



ChemTech

International Journal of ChemTech Research

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.11 No.07, pp 347-354, 2018

Experimental Study of the Heat transfer coefficient in a Plate Heat exchanger

Josué Camargo Vanegas¹, Marcos Camargo Sandoval²,
Guillermo Valencia Ochoa^{3*}

^{1,2,3}Efficient Energy Management Research Group, Universidad del Atlántico
km 7Antigua vía Puerto, Colombia

Abstract : The way to evaluate a device in charge of heat transfer under certain working conditions is through the study of the global coefficient of heat transfer, it was carried out using a test bench that includes the base unit where the heating and movement of water is carried out and a unit where the heat exchange is carried out connected by means of flexible tubes and using the fundamental equations that are required, the results obtained were respectively the global transfer coefficient for both fluids of work with their respective Nusselt number, finally it is observed that the relationships between other models for plate exchangers, the comparative error is very large (40%) and to have more concise results. the scale factor must be taken into account.

Keywords : heat transfer coefficients, plate heat exchanger, empirical model, Nusselt number.

Guillermo Valencia Ochoa *et al* /International Journal of ChemTech Research,
2018,11(07): 347-354.

DOI= <http://dx.doi.org/10.20902/IJCTR.2018.110741>
