

INVESTIGATION ON THE SYNERGETIC
EFFECT BETWEEN HALIDE IONS AND
INTERNAL CORROSION INHIBITOR FOR HCl
ACID AND SIMULATED NaCl SEA WATER

NUR ALIN BINTI MOHD AZHARI

UNIVERSITI MALAYSIA PAHANG

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BETWEEN HALIDE IONS AND INTERNAL CORROSION
INHIBITOR FOR HCl ACID AND SIMULATED NaCl SEA
WATER

NUR ALIN BINTI MOHD AZHARI

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SUPERVISORS' DECLARATION

I hereby declare that I have checked the thesis and in my opinion, this thesis is adequate in terms of scope and quality for the award of the degree of Bachelor of Applied Science (Honor) Material Technology.

Signature

Name of Supervisor : DR. RASIDI ROSLAN

Position : SENIOR LECTURER

Date :

STUDENT'S DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged. The thesis has not been accepted for any degree and is not concurrently submitted for award of other degree.

Signature :

Name : NUR ALIN BINTI MOHD AZHARI

ID Number : SC13032

Date :

DEDICATION

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LIST OF SYMBOLS

| | | |
|--------------------|---|------------------------|
| \sim | - | approximately |
| % | - | percent |
| λ | - | wavelength |
| μ | - | micron (10^{-6}) |
| $^{\circ}\text{C}$ | - | degree celcius |
| g | - | grams |
| h | - | hour |
| t | - | time |
| in | - | inch |
| ft | - | feet |
| mL | - | milliliter |
| cm^{-1} | - | reciprocal centimeters |
| m^2 | - | metre square |
| cP | - | centipouse |

LIST OF ABBREVIATIONS

| | | |
|------|---|---|
| CI | - | corrosion inhibitor |
| iCI | - | internal corrosion inhibitor |
| CT | - | coil tubing |
| KI | - | potassium iodide |
| ATR | - | attenuated total reflection |
| FTIR | - | fourier transform infrared spectroscopy |
| CR | - | corrosion rate |
| IE | - | inhibition efficiency |