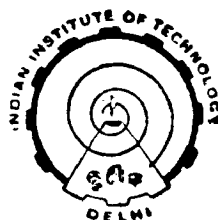


**SOME ASPECTS OF CYCLOADDITION REACTIONS,  
AND  
A  $^{13}\text{C}$  NMR STUDY OF 1,4-DIARYL-1-AZA-1,3-DIENES**

A thesis submitted to the  
Indian Institute of Technology, Delhi  
for award of degree of  
**DOCTOR OF PHILOSOPHY**

by  
**ANIL WALI**



**Department of Chemistry**  
**INDIAN INSTITUTE OF TECHNOLOGY, DELHI**

**1987**

DEDICATED  
TO  
MY PARENTS

CERTIFICATE

This is to certify that the thesis entitled "Some Aspects of Cycloaddition Reactions, and A  $^{13}\text{C}$  NMR Study of 1,4-Diaryl-1-aza-1,3-dienes" submitted by Mr. Anil Wali to the Indian Institute of Technology-Delhi, for award of degree of Doctor of Philosophy in Chemistry, is a record of bonafide research work carried out by him under my guidance and supervision. The candidate has fulfilled all requirements for submission of this thesis which, in my estimation, has reached the requisite standard.

The results contained in this thesis have not been submitted in part or full to any other University or Institute for the award of any degree or diploma.

*R.P. Gandhi* 9/6/87  
( R.P. Gandhi )  
Supervisor  
Professor of Chemistry  
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( Anil Wali )

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