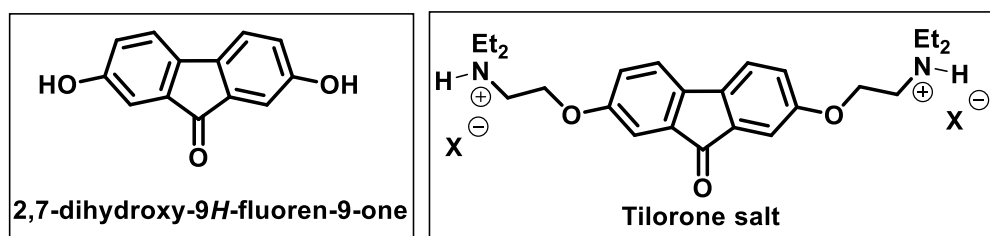




CSIR-Indian Institute of Chemical Biology

## An improved process for 2,7-dihydroxyfluorenone in the manufacture of tilorone and its salts

**INTRODUCTION:** Tilorone is an orally bioavailable interferon inducer. It has a broad-spectrum of antiviral activities through an IFN-related innate immunity pathway. CSIR-IICB has developed an efficient, safe, cost effective and industry friendly process to prepare 2,7 dihydroxy fluorenone towards the total synthesis of Tilorone dihydrochloride and other Tilorone salt forms.



**CHALLENGE/APPLICATION DOMAIN:** IICB has developed an environment friendly and cost effective process using inexpensive reagents. Throughout, Crystallization technique has been used for purification.

**OPPORTUNITY:** Competing technology is not available at present and Pharma and fine chemical industry can employ this cost-effective IICB- process for tilorone, an antiviral drug.

**STAGE OF TECHNOLOGY DEVELOPMENT: TRL 4:** Ready for transfer

**REFERENCES/ PATENTS :** Indian Patent filed 0211NF2020; 15-Dec-2020

**PROJECT INVESTIGATORS:** Dr. P. Jaisankar & Dr. Indubhusan Deb, P. Bhattacharjee.

**FUNDING:** CSIR

**Collaborating Institute/Company if any (pls indicate if a separate MoU/agreement is in place.):**  
None.