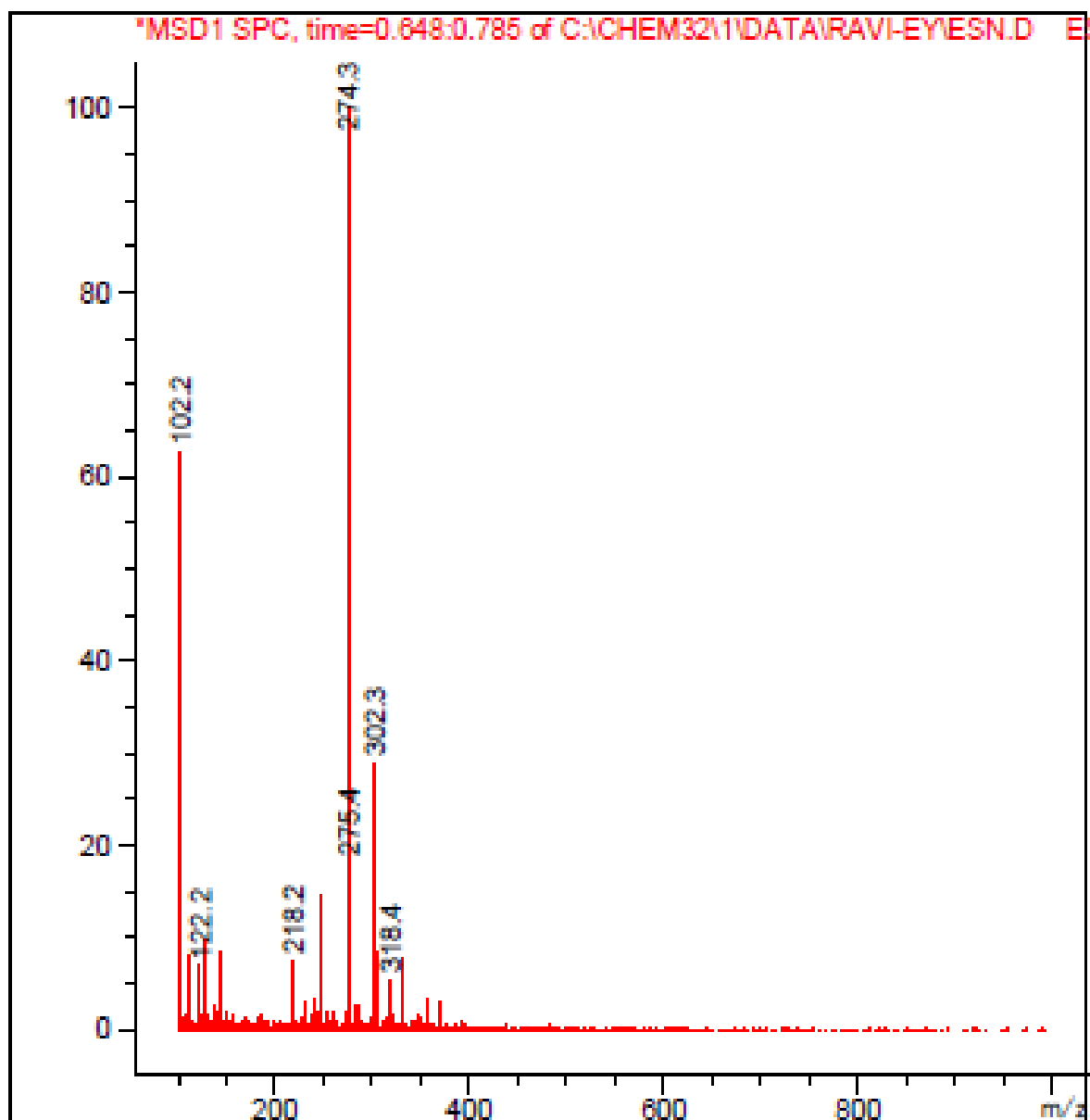


Fig. 3 Showing the sodium adduct molecular ion peak $(M + Na)^+$ & $(M-H + Na)^+$ at 275 & 274 amu respectively of the ES-API mode LC-MS.

