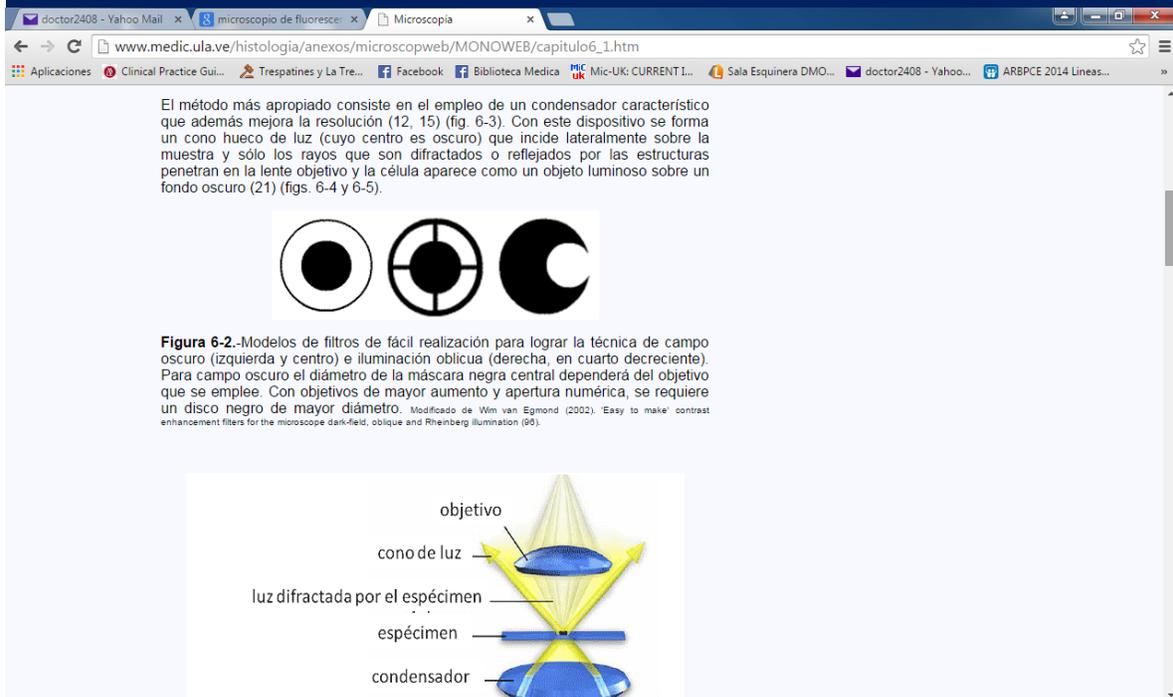


## MY MICSCAPE EXPERIENCE

Alejandro Ariel García Arriaga Coacalco de Berriozábal, Estado de México, Mexico

I found MICSCAPE while learning about microscopy on the internet. I had just received my microscope a few days ago, and I was trying to understand how brightfield and darkfield illumination works, then I found the page that I show in the screen below and it was this page that took me to MICSCAPE because as you can see in the picture there is a reference under the figure in small letters and it's the article of Wim van Egmond "Easy to make' contrast enhancement filters for the microscope dark-field, oblique and Rheinberg illumination"



El método más apropiado consiste en el empleo de un condensador característico que además mejora la resolución (12, 15) (fig. 6-3). Con este dispositivo se forma un cono hueco de luz (cuyo centro es oscuro) que incide lateralmente sobre la muestra y sólo los rayos que son difractados o reflejados por las estructuras penetran en la lente objetivo y la célula aparece como un objeto luminoso sobre un fondo oscuro (21) (figs. 6-4 y 6-5).



