

1. page 109, discussion of the Petzold data: As I said, Petzold's volume scattering function data are "The most carefully made and widely cited ...." However, I did not say they were perfect. Although his data are undoubtedly adequate for most applications – in particular, those for which the small-angle behavior of  $\beta(\psi)$  is unimportant – his values may have serious errors at scattering angles less than a few degrees. Petzold himself states (1972, page 3): "Even though care was taken to reduce the instrument's own internal scattering, it is still significant relative to the small angle forward scattering of clear water, ...." Moreover, there were almost certainly significant diffraction effects arising from the small apertures used to form the beam: his instrument could not distinguish between a small change in light direction caused by diffraction within the instrument and an equal change in direction caused by scattering within the water. (His small-angle instrument measured scattering at nominal angles of  $\psi = 0.172, 0.344$ , and  $0.688$  degrees.) I won't speculate on how big these errors might be, but I do feel that there is need for further very careful measurements of small-angle scattering. Note also that Petzold could not make measurements at values of  $\psi$  greater than  $170$  degrees; the values shown in Table 3.10 for  $175$  and  $180$  degrees were obtained by extrapolation.