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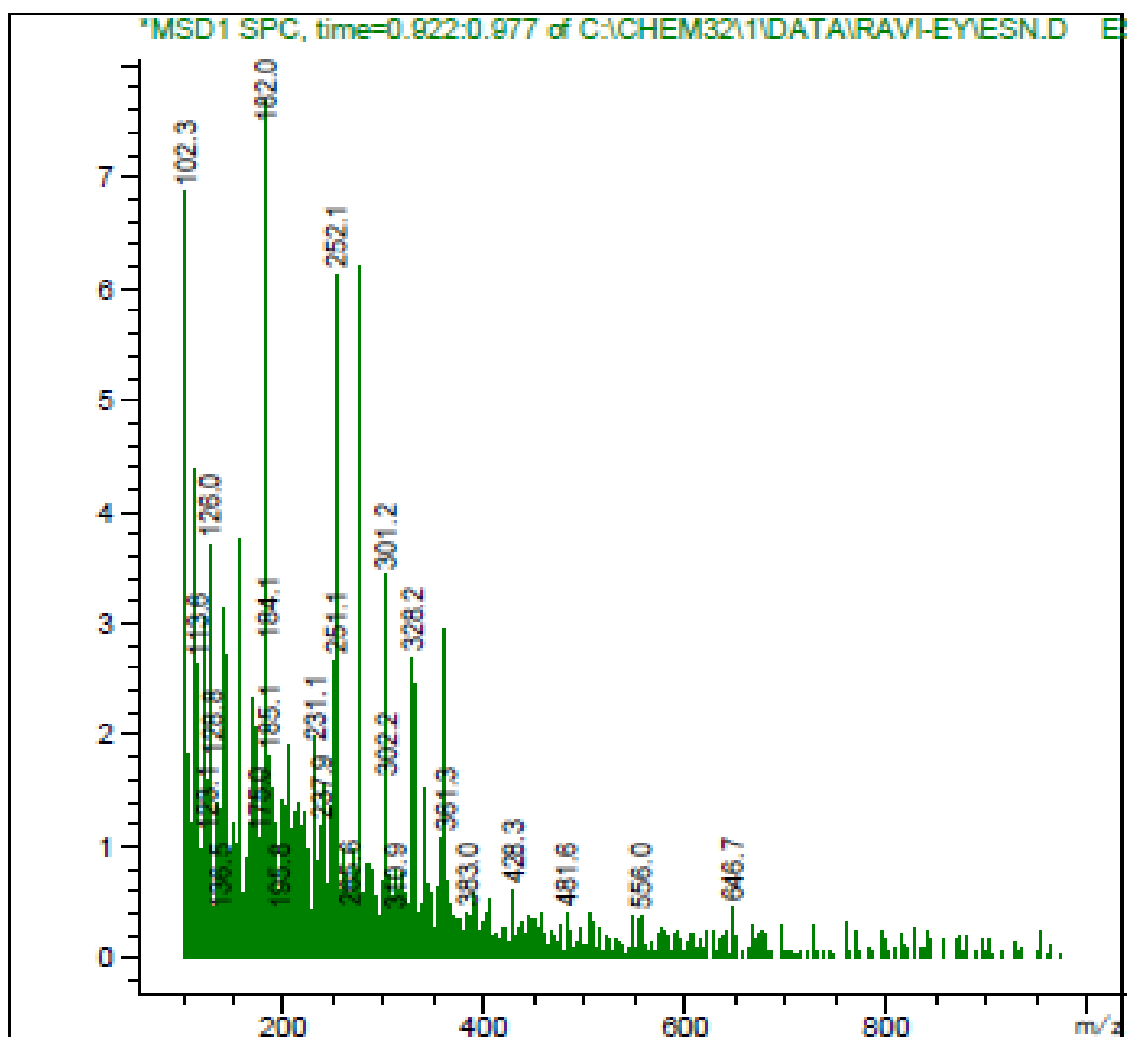


Fig. 4 Showing the characteristic $(M-H)^+$ peak along with M^+ peak at 251 & 252 amu respectively of the ES-API mode LC-MS.