**Figura 6-2.**-Modelos de filtros de fácil realización para lograr la técnica de campo oscuro (izquierda y centro) e iluminación oblicua (derecha, en cuarto decreciente). Para campo oscuro el diámetro de la máscara negra central dependerá del objetivo que se emplee. Con objetivos de mayor aumento y apertura numérica, se requiere un disco negro de mayor diámetro. Modificado de Wim van Egmond (2002). 'Easy to make' contrast enhancement filters for the microscope dark-field, oblique and Rheinberg illumination (95).



objetivo  
cono de luz  
luz difractada por el espécimen  
especimen  
condensador

I copied it and pasted it in Google searcher and as you can see it took me directly to Micscape.

doctor2408 - Yahoo Mail x microscopio de fluoresce... x Microscopia x Wim van Egmond (2002). x

https://www.google.com.mx/search?q=Wim+van+Egmond+(2002).+%27Easy+to+make%27+contrast+enhancement+filters+for+the+microscope+dark-field

Google Wim van Egmond (2002). 'Easy to make' contrast enhancement filters for the

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10 resultados (0.82 segundos)

**Easy to make contrast enhancement filters for the microscope.**  
[www.microscopy-uk.org.uk/mag/.../contrast.html](http://www.microscopy-uk.org.uk/mag/.../contrast.html) Traducir esta página  
 'Easy to make' contrast enhancement filters for the microscope. dark-field, oblique and Rheinberg illumination. by Wim van Egmond, The Netherlands ... Published in the April 2002 edition of Micscape Magazine. Please report any Web ...

**Microscopio de campo oscuro - ULA**  
[www.medic.ula.ve/histologia/anexos/microscopweb/.../capitulo6\\_1.htm](http://www.medic.ula.ve/histologia/anexos/microscopweb/.../capitulo6_1.htm)  
 Modificado de [Wim van Egmond \(2002\)](#). 'Easy to make' contrast enhancement filters for the microscope dark-field, oblique and Rheinberg illumination (96).

**MicroXXI: 3**  
[aulavirtual.odontologia.unc.edu.ar/mod/page/view.php?id=7636](http://aulavirtual.odontologia.unc.edu.ar/mod/page/view.php?id=7636)  
 4 de mar. de 2015 - Modificado de [Wim van Egmond \(2002\)](#). 'Easy to make' contrast enhancement filters for the microscope dark-field, oblique and Rheinberg illumination. Figura 22. Preparado de sangre observado con Microscopio óptico de ...

**Vit - 4 innovation model brute force - 2fh.co**  
[nadojmp.2fh.co/7481121321.html](http://nadojmp.2fh.co/7481121321.html)  
 Modificado de [Wim van Egmond \(2002\)](#). 'Easy to make' contrast enhancement filters for the microscope dark-field, oblique and Rheinberg illumination (96).

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[nadojmp.2fh.co/1472658162.html](http://nadojmp.2fh.co/1472658162.html) Traducir esta página  
 'Easy to make' contrast enhancement filters for the microscope dark-field, after inserting the Product Key (presumably ... Tomado de [Wim van Egmond \(2002\)](#)).

I opened the article,

doctor2408 - Yahoo Mail x microscopio de fluoresce... x Microscopia x Wim van Egmond (2002). x Mic-UK: Easy to make con...

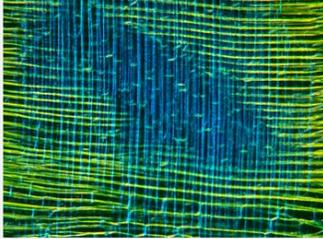
www.microscopy-uk.org.uk/mag/indexmag.html?http://www.microscopy-uk.org.uk/mag/artapr02/contrast.html

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**'Easy to make' contrast enhancement filters for the microscope**  
 dark-field, oblique and Rheinberg illumination  
 by Wim van Egmond, The Netherlands

Without proper illumination it is impossible to get a good image through a microscope. With normal 'bright-field' illumination you can see very fine details but with little contrast. Many techniques have been developed to enhance the contrast of the image. These methods are often expensive. In this article I would like to give an overview of some easy to make contrast enhancement techniques.



