

DECLARATION BY THE CANDIDATE (Para 12B)

I declare that the thesis entitled “**Sample preparation and analysis of environmental markers of chemical warfare agents by means of tandem mass spectrometry**” is my own work conducted under the supervision of **Dr. D. K. Dubey**, Head, VERTOX Laboratory, Defence Research and Development Establishment, Gwalior and **Prof. (Dr.) Rajeev Jain**, Professor, School of Studies in Chemistry, Jiwaji University, Gwalior, at the VERTOX Laboratory, Defence Research and Development Establishment, Gwalior, approved by the Research Degree Committee. I have put-in more than 200 days of attendance with the supervisors at the research centre.

I, further declare that to the best of my knowledge, the thesis does not contain any part of any work, which has been submitted for the award of any degree either in this University or in any other University/Deemed University without proper citation.

Signature of the Candidate

Vijay Kumar Tak

Signature of the Supervisor Signature of the Co-supervisor

Dr. D. K. Dubey Prof. (Dr.) Rajeev Jain

Scientist & Head Professor

VERTOX Laboratory School of Studies in Chemistry

Defence R & D Establishment Jiwaji University

Gwalior (M.P), India Gwalior (M.P), India

Signature of Head UTD/Principal

APPENDIX-4

CERTIFICATE OF THE SUPERVISORS (Para 12-C)

CERTIFICATE

This is to certify that the work entitled “**Sample preparation and analysis of environmental markers of chemical warfare agents by means of tandem mass spectrometry**” is a piece of research work done by **Mr. Vijay Kumar Tak**, under our guidance and supervision for the degree of Doctor of Philosophy of **Jiwaji University, Gwalior, M.P., India** and that the candidate has put-in attendance of more than 200 days with us.

To the best of my knowledge and belief the thesis:

I. Embodies the work of the candidate himself.

II. Has duly been completed.

III. Fulfils the requirements of the Ordinance relating to the Ph. D. degree of the University, and

IV. Is up to the standard both in respect of contents and language for being referred to the examiner.

Signature of the Supervisor Signature of the Co-supervisor

Dr. D. K. Dubey Prof. (Dr.) Rajeev Jain

Scientist & Head Professor

VERTOX Laboratory School of Studies in Chemistry
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Gwalior (M.P), India Gwalior (M.P), India

Signature of Head UTD/Principal

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CERTIFICATE

This is to certify that the work embodied in this thesis entitled "SAMPLE PREPARATION AND ANALYSIS OF ENVIRONMENTAL MARKERS OF CHEMICAL WARFARE AGENTS BY MEANS OF TANDEM MASS SPECTROMETRY" has been carried out by Mr. Vijay Kumar Tak, at VERTOX Laboratory, Defence Research & Development Establishment, Gwalior, by himself.

DIRECTOR