*In commemoration of 175th year*

ICACCS 2018

# Proceedings

*of*

# INTERNATIONAL CONFERENCE ON ADVANCEMENTS AND CHALLENGES IN CHEMICAL SCIENCES (ICACCS 2018)

**2nd & 3rd February 2018**

*Organised by*


**PG & Research Department of Chemistry**
**Pachaiyappa's College**
(Re-Accredited by NAAC with "A" Grade)
Chennai 600 030, Tamil Nadu, INDIA


Sponsored by

UGC, TNSCST, INDIAN OIL CORP LTD., Moldone Labs, FAST TRACK

Molclone Labs

Certified

MOLCLONE LABS PRIVATE LIMITED is a Chennai (Madras) based, Private Limited Company for the manufacture of Active Pharmaceutical Ingredients and Drug Intermediates. The company is managed by technocrats having vast experience in the field of manufacture and marketing of active pharmaceutical ingredients (API) and its intermediates.

The company has a state of the art API manufacturing facility located at 30Kms South of Chennai, capable of synthesizing complex organic molecules and active pharmaceutical ingredients. The manufacturing facility is in conformity with cGMP requirements and WHO GMP certified. Also it meets the requirements of international regulatory bodies too.

Molcone Labs, are expert Pentosan Polysulfate Sodium Manufacturer in India, and also takes pride in introducing ourselves as the first manufacturer of Pentosan Polysulphate Sodium in India in the year 2004, First manufacturer of Xylan from Beech Wood in India, First manufacturer of Calcium L-5- Methyltetrahydrofolate (USP) in India, First manufacturer of Pentosan Polysulphate Calcium in India.

**Services Offered**

- Custom Sysnthesis of value added new API Molecules
- Contract Research for API Intermediates



**HEAD OFFICE:**
73, Kasi Estate 2nd Street,
Jafferkhanpet,
Chennai-600 083
+91-44-42845289

**FACTORY:**
No.2/220, Kundru Medu Street,
Sirumathur Village, Padappai - 601 301,
Kancheepuram Dist., Tamil Nadu, India
+91 72999 84016
+91 72999 84021

ISBN: 978-93-5291-377-0

PP 178

# A facile pseudo four-component diastereoselective synthesis of novel multifunctional thianes

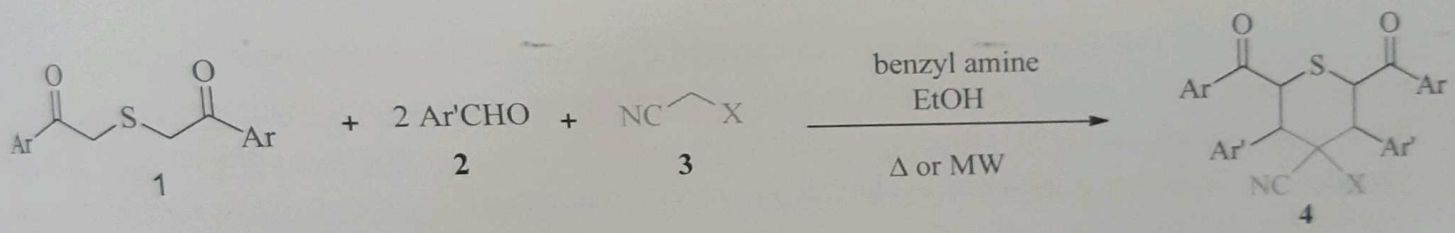
**B Vinosha [a*], S Renuga [a], S Perumal[b], R Hariharan[c]**

[a]*Department of Chemistry, Fatima College, Madurai-625018, India*
[b]*School of Chemistry, Madurai Kamaraj University, Madurai-625021, India*
[c]*Department of Chemistry, Pachayappa College, Chennai*
*E-mail: b.vinosha@gmail.com*

**Abstract:**

The thiane ring plays a key role in the biological activities of a number of pharmaceutical agents such as cephalosporins and dithiathromboxane A2. The thiane derivatives display a widerange of pharmacological activities. For instance, they have been used as anti-inflammatory, antihypertensive, antiulcer, antibacterial and antimicrobial agents.

A series of highly functionalized thianes has been synthesized diastereoselectively from the domino reactions of bis(aroylmethyl) sulfides, aromatic aldehydes and benzyl cyanide in the presence of benzylamine in ethanol under both thermal and microwave conditions in good yields via Knoevenegal condensation and double Michael addition.




X= $C_6H_5$

***Keywords:*** *thianes, active methylene compounds, aromatic aldehyde, Michael addition*

---

PP 179

# Investigations on the growth and characterization of an organic NLO single crystal 2-Pyridylaminium p-Aminobenzoate (2PPA) for photonic applications

**A. Sarbudeen[1*], A. Syed Mohammed Mujaheer[2], G. Foize Ahmad[2], M. Gulam Mohammed[2]**

[1] *Department of Physics, Aalim Muhammed Salegh Polytechnic College, Chennai - 55, India*
[2] *P.G. and Research Department of Physics, The New College, Chennai-14, India*
**corresponding author. Email: mgmresearch2014@gmail.com*

**Abstract**

A good single crystal of 2-Pyridylaminium P-Aminobenzoate (2PPA) was grown by slow evaporation technique. Solubility of 2PPA was determined at different temperature using ethanol as solvent. The grown crystals was subjected to single crystal X-ray diffraction analysis in order to reveal its crystal structure and unit cell parameters. The FT-IR spectral analysis was carried out in order to confirm