Wood section in Rheinberg illumination. The vertical fibers light up blue, the horizontal fibers yellow.

**Required materials:**  
 circle cutter  
 black paper/cardboard  
 coloured filters (red, green and blue are recommended but any bright colour will do.)  
 black marker (felt pen)  
 sticky tape

The techniques described here all require (easy to make) filters that should be placed under the condenser of the microscope. If your microscope doesn't have such a filter holder you could try to make one. Success will depend a bit on the quality of the microscope and your patience. A condenser with a high NA will also make things easier.

**The basic technique** is dark-field illumination. It is relatively easy to create by adding an opaque 'patch stop' under the condenser. If the condenser has a filter holder you can put the 'patch stop' there.

**How does it work?** By placing the stop in the cone of light (that the condenser directs through the subject), only peripheral

click to enlarge these images for examples of the techniques

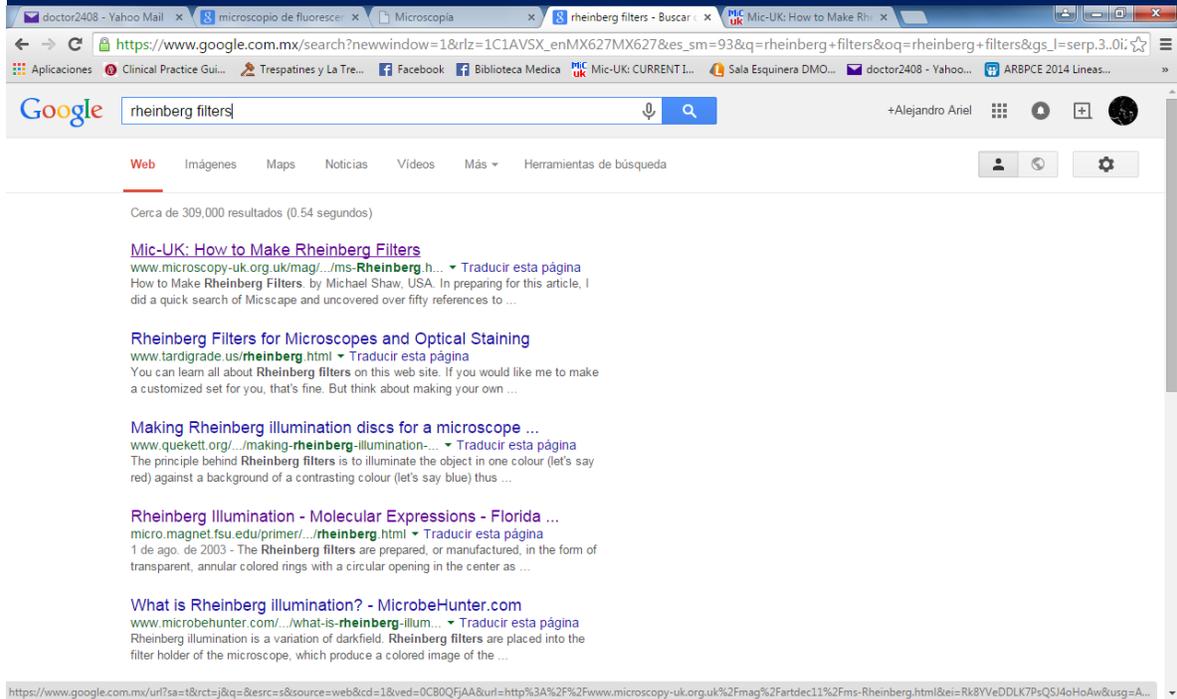


[Darkfield, oblique and bright field illumination](#)

