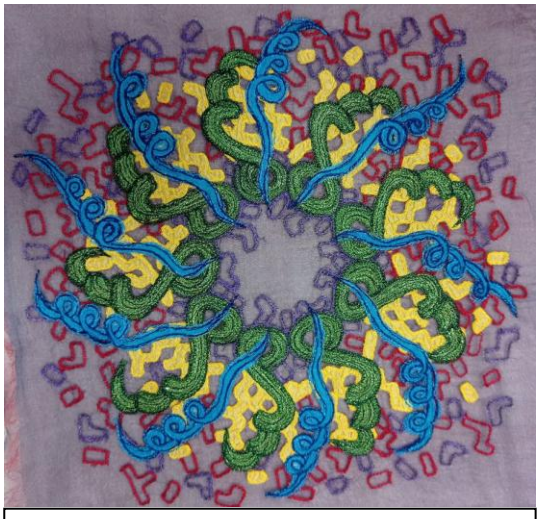
Monday 14 March 2025 meeting
Anne Griffiths – Diamond Stitches

Our first in-person talk of the year was by Anne Griffiths who told us about Diamond Stitches. These projects were all linked to the non-profit scientific establishment The Diamond Light Source (DLS), at Harwell in Oxfordshire.

The first stitch project was born when the DLS facility was being built in the early 2000's. While the concept and purpose of this cyclotron producing extremely fast-moving electrons which can be used to image things otherwise invisible, is rather alien and strange to the general public, the management of the company decided to fund a community stitch project taking inspiration from the science that can benefit from the cyclotron technology. Anne was recruited as the organizer and manager of the project aiming at explaining science to the general public and building connections between the scientists and the wider community in Oxfordshire.

The project produced 30 textile panels, each measuring 50 x 50 cm. The designs for the panels embraced a multitude of scientific areas including prevalent diseases, diffraction images created by the cyclotron and natural topics such as photosynthesis.



One of the 30 panels created for the DLS science project. This one took its inspiration from the structure of the protein involved in photosynthesis.

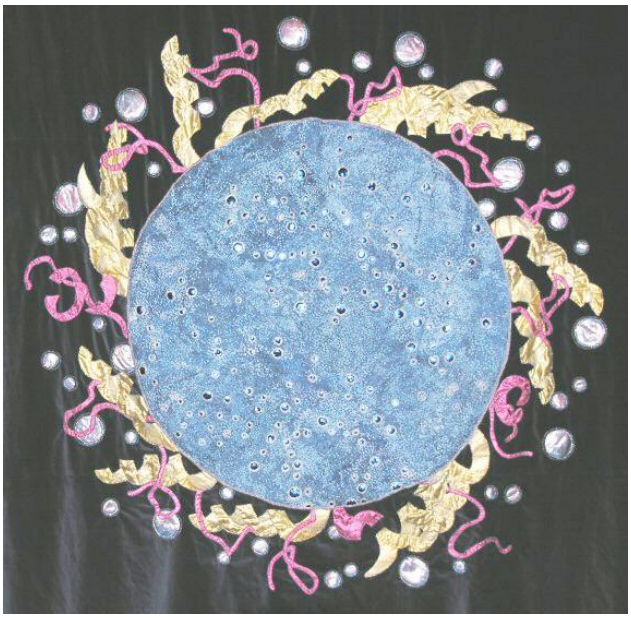
These topics were interpreted first as drawings and then distributed to members of Oxfordshire Women's Institute members to execute in their favourite style. In order to have some uniformity amongst the pieces, hand-dyed fabrics and threads were provided by the project.

This approach still left a lot of freedom to the women to create each panel in their own style, with their own techniques which embraced traditional embroidery, patchworking, crochet, tatting, Suffolk puffs etc., as well as little colourful stripy socks depicting chromosomes.

The scientists specialising in the topics chosen for the panels could not only pitch their topics for inclusion, but also were invited to pick up a needle and make their own marks on the pieces. The colourful end result is now hung on both sides of the main foyer staircase in the DLS building.

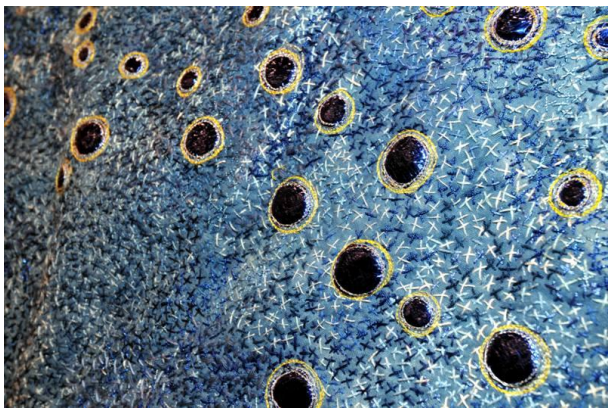
The second project saw Anne taking up a position as a resident artist at the DLS once the facility was up and running. She was given the freedom to see what was going on and pick up inspiration from what she saw at the facility as well as from the scientific topics that the research carried out at the cyclotron touched. Anne settled upon iron as her chosen inspiration, which resulted her in interpreting magnets, iron in the body, rust marks and corrosion in her textile pieces. An interesting approach was mixing iron filings with PVA glue and with the aid of magnets pulling the iron into patterns, which then dried and became fixed by the glue.

The third project was to create an embroidery of the Largest Diffraction Pattern in the World. This ended up being a 3m x 3m textile hanging depicting protein crystals discovered at Diamond Light Source. Eventually over 5000 people participated in the project.



A diffraction pattern is an image that gives information about the internal structure of tiny molecules such as the proteins involved in Alzheimer's disease. The diffraction pattern looks like a collection of small dots against a dark background. With the help of computer programs this pattern can be interpreted to show where the individual atoms of the protein molecules are and finally the overall structure of the protein can be deciphered.

The design chosen for the wall hanging included all these three elements executed in embroidery. An interesting aspect of this community project was that individual parts of the hanging travelled the world, popping up in unexpected locations and attracting a variety of people to add a few cross stiches of their own to the piece. The finished piece was revealed in 2010.



You can find more about Anne and her other work here https://pocketmouse.co.uk/