



Experiment title: BAG Barcelona-
Crystal structure of DNA fragments

**Experiment
number:**
LS1666

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Shifts:

Local contact(s):

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Report:

The DNA decamer d(CCGGATCCGG) has been crystallized for X-ray analysis in order to investigate the effects of changing the two central base pairs of the DNA fragments d(CCGGGACCGG) and d(CCGGTACCGG). Previous studies have already demonstrated that the structure of the former DNA fragment contains a Holliday Junction. The DNA molecules stack in an end to end way forming endless rods through the crystal in a way that simulates a continuous helix, with one turn per decamer.

Data were taken at 100 K using a wave length of 0.934Å. We collect 90 degrees with a $\Delta\phi$ of 1 degree and process with Mosfilm and scaled with Scala (CCP4).

The cell dimension where $a=b=33.54$ Å, $c=46.39$ Å, $a=b=90^\circ$, $c=120^\circ$, in the space group P31. We get 9379 reflections (3431 unique) in the range 80.0 Å to 20. Å with a completeness of 98% with an R_{sym} of 9.4.