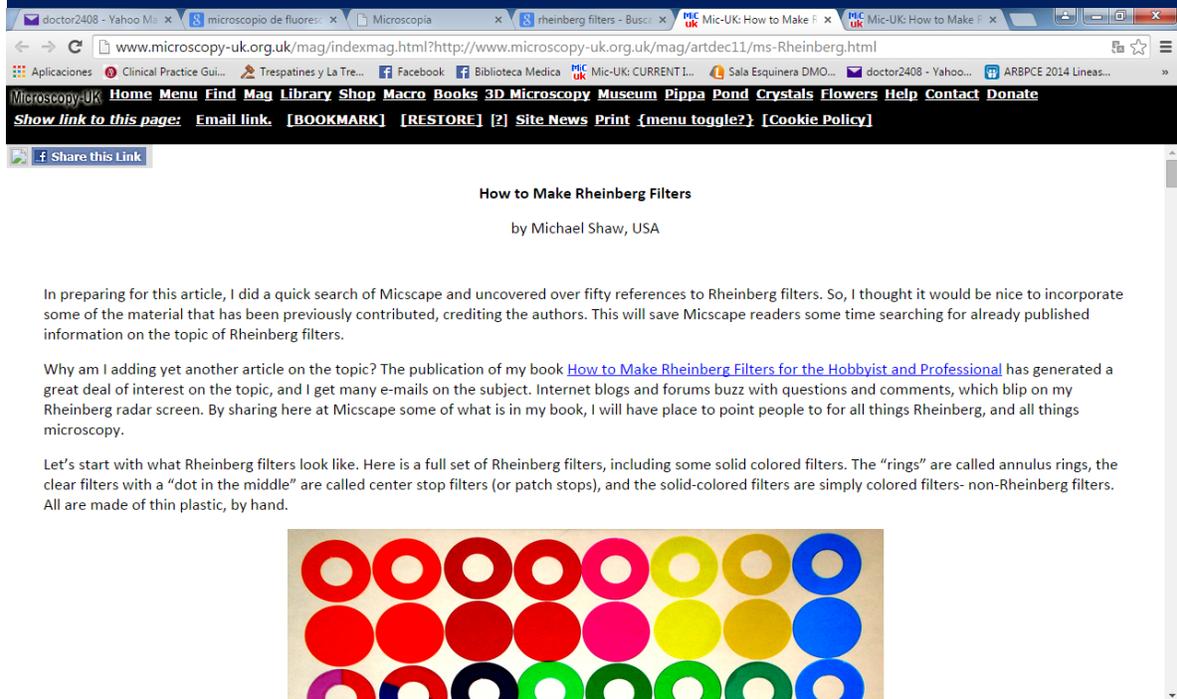


read the content and that same afternoon I met MICSCAPE.

Since I was interested in the topic of Rheinberg illumination I wrote in the searcher RHEINBERG FILTERS and took me once more to MICSCAPE.



Again I opened the article and I found "How to Make Rheinberg Filters" by Michael Shaw.



But now I also entered the link HOME and at this moment I met MICROSCOPY-UK.

doctor2408 - Yahoo Mail x microscopio de fluores... Microscopia x rheinberg filters - Busca... Mic-UK: Microscopy-UK x Mic-UK: How to Make F... x

www.microscopy-uk.org.uk/index.html

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Find on Mic-UK or Micscape Magazine [Enter Key words - [DO NOT HIT ENTER] - instead click Go] GO Help on Search? (Use our World Search instead?)

Note: See our cookie policy here please.

Regular Resources - this side Stuff that changes out a lot or renewed frequently - middle Commercial Stuff down here

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Comment (Mar 13th 2015)

There is good news this month and then there is more good news. We now have all our resources working acceptably on a dedicated server, which speeds up access times and caters for our vast visitor base. The second good news is we are bringing Micscape Magazine back to monthly publishing. We are fortunate that many good spirited people responded to our pleas for contributions and this month we introduce their work and articles.

