#### DECLARATION

The research-work embodied in this thesis has been carried out in the Laboratory of the Department of Chemistry, University of Delhi under the supervision of Prof. Akhilesh K. Verma. The extent of information derived from the existing literature has been indicated in the body of the thesis at appropriate places giving the source(s) of information. The work is original and has not been submitted in part or full for any other diploma or degree of this or any other University. I owe a deep sense of gratitude to my research supervisor Prof. Akhilesh K. Verma for his guidance, invaluable suggestions, constant help and showing faith on me throughout the course of this research-work.

A brief summary of the work is appended. It is needless to say that I stand solely responsible for the errors/mistakes that might have occurred in this work, despite all precautions taken to the best to my ability.

Prof. Akhilesh Korvermah K. Verma

(Supervisor) epartment of Chemistry

University of Delhi

Delhi-110007

Priyanka Meena (Candidate)

Dr. Akhilesh Bharti

Dr. Akhiles (Go-Supervisor)

Assistant Profit of Department of Chemistry

Kirori Mat Edilari, Delin-110007 University of Delin, Delin-110007

15/10/

Head

Department of Chemistry University of Delhi Delhi-110007

Company Programmer - Next Head Control of Co

#### CERTIFICATE

(As required under clause 13 of Ordinance VI of University of Delhi)

This is to certify that Ms. Priyanka Meena has satisfactorily completed all the courses required for Ph.D. program in the year 2018-2019 as laid down in the University Ordinance VIB of the University of Delhi, for this purpose.

- 1. UNIT- VII Group Theory
- 2. UNIT- XXII Green Chemistry
- 3. UNIT- XXVI Metal Catalyzed Cross-Coupling Reactions
- 4. **UNIT-XXVIII** Nano-Chemistry
- 5. **UNIT-XXXI** Organic Name Reactions
- 6. **UNIT-XXXIV** Peptides and Proteins
- 7. RM Research Methodology

Herono Prof. Akhilesh K. Verma

Prof. Akhilesh K. Verma Department of Chemistry (Supervisor) University of Delhi Delhi-110007

Priyanka Meena

(Candidate)

Akhiled Black

Dr. Akhilesh Bharti

Dr. Akhilesh (Co-Supervisor) Assistant Professor

Department of Chemistry

Kirori Mal College University of Delni, Delni-110007

Head

Department of Chemistry University of Delhi Delhi-110007



## DEPARTMENT OF CHEMISTRY

University of Delhi Delhi-110007, India

Date:

## CERTIFICATE OF ORIGINALITY

I hereby declare that the research work embodied in this thesis entitled "Base-Mediated Chemo- and Regioselective Intermolecular Hydroamination and Methylsulfinylation of Alkenes" is an original work carried out by the author at the Synthetic Organic Chemistry Research Laboratory, Department of Chemistry, University of Delhi, Delhi-110009, India. The thesis has been subjected to plagiarism check by OURIGINAL software. The work submitted for consideration of award of Ph.D. is original.

Prof. Akhilesh K. Verma

(Supervisor)

Prof. Akhilesh K. Verma Department of Chemistry University of Delhi Delhi-110007

(Candidate)

Dr. Akhilesh Bharti

(Co-Supervisor)

Dr. Akhilesh Bharti
Assistant Pro
Department Annual Strong Miles Company
Kirori Miles Company
University of Delhi, Delhi-110007

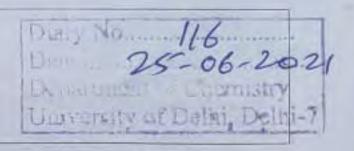
Department of Chemistry University of Delhi Delhi-110007

Head

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Unit – I, Porta Cabin, Near Department of Zoology, University of Delhi, Delhi - 110007, Ph.: 27666601, 27662825, email- sciencefacultyof@gmail.com

Ref.: FOS-I/114/2021/9500

Dated: 23.06.2021

25

The Head Department of Chemistry University of Delhi Delhi-110007.

Madam,

This is with reference to your leltter No. Chem/2021/3052 dated 17.03.2021 regarding change of supervisionship to guide Ph.D scholar and appointment of Co-supervisor in respect of Ms. Priyanka Meena a Ph.D scholar in the department of Chemistry.

In this connection, this is to inform you that the Board of Research Studies (Science) in its meeting held on 19.03.2021 considered and approved Prof. Akhilesh Kumar Verma as supervisor and appointed Dr. Akhilesh Bharti as Co-supervisor of Ms. Priyanka Meena, a Ph.D. scholar registered on 29.11.2018 in the department of Chemistry.

