

# 2024

**1<sup>st</sup> October** 7.30pm **DRY MOUNTING** by Ian Wilson. Dry mounting is one of the simplest techniques in microscopy but can be used for a range of subjects and can be done with the minimum of equipment. We will make slides, which you can keep, of cardboard, wood and glass to mount insect parts, foraminifera, shells and seeds to see if we can replicate some classic Victorian slides.

**15<sup>th</sup> October** 7.30pm **ANTONY VAN LEEUWENHOEK AND SHOW & TELL** Mike Gibson and All. Mike will give us a presentation on one of the fathers of microscopy. We will then look at anything members have bought along which might be of interest whether that's slides, books, equipment or something unexpected. Bring something to show!

**5<sup>th</sup> November** 7.30pm **ALGAE 1 – AN OVERVIEW** by Ian Wilson. Algae are a very broad group of organisms found almost everywhere on earth and are responsible for producing much of the oxygen we breathe. We will consider the variety of algal species before looking at algae slides in the collection, as well as making temporary slides of living algae from pond water samples.

**19<sup>th</sup> November** 7.30pm **PSEUDO SCORPIONS** by Mike Gibson. The pseudo scorpions are a fascinating and largely hidden group of arthropods often found in compost heaps, leaf litter and other such locations. Mike will tell us about them and their habits before we attempt to find some for ourselves in soil and compost and study them under a microscope.

**3<sup>rd</sup> December** 7.30pm **OBLIQUE AND RHEINBERG ILLUMINATION** by Mike Gibson. We will have a selection of oblique filters and coloured films available to see what results we can get with these simple, effective but sometimes tricky methods for improving the visibility of specimens. You can bring your own slides to try the technique on if you wish.

**17<sup>th</sup> December** 7.30pm. **YOUR CHRISTMAS DINNER** by Mike Asquith. Mike's annual dive into the science of the food of the season, where he may well try to put you off your Christmas dinner! Bring seasonal snacks.

# 2025

**7<sup>th</sup> January** 7.30pm **SPIDERS** by Ian Wilson. Spiders have some fabulous adaptations to their hunting lifestyle. We will have a look at their structure and habits before studying slides in the Society's collection to see some of those structures in detail. They also shed their exoskeletons so bring along any spider skins you find around the house or garden.

**21<sup>st</sup> January** 7.30pm **SPECIALISED INSECT BODY PARTS - SESSION 1** by Kevin Rowley. Insects are a huge and varied group of organisms with body parts specialised to many different functions. Kevin plans to show us how these can benefit the animals as well as how they can help us to identify what group various insects belong to.

**4<sup>th</sup> February** 7.30pm **ALGAE 2 – DIATOMS** by Ian Wilson. Having looked at algae as a whole we will explore one group of algae, the diatoms. They have glassy frustules which, unlike most algae, can fossilise and be studied after millions of years. We will talk about the main groups and how diatoms live and then see what we can find in some 5 million year old diatomite as well as prepared slides and fresh samples.

**18<sup>th</sup> February** 7.30pm **VIDEOS PART 3; EDITING AND EXAMPLES** by John Smith, IW, MG. Technology makes taking and editing videos through the microscope easier than it has ever been. John will start by giving a practical demonstration of video editing using free software followed by an opportunity for anyone to show off videos they have taken of microscopic subjects.

**4<sup>th</sup> March** 7.30pm **PARAMECIUM AND OTHER CILIATES** by Mike Gibson. We hope to have a Paramecium culture to look and study, as well as some other members of this huge and varied group of protists in hay infusions and pond samples. These are a great group to try out various contrast techniques such as phase contrast, dark field etc.

**18<sup>th</sup> March** 7.30pm **BOTANY – PART 1 – STEMS** by Mike Asquith. Stems are mainly support organs and their structure reflects this. Mike will bring some slides of examples which illustrate this. We will then be able to look at these under the microscope to identify the structures discussed.

