

# CERTIFICATE

This is to certify that the thesis titled "Source apportionment of particulate matter and its probable consequences in urban areas of Lucknow" submitted by **Mr. Sushil Kumar Bharti** is an original research work and has not been previously submitted in part or full for the award of any other degree or diploma to this or any other university.

The thesis submitted to Babasaheb Bhimrao Ambedkar University Lucknow satisfies all the requirements as stipulated in the Doctor of Philosophy (Ph.D.) regulations -1999 as amended in 2008/2010 and it is fit for submission and evaluation for the award of the degree of Doctor of Philosophy of the University.

Date: 06/04/2018

*S. C. Barman*  
06/04/2018

**Co-Supervisor**

(डा० एस०सी० बर्मन)  
Dr. S. C. Barman  
वरिष्ठ प्रधान वैज्ञानिक एवं प्रमुख/Sr. Principal Scientist & Head  
पर्यावरण अनुवीक्षण प्रभाग  
Environmental Monitoring Division  
सी.एस.आई.आर.-भारतीय विषविज्ञान अनुसंधान संस्थान  
CSIR-Indian Institute of Toxicology Research  
पो० बा० नं० 80/P.B. No. 80  
महात्मा गाँधी मार्ग/Mahatma Gandhi Marg  
लखनऊ-226 001/Lucknow-226 001

**Supervisor**

*Dr. Narendra Kumar*  
06/04/18  
Assistant Professor  
Department of Environmental Sciences  
Babasaheb Bhimrao Ambedkar University  
Raebareli Road, Lucknow-25

*J. Dwivedi*  
06.4.18  
**Head of the Department**

**Head**  
Deptt. of Environmental Science  
B. B. Ambedkar University  
Raebareli Road, Lucknow-25