Cyanotype is a photographic printing process that gives a cyan-blue print. The English scientist and astronomer Sir John Herschel discovered this procedure in 1842. Herschel made numerous important contributions to photography. He made improvements in photographic processes, particularly in inventing the cyanotype process and variations (such as the chrysotype), the precursors of the modern blue-print process. He experimented with color reproduction, noting that rays of different parts of the spectrum tended to impart their own color to a photographic paper. He collaborated in the early 1840’s with Henry Collen, portrait painter to Queen Victoria. Herschel originally discovered the platinum process on the basis of the light sensitivity of platinum salts, later developed by William Willis.[8] He coined the term photography and applied the terms negative and positive to photography.[2] Even though John Herschel is perhaps the inventor of the cyanotype process, Anna Atkins actually brought this to photography. She created a limited series of cyanotype books that documented ferns and other plant life. By using this process, Anna Atkins is regarded as the first female photographer.

The process uses two chemicals:
- Ammonium iron(III) citrate (Ammonium ferric citrate; green)
- Potassium ferricyanide

They result in a photo-sensitive solution when dissolved in water, which is used to coat a material (usually paper). A positive image can be produced by exposing it to a source of ultraviolet light (such as sunlight) with a negative. The UV light reduces the iron (III) to iron (II). This is followed by a complex reaction of the iron (II) complex with ferricyanide. The result is an insoluble, blue dye (ferric ferrocyanide) known as Prussian blue. The developing of the picture takes place by flushing it with flowing water. The water-soluble iron (III) salts are washed away, while the non-water-soluble Prussian blue remains in the paper. This is what gives the picture its typical blue color. The process was popular in engineering circles well into the 20th century.

The simple and low-cost process enabled them to produce large-scale copies of their work, referred to as blueprints.

The cyanotype process at a glance: The cyanotype process is simple. It can be done easily in a few steps:

Mixing chemicals:

The cyanotype is made up of two simple solutions. Potassium ferricyanide and Ferric ammonium citrate (green) are mixed with water separately. The two solutions are then blended together in equal parts.

Preparing the canvas: Use paper, card, textiles or any other naturally absorbent material and coated with the solution. Dry in the dark or in a dryer with no direct light.

Printing the cyanotype: Objects or negatives are placed on the material to make a print. The cyanotype is printed using UV light, such as the sun, a light box or a UV lamp. Making digital contact negatives (see separate sheet) is a good way of experimenting with your own photographs. You will need to photocopy your negative image onto acetate.

Processing and drying: After exposure the material is processed by simply rinsing it in water. A white print emerges on a blue background. The final print is dried and admired.