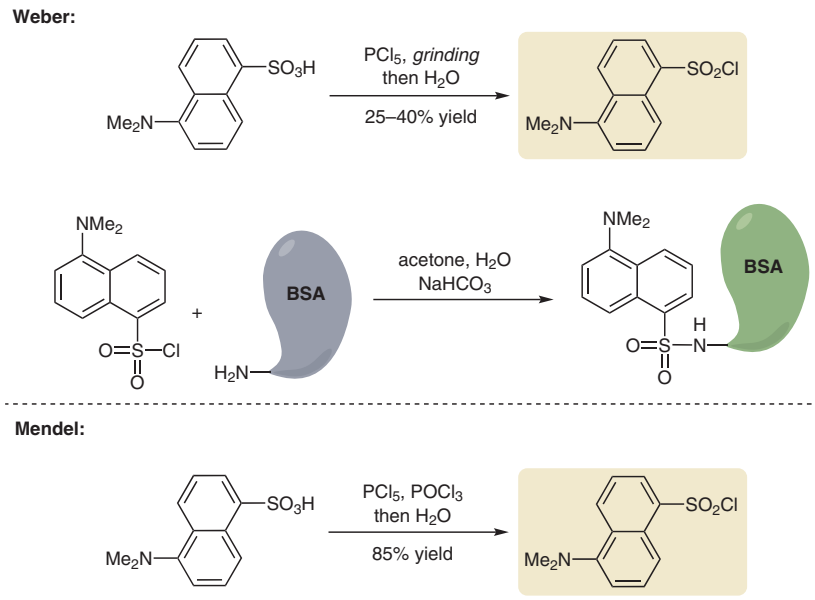
G. WEBER* (UNIVERSITY OF CAMBRIDGE, UK)

Polarization of the Fluorescence of Macromolecules. 2. Fluorescent Conjugates of Ovalbumin and Bovine Serum Albumin
Biochem. J. **1952**, *51*, 155–167.

Dansyl's First Dance



Significance: Labelling of proteins with small molecule fluorophores has been instrumental for elucidating protein structure and function and has enabled a variety of biological studies. Its easy synthesis, small size and good fluorescent properties of its amides made dansyl chloride a popular reagent that is still being used to date. For example, dansyl amides have been of great use to measure distances based on Förster resonance energy transfer.

Comment: Weber prepared dansyl chloride by grinding 5-dimethylamino-1-naphthalenesulfonic acid with PCl_5 to a melt, then pouring it into water. Dansyl chloride enabled labelling of primary amino groups of bovine serum albumin (BSA) and the determination of the fluorescence properties of the conjugate under various conditions. Mendel improved the synthesis of this important fluorophore by performing the addition of PCl_5 in $POCl_3$.

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