Impingement of producer gas obtained from rice-husk gasification onto a water surface has been found to be very effective in removing tar and ash from the gas. Correlations to estimate tar- and dust-removal efficiencies have been developed. An advantage of impingement is that the hot gas jet is cooled. Here, we describe experiments to study heat transfer when heated ambient air impinges on the water surface. An equation to estimate the overall heat-transfer coefficient has been derived. This coefficient is expressed in terms of Nu and is correlated with the following dimensionless groups: \( \frac{v_a}{v_w} \), \( \frac{H_n}{D_n} \), \( \frac{D_c}{D_n} \), and Re. The correlation obtained by minimizing the absolute error is

\[
Nu = 0.0148 \left( \frac{v_a}{v_w} \right)^{-0.16} \times \left( \frac{H_n}{D_n} \right)^{-1.3} \left( \frac{D_c}{D_n} \right)^{-1/2} Re^{1.2}
\]