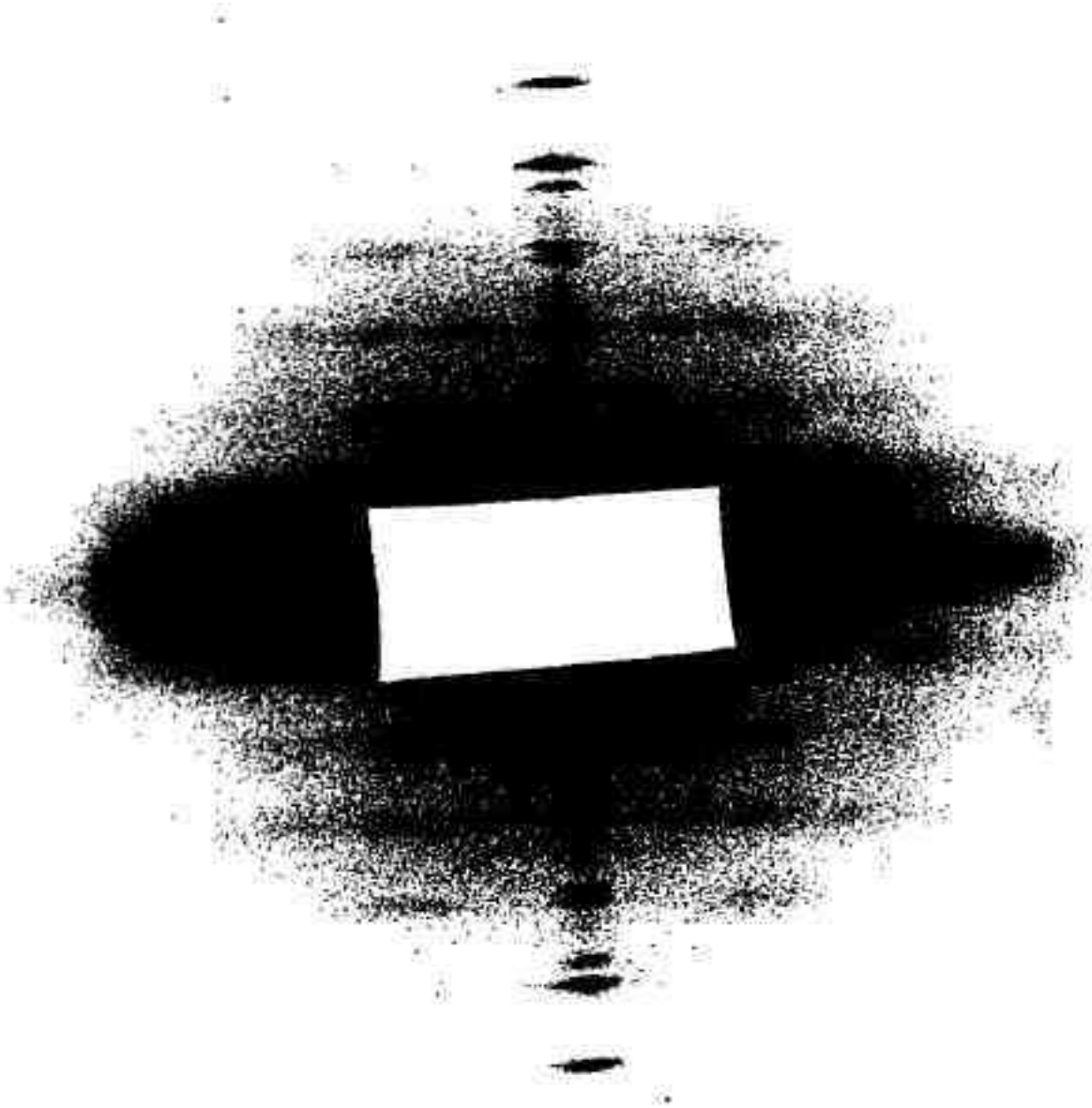
Establishment of the SRS as the home for structural biologists

The efforts to make the SRS the home for structural molecular biology dates as far back as the establishment of the NINA SRF. To understand some complexity, it is worth mentioning that the UK's Science Research Council (SRC) established NINA and subsequently the SRS at Daresbury. There were a number of other research councils at the time including the Medical Research Council and the Agricultural and Food Research Council, each jealously guarding their territories and budgets. Simply said, anyone outside the scope and remit of the SRC had to get their funding council to pay their way for the use of the NINA SRF but more so for the SRS owing to what was a significant investment by a single research council.

Max Perutz (MRC Cambridge), David Phillips (Oxford Molecular Biophysics) and Maurice Wilkins (King's College) represented the interests of the MRC at meetings on 22nd January and 3rd August 1973. It was clear that at the time, the main beneficiary was expected to be fibre diffraction and as such Hugh Huxley was nominated to coordinate the activities at the NINA SRF. Huxley was able to obtain impressive static diffraction pictures from frog muscle (see below) in early 1974 and was able to progress towards initial time resolved muscle diffraction using this synchrotron source before the closure of NINA on 31st March 1977. In 1978 when Joan Bordas moved to EMBL Hamburg, where fibre diffraction and XAFS instruments had been located on the storage ring DORIS, Hugh Huxley joined in the effort. He only returned to the SRS in the mid 1980s. Joan returned to Daresbury as the head of MRC's Structural Biology Laboratory in 1983. At his time MRC also decided to build a dedicated beamline 2.1 for biological solution scattering and fibre diffraction.



From the Daresbury Laboratory Annual Report 1974

Fig.39 X-ray diffraction photograph of a specimen of muscle. The exposure time was approximately one hour for 5 GeV and 14 mA circulating current in NINA.