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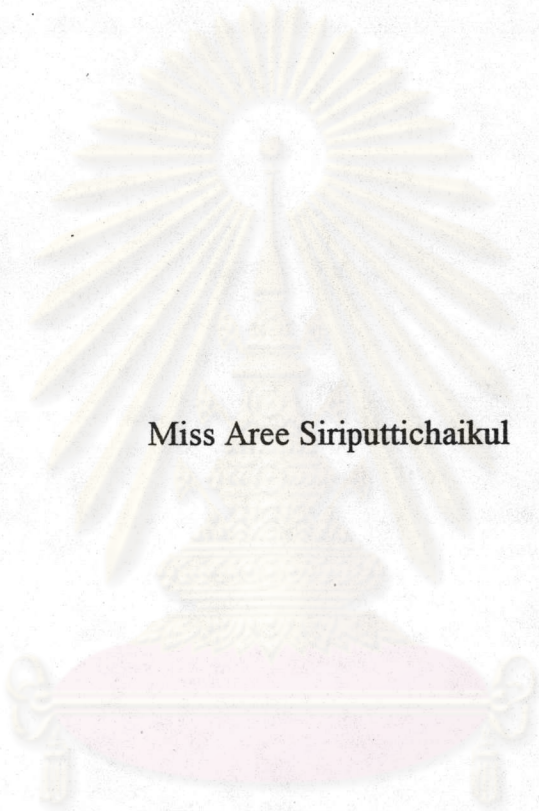
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PREPARATION OF CHLORINATED PARAFFINS
FROM LIGHT DISTILLATE



Miss Aree Siriputtichaikul

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

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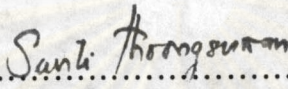
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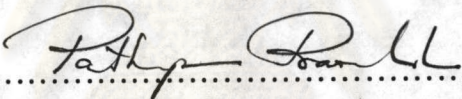
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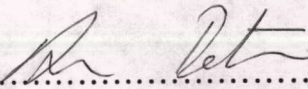
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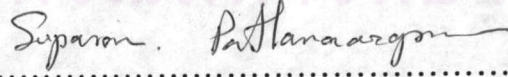
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In this research, chlorinated paraffins were prepared from light distillate and they were converted to semi-synthetic lubricating oil. Before chlorination, light distillate was dewaxed by methyl ethyl ketone. The yield was 43.58 % by weight of oil. The reaction temperature from 60 to 120 °C had little or no effect on properties of chlorinated products. When the chlorine content of the chlorinated products was increased, the viscosity increased. Chlorinated paraffins from dewaxed oil were dark viscous liquid, thus they couldn't be used for direct applications. However, it can be converted to semi-synthetic lubricating oil by self-condensation in the presence of anhydrous aluminum chloride and their properties were better than those of dewaxed oil.

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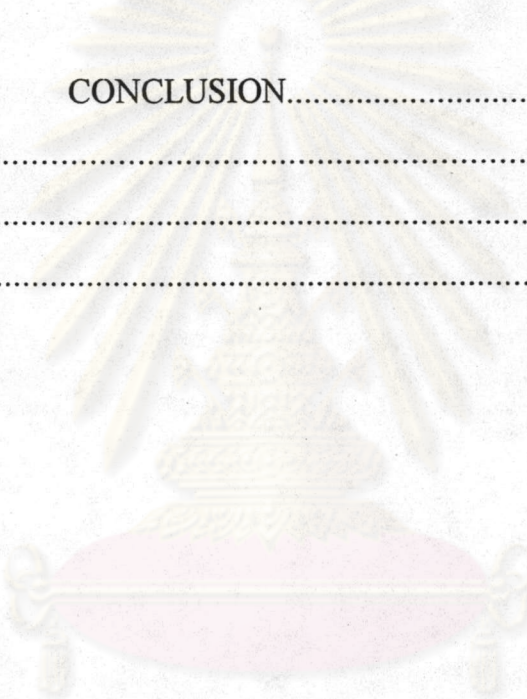
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ABBRIVIATIONS

°C	=	Celsius degree
VI	=	Viscosity index
cSt	=	Centistoke unit
TGA	=	Thermogravimetric Analyzer
%C _p	=	Percent of paraffinic carbon
%C _n	=	Percent of naphthenic carbon
%C _a	=	Percent of aromatic carbon
lb/hrs	=	Pound per hours
ppm	=	part per million
psi	=	Pound per square inch

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