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LIST OF ABBREVIATIONS AND SYMBOLS

°C	Degree Celsius
K	Degree Kelvin
h	Hour
MWNTs	Multi-walled carbon nanotubes
LLDPE	Linear low density polyethylene
Cu	Copper
Al	Aluinium
PVB	Polyvinyl butyral
SEM	Scanning electron microscopy
CNTs	Carbon nanotubes
SWNTs	Single-walled carbon nanotubes
PMC	Polymer-matrix composites
MMC	Metal-matrix composite
CMC	Ceramic-matrix composite
XRD	X-ray diffraction
α	Absorptance
R	Reflectance
T	Transmittance
Q	Solar energy collected
P	Power
k_C	Thermal conductivity of the composite
k_p	Thermal conductivity of the particle
k_m	Thermal conductivity of the matrix
Φ_p	Volume fraction of particle
Φ_m	Volume fraction of matrix
vol.	Volume
wt.	Weight

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ข้อความแห่งการริเริ่ม

1) เป็นการเตรียมชิ้นงานที่ง่ายและรวดเร็ว โดยการใช้วิธีบดผสมแล้วให้ความร้อนพร้อมการอัดเพื่อเคลือบติด อีกทั้งยังให้ค่าความแข็งแรงในการยึดเกาะแผ่นอะลูมิเนียมและแผ่นทองแดงที่สูง

2) การเตรียมชิ้นงานด้วยวิธีนี้ ให้ค่าการดูดซับความร้อน 0.95 ซึ่งค่อนข้างสูงเมื่อเทียบกับงานวิจัยอื่นๆ เช่น โร โรและคณะ เชนและบอสตรอม ได้รายงานผลค่าการดูดซับความร้อนที่ 0.84 และ 0.79-0.90 ตามลำดับ ส่วน เช็งและคณะ บีราและคณะ และ เฟ็งและคณะทดลองชิ้นงานที่เตรียมได้ค่าการดูดซับความร้อนที่ 0.949 0.975 และ 0.95 ตามลำดับ

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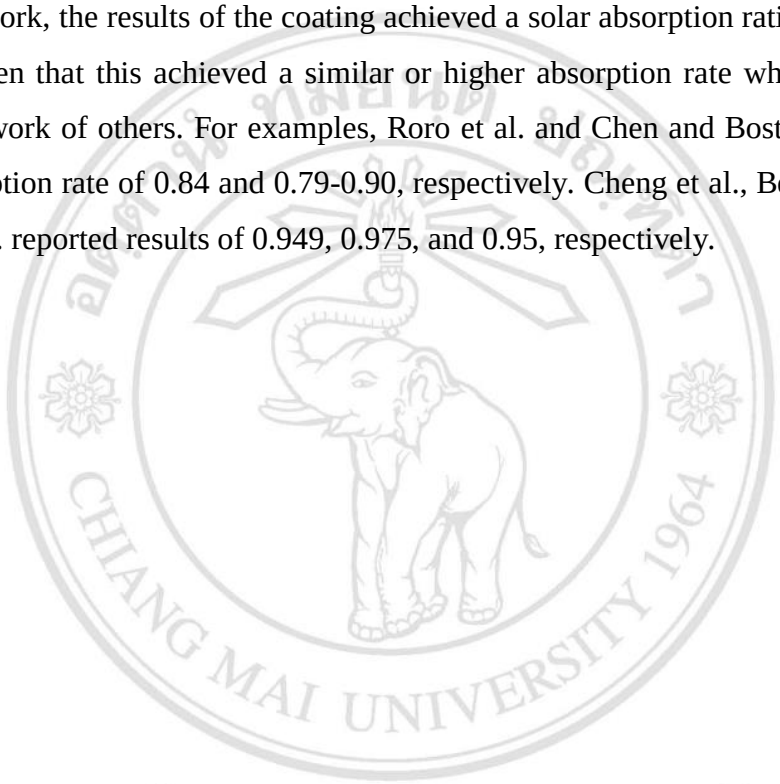
STATEMENT OF ORIGINALITY

1) The ball mill mixing process and the hot press method were used for prepare the coating. This is a quick and easy technique for the preparation of the coating.

2) For this work, the results of the coating achieved a solar absorption rating of 0.95. It can be seen that this achieved a similar or higher absorption rate when compared with the work of others. For examples, Roro et al. and Chen and Bostrom reported the absorption rate of 0.84 and 0.79-0.90, respectively. Cheng et al., Bera et al., and Feng et al. reported results of 0.949, 0.975, and 0.95, respectively.



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