

Spectroscopic Characterization and Physical Properties of Some Developed Polymeric Materials by Ionizing Radiation

Thesis submitted as partial Fulfillment of M. Sc. in Physics

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" الحمد لله الذي هدانا لهذا
مما كنا لنهتدي لولا أن هدانا الله"
حدق الله العظيم
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DEDICATION

To My Lovely Family. The Source of My Enthusiasm

My Great Father, Loving Mother, Dear Brothers And Beloved Husband.

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LIST OF ABBREVIATIONS

AAc Acrylic acid

AAm Acrylamide

AC Alternating current

AN Acrylonitrile

BuA Butyl acrylate

CdS Cadmium Sulfate

Chl Chlorophyll

CMC Carboxymethyl cellulose

CNT Carbon nanotubes

Co Cobalt

DC Direct current

EB Electron beam

FAs Fatty acids

fCNT Functionalized carbon nanotubes

FTIR Fourier transform infra red spectroscopy

HDPE High density polyethylene

kGy Kilo gray

keV Kilo electron volt