

Abstract Submitted  
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**Transformation of voids observed on a surface to a volumetric size distribution** LYNN SEAMAN, SRI International — A new procedure, based on the Scheil<sup>1</sup> method, for transforming surface counts of voids or grains to volumetric size distributions has been developed. The method simultaneously smooths the surface count data and produces the volumetric distribution. A constraint has been added to require that the relative volume of the voids or grains matches the relative area of these artifacts. Here the method is applied to void count data from spall experiments in 99.999% pure aluminum performed by Qi MeiLan<sup>2</sup> and similar experiments in several other materials.

<sup>1</sup>. E. Scheil, Die Berechnung der Anzahl und Grossenverteilung kugelformiger Kristalle in undurchsichtigen Körpern mit Hilfe durch einen ebenen Schnitt erhaltenen Schnittkreise, Z. Anorg. Allgem. Chem., Vol 201, p259, 1931.

<sup>2</sup>. Qi MeiLan, PhD thesis, to be published.

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