

The proposal was to carry out serial crystallography on acetylcholinesterase (AChE) crystals at room temperature. To this end, microcrystals of human (hAChE) and *Torpedo californica* AChE (TcAChE) were sandwiched between two silicon wafers and data were collected using the raster scanning approach that has been developed and successfully applied by our group (Coquelle *et al.* 2005). hAChE microcrystals grown in LiSO₄ diffracted only to 3 Å resolution, the same resolution that is regularly obtained at cryo-temperatures with larger crystals. We believe that this is inherent to this crystal form, owing to its high solvent content (80%). Concerning TcAChE microcrystals, we faced several methodological problems, including a high sensitivity to mechanical manipulation. Nevertheless, we have been able to show that they diffracted to 2 Å resolution (Figure 1, Table 1). However, the limited amount of crystalline sample precluded collection of a complete data set.