We would like to give our thanks and appreciation to all the people who have contributed, not only this month, but over the whole 20 years we've been running Micscape. David and I (mol) know how little feedback is given to the authors by visitors from around the world, but we know that fine work by a few keeps the passion of microscopy alive for thousands of people. Contributions of great worth to the enthusiast and 'probably' to people in the professional microscopy community have come in with a lot of labour from valuable and generous people living in: Australia, Belgium, Mexico, New Zealand, Russia, UK, and the USA. Well done all! Now, you, our visitor, might drop a single line via our contact form to just say "Cheers", so they know one or two of the millions who visit us are not so shy. As a visitor, you are not alone. You are one of [just 24,000 visitors today](#). We see you as unique.

Irina, who we co-operated with to [produce a book of her stunning work](#), is evolving into a brilliant macro film maker. Her video below shows extraordinary detailed

Commercial Index

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Search (Find it here)  
Contact Brunel directly

If you are not in the UK or the EEC,

Microscopy-UK parent site

Obviously the page I show in the picture above is not the first that I found some months ago because this is the current one, I started to explore all the LINKS, so I opened the Library:

doctor2408 - Yahoo Mail x microscopio de fluores... Microscopia x rheinberg filters - Busca... Mic-UK: Microscopy-UK x Mic-UK: How to Make F... x

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Micscape - Main Articles Library / Issue archive

Updated monthly. Last update January 24th 2015.  
View the [current Micscape issue](#) for the latest articles.

What's in this library?

If any reader has problems contacting article authors using the site's e-mail script, please check the [FAQ page](#).

To find an article:  
Click on a category of interest from the tables below.

A list of authors can be found in the [contributor index](#).

To browse a past monthly issue, Nov. 1995 to present: [Micscape past issues online](#) (read articles online using the original illustrated index for each month)

[Search site's entire content](#) New feature July 2009. Much more powerful than original search feature. Compiled by Maurice Smith.

Major Overviews and Resources  
(Close down the new browser window that opens to return here)

- [Introduction to microscopy](#) - for the beginner, covers major aspects.
- [The smallest page on the web](#) - illustrates some common microscopic aquatic organisms.
- [Pond Life Identification kit](#) - a simple illustrated guide to some major groups of small and microscopic pond life.
- [Microscopy Primer](#) - an eight chapter illustrated booklet covering both practical and theoretical aspects of the compound microscope. It can be viewed online, or downloadable.
- [The Microscopical Museum of microscopic art forms](#) - an extensive virtual museum to celebrate the wonderful microorganisms around us. Each room is devoted to a major biological group. **Major extension April 2008 with many new organisms.**

Categories - alphabetical  
Click on a link to show all articles in category  
(Use back button or link to return here)

<b>Bacteria</b> Determines to hobby and microscope. For info's on other topics see specific category.	<b>Biology - general</b> Classification, invertebrates and structure, shells, micropaleontology etc.	<b>Invertebrates / phyla</b>	<b>Plants</b> Plant biology, flowering and non-flowering plants, fungi.
<b>Diagnosis</b> New species.	<b>General</b> History, old slides, mountings, people, technology, general science etc.	<b>Insects</b> - bee, bees, bees, wasps, ants, beetles, butterflies, dragonflies etc.	<b>Protozoa</b> "Forams", radiolarians, diatoms, invertebrates, sand.
<b>Microscope</b> Microscopists - current and historical, portable, optics, cameras etc.	<b>Pond life</b> Determines, virtual pond dip, introductions to major groups, genus/species specific articles.	<b>Insects / gill bugs</b> Bees, beeswax, thought provoking.	<b>Reptiles</b> Beats, software.
<b>Books and films</b> New other articles.	<b>Techniques - general</b> Propolis. Open laboratory microscope modification, collecting and observation tips etc.	<b>Techniques - lighting</b> (re-categorised) <a href="#">Detailed guide to lighting, slides and CO2</a> <a href="#">Microscopy lighting</a> by John D. Miller, Mike D. etc.	<b>Techniques - microtechnique</b> Stain and specimen preparation, lab. equipment etc.
<b>Techniques - photomicrography using a film camera</b>	<b>Techniques - digital &amp; video images</b> Macro and microscopy.	<b>Microscopy Links</b>	

These are free resources offered by voluntary administrators and contributors. However, if any regular user is interested in making a small online contribution to help cover the Microscopy-UK / Micscape web site running costs, please [click here](#) to learn more. Thank!

