

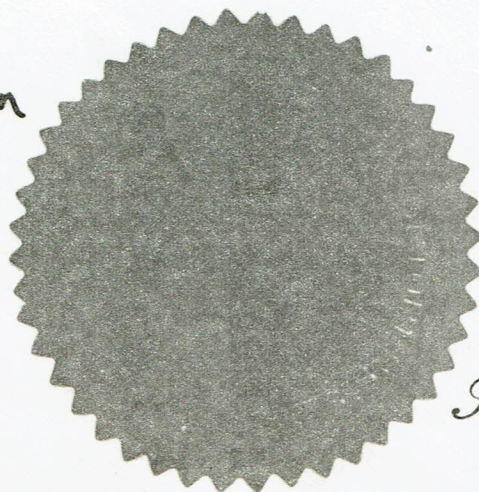
This is to Certify that
Malcolm Frank Goldman
has fulfilled the requirements of the
University of Toronto
and has been admitted under the authority of
the Governing Council of the University
of Toronto to the degree of
Doctor of Philosophy

In Witness whereof we have hereto subscribed
our names and affixed the academic seal
of the University

A. E. Safarian
Dean

Wm. H. Evans
President

A. S. Haringford
Secretary of the Governing Council



December 5, 1975