**1<sup>st</sup> April** 7.30pm **ROTIFERS** by John Smith. Rotifers are another huge group of tiny animals found in most ponds, lakes and, sometimes, puddles. Discover something of their variety and structure as well as looking for them in samples of pond water. Bring along some water whether from a pond, bird bath or puddle to search for rotifers, which we can try to identify.

**15<sup>th</sup> April** 7.30pm **BOTANY – PART 2 - STRUCTURE AND FUNCTION OF LEAVES** by Mike Asquith. Mike will discuss the structure and functions of leaves and we'll then look at sections and fresh samples under the microscope. Bring a selection of leaves we can study at the meeting.

**6<sup>th</sup> May** 7.30pm **BOTANY - PART 3 - SEED GERMINATION** by Mike Asquith. Spring is the time of germinating seeds, so what happens when a seed germinates? Mike will bring some slides of germinating seeds and some examples for you to examine under the microscope.

**20<sup>th</sup> May** 7.30pm **POLLEN** by Mike Asquith. As well as being the cause of untold suffering for many over the summer, pollen can be a beautiful and varied subject for the microscope and making slides can be surprisingly easy. We will look at some pictures of pollen, and consider its structure and function before making slides from our own samples. Please bring some flowers!

**3<sup>rd</sup> June** 7.30pm **DRUG PLANTS** by Mike Asquith. Mike will talk about many of the plant species that have been used as medicines and bring in some examples that can be found growing locally.

**17<sup>th</sup> June** 7.30pm **RUSTS** by Ian Wilson. Rusts are one of a number of types of micro-fungi which infect various plants. They have curious life-cycles and can be found easily all over the place. So we should be able to find some material with some spores to mount and examine. I guarantee that on your next county-side walk you will be spotting rusts on leaves along the paths.

**1<sup>st</sup> July** 7.30pm **BEACH SAND REVISITED** by Ian Wilson. Last year we looked at beach sand and concentrated on the Foraminifera. This year we will look more closely at other organisms likely to be found in beach sand, molluscs, bryozoans, ostracods and others. There will be a range of sand samples to look at under the microscope and, hopefully you will be inspired to collect some sand if you are visiting a beach over the summer.

**6<sup>th</sup> JULY - SUNDAY** 10.00am – 4.00pm  
**THE ANNUAL EXHIBITION OF MICROSCOPY**, Including sales, exhibits, talks and photo competition. This is an opportunity to meet with fellow microscopists and enthusiasts from around the country and also to see what's on offer in the way of sales items. Why not bring along an exhibit of your own? Sales and exhibits in the morning and lectures in the afternoon. **Guests are very welcome.**

**15<sup>th</sup> July** 7.30pm **SPECIALISED INSECT BODY PARTS - SESSION 2** by Kevin Rowley. Kevin will be showing us other marvels of evolution within the insect kingdom using specimens, fresh samples and slides from the society's collection.

**5<sup>th</sup> August** 7.30pm **BOTANY - PART 4 - THE FLOWER** by Mike Asquith. A look at the structures of the various parts of the angiosperm flower, from prepared slides and fresh material. Feel free to bring your own samples to explore under the microscope.

**19<sup>th</sup> August** 7.30pm **MICROMETEORITES** by Ian Wilson. The earth is being constantly bombarded by cosmic dust. We will learn about how much there is, how big they are and how to find them before attempting to discover micrometeorites in dust collected from rooftops, streets and the gutters of the Humfrey rooms!

**2<sup>nd</sup> September** 7.30pm **THE STEREO MICROSCOPE WITH EVERYDAY OBJECTS** by Mike Gibson. It can be amazing to see everyday objects magnified by just ten or twenty times. Bring along anything you have which might be interesting including flowers, insects from the windowsill, printed materials, cloth, dust etc. We will try to bring along some mystery objects to test your skills of observation!

**16<sup>th</sup> September** 7.30pm **BUTTERFLIES AND MOTHS** by Ian Wilson and Mike Gibson. Butterfly and Moth wing scales are beautiful subjects for mounting. We will briefly look at the anatomy of butterflies and moths under the microscope before mounting butterfly and moth wing scales.

***No microscope, don't worry, use one of our microscopes at our meetings.***