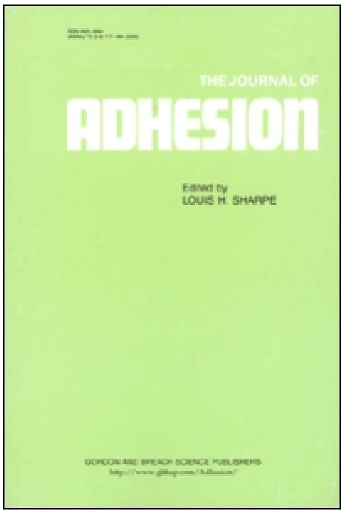

The Journal of Adhesion

Erratum

To cite this Article (1993) 'Erratum', The Journal of Adhesion, 43: 1, 175 — 176
To link to this Article: DOI: 10.1080/00218469308026596
URL: http://dx.doi.org/10.1080/00218469308026596

J. Adhesion, 1993, Vol. 43, pp. 175–176
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Printed in the United States of America

ERRATUM

There is a printer's error on page 36 of the article, "A Simple Constant Strain Energy Release Rate Loading Method for Double Cantilever Beam Specimens," by David A. Dillard, John Z. Wang and Hari Parvatareddy, *J. Adhesion* 41, 36 (1993). The last three lines of the page were inadvertently omitted during printing. A corrected page 36 follows.

We apologize for any inconvenience which the authors and our readers may have experienced as a result of this regrettable error.

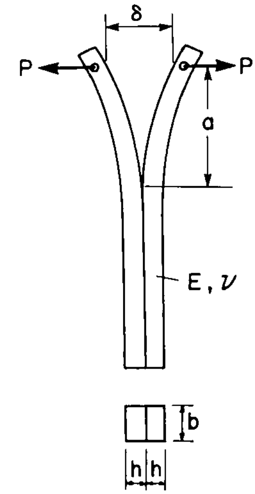

FIGURE 1 A symmetrically loaded double cantilever beam specimen with relevant dimensions.

$$G_I=\frac{4P^2}{Eb^2}\left[\frac{3a^2}{h^3}+\frac{1}{h}\right] \tag{1}$$

where

P = the force acting perpendicular to the bondline
a = crack length
h = the thickness of the adherend
b = the width of the adherend and bondline
E = the Young's modulus of the adherend

The first term in the brackets is due to bending, while the second term is a correction for shear.

For sufficiently long debonds, Equation (1) indicates that the strain energy release rate of the specimen subjected to a constant load is almost proportional to the square of the crack length. Since the strain energy release rate increases rapidly with crack length, specimens would tend to fail catastrophically under constant load conditions, so constant displacement rate conditions are normally used for experimental purposes. The Boeing wedge test [ASTM D3762] has been widely used and advocated as a sensitive durability test for adhesives[17] and is simply a DCB specimen loaded under constant displacement conditions. For this loading mode, the strain energy release rate decreases as the inverse of the fourth power of the crack length. Regardless of the loading mode, the DCB specimen exhibits a strong dependence of the strain energy release rate on the debond length. Generally speaking, special effort is needed to prevent unstable crack growth and special instrumentation is required to obtain an accurate measurement of the crack length. To alleviate the experimental inconveniences caused by unstable crack growth of the flat DCB specimen, Ripling and Mostovoy[3,4] proposed the contoured double cantilever beam (CDCB) specimen so that the term $(3a^2/h^3+1/h)$ in Equation (1)