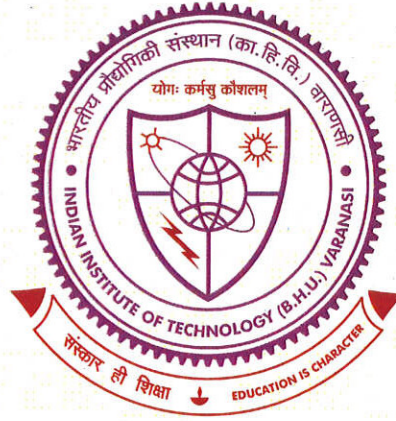


Application of COM-B Model of Behaviour for Effective Municipal Solid Waste Management in India



Thesis submitted in partial fulfillment for the
Award of Degree

Doctor of Philosophy

By

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DECLARATION

I, **Ravikant Dubey**, certify that the work embodied in this thesis is my bonafide work and carried out by me under the supervision of **Dr. Amrita Dwivedi and Prof. Prabhat Kumar Singh** from **July 2018 to July 2025**, at the **Department of Humanistic Studies**, Indian Institute of Technology (BHU) Varanasi. The matter embodied in this thesis has not been submitted for the award of any other degree/diploma. I declare that I have faithfully acknowledged and given credits to the research workers wherever their works have been cited in my work in this thesis. I further declare that I have not willfully copied any other's work, paragraphs, text, data, results, *etc.*, reported in journals, books, magazines, reports dissertations, theses, *etc.* or available at websites and have not included them in this thesis and have not cited as my work.

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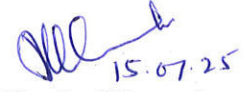
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Dedicated
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My Parents



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ABBREVIATIONS

ABC	–	Attitude-Behaviour-Condition
A-B-C	–	Attitude-Behaviour-Condition
BCW	–	Behaviour Change Wheel
BCC	–	Behaviour Change Communication
CPCB	–	Central Pollution Control Board
COM-B	–	Capability, Opportunity, Motivation - Behaviour
EIA	–	Environmental Impact Assessment
ERB	–	Environmentally Responsible Behaviour
EU	–	European Union
GHG	–	Greenhouse Gas
IEC	–	Information, Education, and Communication
IMSWM	–	Integrated Municipal Solid Waste Management
ISWM	–	Integrated Solid Waste Management
MRF	–	Material Recovery Facility
MSW	–	Municipal Solid Waste
MSWM	–	Municipal Solid Waste Management
NAM	–	Norm Activation Model
NBCF	–	National Behaviour Change Communication Framework
NGO	–	Non-Governmental Organization
PLS-SEM	–	Partial Least Squares Structural Equation Modelling
R3	–	Reduce, Reuse, Recycle
RCRA	–	Resource Conservation and Recovery Act
RFID	–	Radio Frequency Identification

SBM-U	–	Swachh Bharat Mission – Urban
SDGs	–	Sustainable Development Goals
SPCB	–	State Pollution Control Board
SPSS	–	Statistical Package for the Social Sciences
SWM	–	Solid Waste Management
TDF	–	Theoretical Domains Framework
TPB	–	Theory of Planned Behaviour
ULBs	–	Urban Local Bodies
UN	–	United Nations
UNEP	–	United Nations Environment Programme
UN SDG	–	United Nations Sustainable Development Goals
WHO	–	World Health Organization
WtE	–	Waste-to-Energy
WTP	–	Willingness to Pay