

## QUANTITATIVE FRACTOGRAPHY AS AN AREA OF INTEREST IN THE STUDY OF METALLIC MATERIALS

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*Recent availability of automatic or semi-automatic image analyzers has brought to attention the possibility of developing methods for the quantification of geometrical characteristics not only of plane sections - quantitative metallography has been long known and used - but also of non-planar surfaces as those which are obtained as a result of fracture.*

*There are two main approaches to this problem; one is based on the evaluation of unidimensional parameters of profiles which are obtained as a result of vertical sectioning of fracture surfaces and leads to the measurement of roughness parameters or fractal dimensions, and the other one is based on direct determination of parameters of the fracture surface with the help of stereo pairs or 3-D reconstruction techniques.*

*The interest of our group is directed more towards the latter approach, taking into account the facilities now available which include the possibility of directly feeding electron images from the SEM into the image analysis unit.*

*No results have been produced so far, but projects which will include this possibility of a direct geometrical analysis of fracture surfaces to relate them to the microstructure and to mechanical properties will be considered in the near future.*