

**DMSO-mediated linear molecular chains in the
crystal structure of 4,4,4-trifluoro-1-(thiophen-2-
yl)butane-1,3-dione)-cobalt(II) complex:
Experimental and theoretical insights**

**Project report submitted to the Department of Studies in Physics for
the award of the degree of**

**MASTER OF SCIENCE
IN PHYSICS**

BY

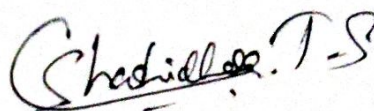
Shashidhara T. S.

**Research Guide
Prof. Lokanath N. K.
Department of Studies in Physics
University of Mysore, Manasagangotri
Mysuru 570 006**

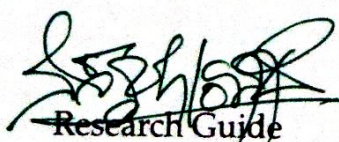
September 2023

DECLARATION

I, **Shashidhara T. S.**, hereby declare that the project report entitled "**DMSO-mediated linear molecular chains in the crystal structure of 4,4,4-trifluoro-1-(thiophen-2-yl)butane-1,3-dione)-cobalt(II) complex: Experimental and theoretical insights**" is the result of research work done by me under the supervision of **Dr. Lokanath N. K.**, Professor, Department of Studies in Physics, University of Mysore, Manasagan-
gotri, Mysuru. I am submitting this project report for possible award of the degree of Master of science (M.Sc) in Physics of the University of Mysore, Mysuru, India. I further declare that this project report or any part of it has not been submitted for the award of any other degree, diploma or associateship of this or any other University or Institution.

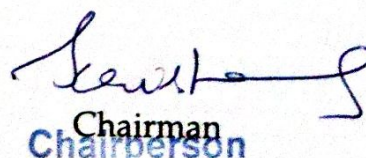


Project student



Research Guide

Dr. N.K. Lokanath
Professor of Physics
Department of Studies in Physics
University of Mysore, Manasagan-
gotri
Mysore-570 006, INDIA.



Chairman

Department of Studies in Physics
University of Mysore, Manasagan-
gotri
Mysuru - 570 006, India.