CORRIGENDUM

The Mode III Fatigue Crack Growth Threshold for Mild Steel, L. P. Pook and J. K. Sharples, International Journal of Fracture 15 (1979) R223-R226,

The second paragraph should read:

Conventional specimens used to determine fatigue crack growth behaviour have the initial crack oriented perpendicular to the applied stress. In practice components fail by fatigue from crack-like flaws that are not necessarily at right angles to the maximum principal stress, and crack growth will in general not be in the plane of the initial crack. Definition of threshold behaviour in terms of the fatigue limit of cracked specimens extends naturally to such combined mode situations; for example, ΔK_{IIIt} may be defined as the critical value of ΔK_{III} , the range of the shear mode stress intensity factor necessary to cause crack growth which leads to failure, even though crack growth is not in the plane of the initial crack.

The antepenultimate paragraph should read:

Some preliminary tests on mild steel using the sharply notched torsion specimen shown in Fig. 3 does confirm that $\Delta K_{IIIt} > \Delta K_{It}$. The specimens were stress relieved before testing at zero mean load. ΔK_{III} was calculated from the alternating load using the equation [5]

$$\Delta K_{III} = \frac{2\Delta T/R^3}{\left[1 - (a/R)\right]^3} \frac{\sqrt{(a/\pi)}}{\sqrt{\left[1 + 7.111(a/R)/(1 - a/R)\right]}}$$
(1)

where a is depth of notch, R radius of specimen, and ΔT the range of applied torque.