ESRF	**Experiment title:** High-resolution powder diffraction of a homologous series of 1,2-disaturated-3-oleo-triacylglycerols.	**Experiment number:** CH-732
Beamline: BM16	**Date of experiment:** from:26-9-1999 (7:00) to:28-9-1999 (7:00)	**Date of report:** 25-2-2000
Shifts: 6	**Local contact(s):** Andrew Fitch	*Received at ESRF:*

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Report:

In this session high-resolution powder patterns of LML, MPM and PSP were measured. These triacylglycerols are all in the β'-phase and are part of our ongoing research in the behaviour and polymorphism of fats and mixtures of fats (e.g. cocoa butter). All patterns are indexed but their structures are not yet solved.

In the framework of this project also a sample of cocoa butter was measured at different temperatures to make the interpretations of previous SAXS measurement at the DUBBLE-CRG beam-line (Exp. Nr. 26-02-10) easier.

For our structure determination project the following structures were measured :

-$VOPO_4.C_4H_8O$, an inorganic layered structure intercalated with tetrahydrofuran. The structure was solved and a publication is in preparation.

-$VOPO_4.HOCH_2CH_2OCH_2CH_2OH$. Comparable with the previous, but the organic intercalate is diethyleneglycol. This structure is also solved and a publication is in preparation.