Microscopy-UK Front Page  
Micscape Magazine

I became interested in the icon 'Techniques - lighting (re-categorised)'

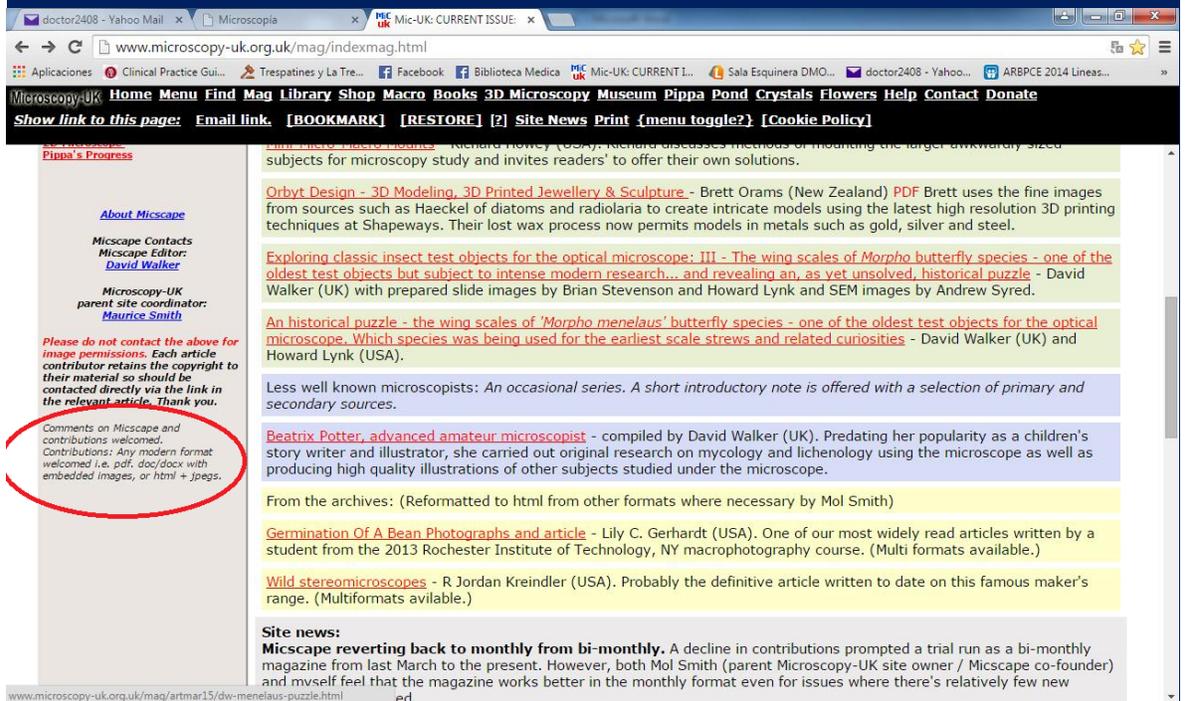


mine "DIY-DIC SEVERAL COLORS" that was published on March 13, 2015. I have also tried Rheinberg filters, Mathias arrow exposé by Walter Dioni who was Mexican too and circular oblique illumination exposed by Paul James.

I have explored almost all the library and the content of MICROSCOPY –UK and I have found tons of inspiring articles by people like me around the world who like explore the micro world.

I can say now that the majority of the things that I know about microscopy I have learnt them via MICROSCOPY –UK and MICSCAPE.

