

بسم الله الرحمن الرحيم

Sudan University of Science and Technology

College of Graduate Studies

**Isolation and Physicochemical Characterization of *Momordica Balsamina*
Seed Lectin and Its Effects on Human Commercial Cancer Cell Lines**

العزل و التوصف الكيموفيزيائي للكتين بذرة العبير و تأثيره على خلايا سرطانية بشرية تجارية.

A Thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy in
Medical Laboratory Sciences (Clinical Chemistry)

By

Mariam Abbas Ibrahim

M. Sc. in Clinical Chemistry

Supervisor

Professor Bakri Osman Saeed

MBBS, PhD, MD, PGCME, FRCPath, FRCP

Co-supervisor

Dr. Samia Mahdi Ahmed

PhD in clinical chemistry

June - 2014