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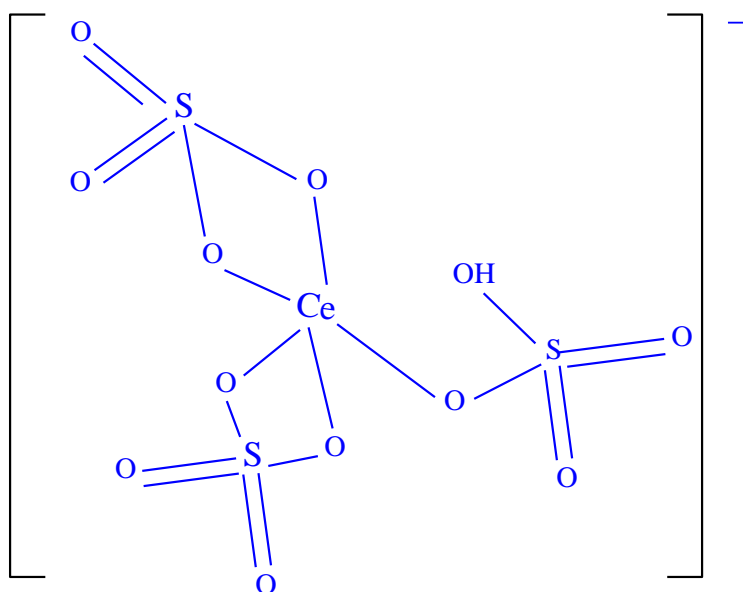


Fig.5 Structure of Active Species $\text{HCe}(\text{SO}_4)_3^-$

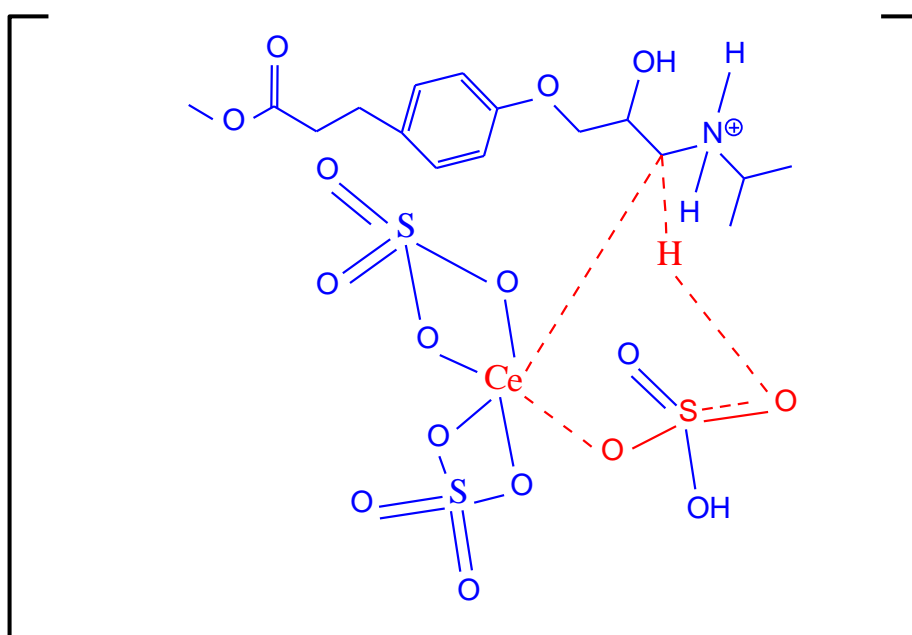


Fig. 6 Structure of Complex with bridging b/w oxidant & reductant