Sr.	Name of the	Date of	Name of the	Name of Approved	
No.	Student	Registration	Supervisor	Co-Supervisor	
1.	Ms. Priyanka Meena	29.11.2018	Prof. Akhilesh Kumar Verma	Dr. Akhilesh Bharti	

The concerned scholars may please be informed accordingly.

Yours faithfully

Section Officer

Copy to:

- Prof. Akhilesh Kumar Verma, Supervisor, Department of Chemistry, University of Delhi. Delhi-110007.
- 2. Dr. Akhilesh Bharti, Department of Chemistry, University of Delhi. Delhi-110007.

Section Officer



#### UNIVERSITY OF DELHI DELHI-110007

Ref.No.Exam. Br./Ph.D/Result/2022-23/54

The following candidates, consequent upon evaluation of their theses submitted for the degree of Doctor of Philosophy (Ph.D) on the topic as mentioned against their names and after viva-voce examination, have been found qualified for the Degree of Doctor of Philosophy (Ph.D) of this University.

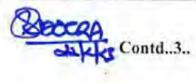
SI. No.	Enrolment No.	Scholar's Name	Title of the Thesis	Supervisor's Name
		(De	Faculty of Arts partment of Arabic)	
803 (11969)	16DARBPHA R000003	Öbaidullah	"Abdul al-Salam al-Ujaili and his contribution to Arabic Fiction: An Analytical Study"	Dr. Mohammad Akram
804 (12029)	ZH-961/13	Meraj Ahmad	"Contribution of Nabil Farouk to the Detective Literature in Arabic: An Elective Study"	Prof. Naimul Hasan
		(Departi	ment of Buddhist Studies)	
805 (11994)	SOL(S)/BAPR /371/09	Preeti	"पश्चिमी भारत में बौद्ध धर्मः एक ऐतिहासिक अध्ययन"	Prof. Amarjiva Lochan
806 (12073)	BS-14/2015	Nguyen Phuong Thao	"Buddhist Meditation as a Tool for Sustainable Healthy Society: A Case Study"	Prof. Subhra Barua Pavagadhi
		(De	epartment of Hindi)	
807 (11977)	16DHNDPLHI 000011	Lalit Kumar Singh	"बाल रंगमंच के सन्दर्भ में मुखौटों और कठपुतलियों के प्रयोगों का सांस्कृतिक अध्ययन"	Prof. Darshan Pandey
808 (12020)	H-681/10	Nitin Mishra	"असगर वजाहत के कथा साहित्य में अभिव्यक्त सामासिक संस्कृति"	Prof. Kusumlata Malik

27/02/2022

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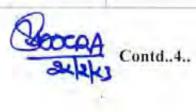
		(De	partment of Sanskrit)	
809 (11977)	KM-154/11	Ramchandra Meghawal	"मीमांसादर्शन में बलाबल-अधिकरण का समीक्षात्मक अध्ययन (वाक्यार्थ-विश्लेषण के सन्दर्भ में)"	Prof. Dilip Kumar Jha
810 (12039)	17DSKTPLSA 000020	Ashutosh Kumar	"षट्त्रिंशत् काव्यलक्षण एवं कालिदास की नाट्यकृतियों में उनका अनुप्रयोग"	Prof. Ajay Kumar Jha
			ulty of Social Sciences partment of History)	
811 (11873)	RLA-177/09	Vaishali	"A Contested History of the Valmikis in Delhi from the Colonial to the Post- Colonial Period"	Prof. Anirudh Deshpande
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			of Mathematical Sciences ent of Operational Research)	
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			Faculty of Science epartment of Botany)	
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		(Dep	artment of Chemistry)	
820 (4451)	18DCHEPHC H000001	Priyanka Meena	"Base-Mediated Chemo- and Regioselective Intermolecular Hydroamination and Methylsulfinylation of Alkenes"	Prof. Akhilesh K. Verma
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May Jans



		(Departme	nt of Environmental Studies)	
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			Faculty of Law	
827 (4504)	Ph.D-127/2015	Mridula Thakur	"Efficiency of Tribal Laws in Resolution of Conflicts: An Empirical Study with Special Reference to Odisha"	Prof. Rajni Abb



(S. K. Dogra) Joint Registrar (Exams) Delhi, the 22<sup>nd</sup> February, 2023

(Prof. D. S. Rawat) Dean (Examinations)