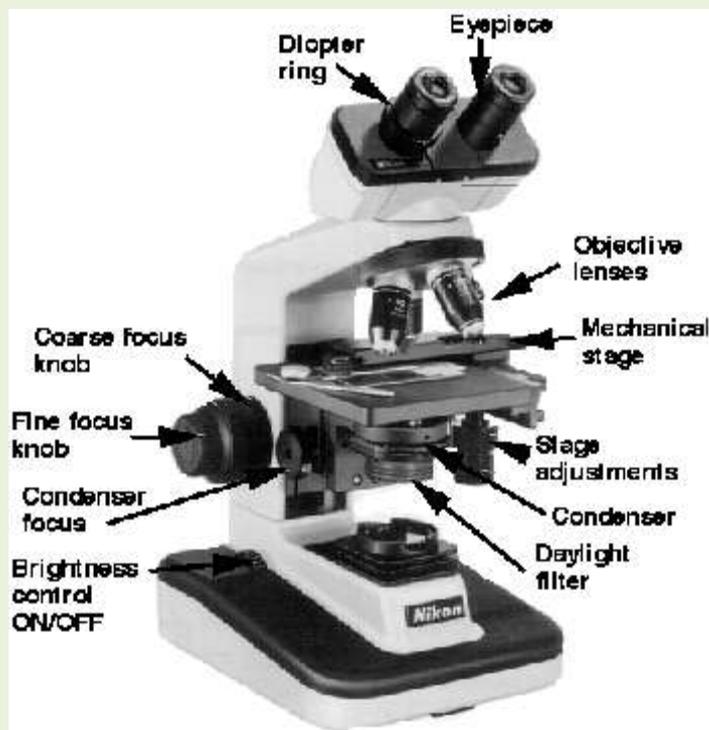


INTRODUCTION

For a number of reasons my old site closed down. This is the replacement of my **Microscopic Scienceart .nl** site some people might have visited.

The **SAND** section , which contained more than a thousand pictures, has slimmed down to 90 of the most different and beautiful.



The pictures on this site are taken through a **light - microscope**, in a time that there were no digital camera's. So they were taken with films, nothing fancy at all, just Fuji or Kodak 200 ASA.

The pictures were taken with a Olympus OM2 camera mounted on the microscope.

If you are interested, read the following explanation of my techniques, to understand what you are



looking at!

MICRO-CRYSTALS are made to grow by dissolving a chemical and evaporating the fluid by heating, or otherwise. During this process tiny crystals appear, which can be studied in polarized light. Almost every chemical crystallizes under the right circumstances in an endless variety of form and structure.

Most crystals are by nature optically active. The color is obtained by the use of polarisation filters, which direct the light through the crystals, splitting it into different colors. In laboratories expensive polarization microscopes are used. I cut my own filters, which worked just as well.

For enhancing the colors I used several optically active colorless plastic filters.

Nothing but optical coloring is used.

Magnification: Imagine the pictures covering an area of ± 1 or 2 mm^2 .

The **BUBBLE PICTURES** are taken without the help of polarization filters, but most of them, like the crystal pictures, through the light-microscope.

A few were made with the help of my *stereo-microscope*, ► when I needed a bigger surface.



Since fluids don't have polarizing properties, I used home-made plastic filters of various design, with one or two or many colors. So: the coloring *is purely optical*, though not natural.

The **FLUID** pictures were photographed with my light microscope mainly. The fluids were captured between two glass plates. Sometimes I used colored filters to give them a nice touch.

The **THIN SECTIONS**, very thin and transparent slices of common rock, were photographed through the light microscope, which reveals their crystal structure in polarized light.

The **PLASTICS** were partly photographed with the light microscope and partly with the stereo. Plastic is often highly polarizing material, with the use of polarizing filters the colors are fantastic.

The **PATTERNS**, most of them from fluids, were made by using Photoshop to multiply and mirror the original pictures. It's amazing how patterns are formed and seemingly unimportant details suddenly stand out in great beauty. In some cases I manipulated the colors a bit for visual effect.

I have chosen not to mention all the individual chemicals I used for the crystal pictures, for several reasons. One of them is that it is impossible to get about the same pictures twice, (if some one wants to try). Another is that I often used more than one chemical, in quantities I never registered. So giving you the names wouldn't do much good.

I used many household chemicals, on their own already quite often composed of different elements. It would be impossible, and quite boring, to mention them all.

However: the chemical tour you're about to embark on has 3 distinctive highlights:

Ascorbic Acid (vit.C), Paracetamol and Cholesterol.

Those wellknown substances are presented in their full and varied glory. Try to forget that you are looking at crystallized chemicals... and imagine you're touring an art gallery instead...

As for the **SAND**: they have their own introduction below, in Dutch only. But info on Sand can be obtained in many places on the net.

I am no longer involved in photomicrography. Since I stopped more than 10 years ago, digital camera's and microscopes took over and many things have become cheaper and easier. So it's no use to explain more than I did in the preceding text.

I don't, as a rule, sell my pictures, and I don't give them away like I used to do either, with very few exceptions. Experience is a tough teacher.

If you want to use a picture for some purpose, please contact me and I'll answer right away. info@scienceart.nl

N.B. The resolution of the Crystal pictures is low, but in reality the pictures are of course much sharper.

My URL hasn't changed, it is still **www.scienceart.nl**.

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