Correction to "Two Integral Inequalities", by J. R. Blum and M. Reichaw, Israel Journal of Mathematics, Vol. 9 No. 1, 1971, pp. 20–26.

We are indebted to Professor Dean Issacson for pointing out that the set $E = X$ in our proof of the second inequality should be replaced by

$$E = \{y: \phi(z_1, y) - \phi(z_2, y) \geqq 0\}$$

and that the proof should be changed as follows:

Fix z_1 and z_2 and let $f(x) = l(z_1, x) - l(z_2, x)$. Then by (1) used for this E one has:

$$\int_X (\phi(z_1, y) - \phi(z_2, y))^+ d\mu(y) =$$

$$\int_E d\mu(y) \int_X (l(z_1, x) - l(z_2, x))k(x, y)d\mu(x) \leqq \delta(K) \int_X (l(z_1, x) - l(z_2, x))^+ d\mu(x) +$$

$$\alpha(z_1, z_2) \inf_{x \in X} \int_E k(x, y)d\mu(y) \leqq \delta(K)\delta(L) + \bar{\alpha} \inf_{x \in X} \int_X k(x, y)d\mu(y).$$

It remains to take the supremum of $\int_X (\phi(z_1, y) - \phi(z_2, y))^+ d\mu(y)$ over z_1, z_2.