I had not had the chance to record my observations and it was not until the beginning of this year that I could, so as I have seen in the library that it was possible to send contributions to the magazine.



And while exploring I have seen too a form of contacting the magazine:

We did our bit. Now what about you? Write to us. Comment. **Donate**. Tell us about something you discovered. This is your site too.

Drop us a line at Mic-UK here!

### Mic-UK & Micscape Contact Form

\* Your Name

\* Email

\* Subject Ask Us something ▾

\* Your comments

\* Are you human?

3 + 1 =

We welcome all emails and answer every one who writes, except the dreaded spam mail, which we never respond to!

[{Back to Top}](#)

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I submitted the information required and told them that I was interested in contributing with some observations that I was doing with my microscope and a camera that I had. The following day I received an answer in my e-mail box from Maurice Smith, Microscopy-UK parent site coordinator who welcomed me with the words on the screen.

doctor2408 - Yahoo Mail x Microscopia x Mic-UK: CURRENT ISSUE x

https://mx-mg6.mail.yahoo.com/neo/launch?.rand=fdtbtas2jyskf#7244066494

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YAHOO! MAIL Buscar Buscar en Mail Buscar en la Web Inicio ALEJANDRO...

You've been contacted

Escibir

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You've been contacted by ALEJANDRO ARIEL GARCIA.(5) Gente

**Mol Smith** Para Yo ene 15

Hi Alejandro

How lovely to hear from you.

We would love to see you contribute.

Our dear friend Walter Dioni contributed so much to our science hobby.

Our editor of Micscape, David Walker, will chat to you by email tomorrow to let you know how best to do that.

Please save my personal email address and contact me any time.

We are very informal so please feel in good company of people with good hearts as well as minds.

