



UNIVERSITY OF
BIRMINGHAM

It is hereby certified that

Teresa Arora

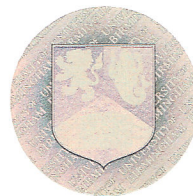
was admitted to the Degree of

Doctor of Philosophy

on the eleventh day of July 2012

VICE-CHANCELLOR AND PRINCIPAL

REGISTRAR AND SECRETARY



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