

SUDAN UNIVERSITY OF SCIENCE AND TECHNOLOGY

COLLEGE OF GRADUATE STUDIES

**AUTOMATIC CONTROL OF CAUSTIC SODA CONCENTRATION IN
BOTTLE WASHING MACHINE USING PLC**

A thesis Submitted For Partial Fulfillment For The award of M.Sc. in
Microprocessors & Electronic Control

Presented By:

Isam Muatasim Mukhtar Ali

Supervised By:

Ustaz Abd Allah Salih Ali

Sep 2006

SUDAN UNIVERSITY OF SCIENCE AND TECHNOLOGY

COLLEGE OF GRADUATE STUDIES

AUTOMATIC CONTROL OF CAUSTIC SODA CONCENTRATION IN

BOTTLE WASHING MACHINE USING PLC

A thesis Submitted For Partial Fulfillment For The award of M.Sc. in

Microprocessors & Electronic Control

Presented By:

Isam Muatasim Mukhtar Ali

Supervised By:

Ustaz Abd Allah Salih

August 2006

isam