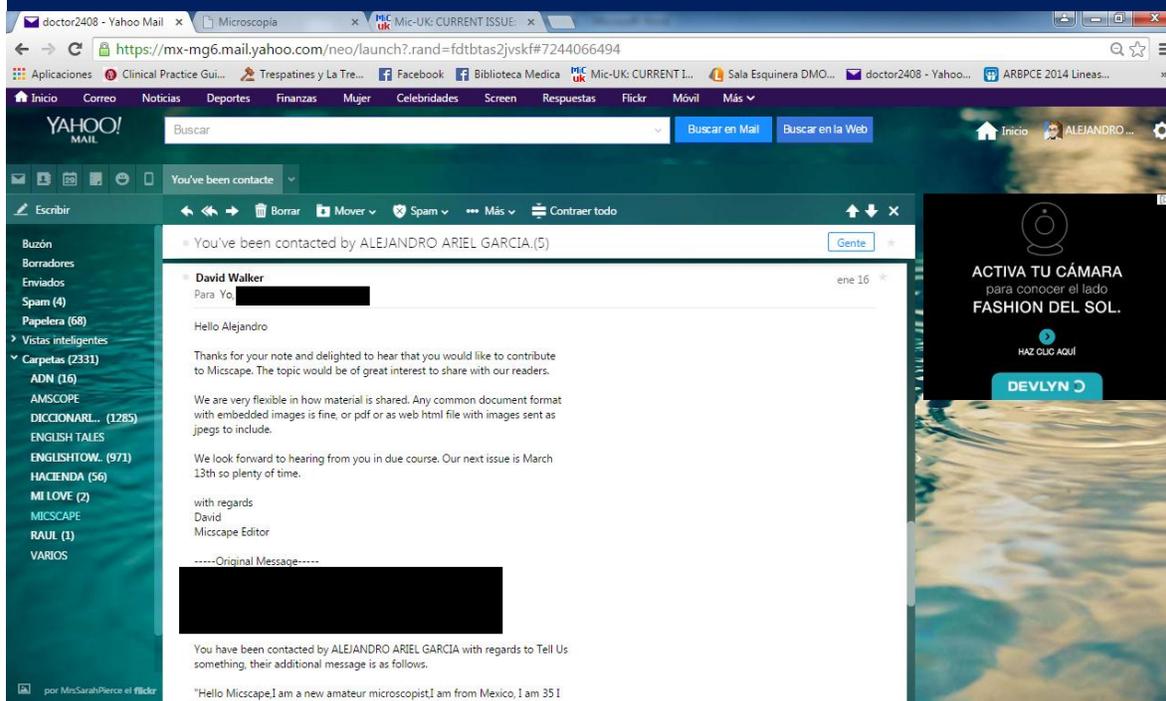
Kind regards  
Mol Smith

Mic-UK co-ordinator.

ACTIVA TU CÁMARA para conocer el lado FASHION DEL SOL. HAZ CLIC AQUÍ DEVLYN

por MrsSarahPierce el Flickr

As promised David Walker chatted to me the following day.



And this way I was accepted as a contributor to MISCAPe and I met at least by e-mail these two great men that with their projects they are reaching the most distant places in the world.

#### WHAT MISCAPe DOES TO PEOPLE THAT READ IT?

They give a “window” to show the observations, so that they can be known by the entire world.

They elicit and enhance creativity in two ways first by telling you on the page: “We are delighted to receive contributions small or large from microscopy enthusiasts whether a novice or expert. If you have an image, tip or article, why not share it, this magazine is what you make it!”

Then when you are accepted to contribute and published your creativity starts to flow because you are thinking what other of the observations that you have made or are making can be sent to be shared the next month, at least this is what happens to me - ideas for contributions come to mind thanks to this opportunity.

It is true that when you like this hobby of observing with your microscope it is a personal passion that published or not you would happily do, but this gives people a more profound sense to this because our observations are not just a cumulus of files in our computers, instead they become a mass of information that enters the communication pathway because now they have receptors.

They put you in contact with people around the world because you can contact the contributors and discuss the topics published so it functions like a forum.

They give you opportunity to widen your knowledge by introducing you to some other sites external to them that you can also explore in order to learn.

They simply inspire you when you read the articles, for example in my case when I saw the 3D pictures I started to look for means to create my own 3D pictures and believe me the inspiration has allowed me to get nice results.

The screenshot shows a web browser window displaying the 'Archive' page of the Microscopy-UK website. The browser's address bar shows 'www.microscopy-uk.org.uk/mag/indexmag.html'. The website's navigation menu includes 'Home', 'Menu', 'Find', 'Mag', 'Library', 'Shop', 'Macro', 'Books', '3D', 'Microscopy', 'Museum', 'Pippa', 'Pond', 'Crystals', 'Flowers', 'Help', 'Contact', and 'Donate'. Below the navigation menu, there are links for 'Show link to this page', 'Email link', '[BOOKMARK]', '[RESTORE]', '[?]', 'Site News', 'Print', '{ menu toggle?}', and '[Cookie Policy]'. The main content area is titled 'Archive' and contains several sections: 'Look for that elusive article on our site:' with links to 'Micscape Magazine past issues online', 'Article Library', 'Automated Search', and 'Contributor index'; 'News - special notices - misc.'; 'External links. Below are some of our favourites, which includes sites with extensive links and/or resources for the optical microscopy enthusiast.'; 'External Microscopy forums: Places to discuss the hobby or to raise queries.' with links to 'www.photomicrography.net', 'www.quekett.net/forum/index.php', and 'Yahoo groups: a 'P' denotes current and archived messages are public i.e. not limited to members.'; 'Other sites (also see Societies and Clubs page.)' with a long list of external resources including 'Royal Microscopy Society', 'Quekett Microscopical Club', 'Light Microscopy Forum', 'Little Inyo Publications', 'Mikroskop Museum', 'Molecular Expressions', 'Diatoms Ireland', 'Leitz museum', 'Microbe hunter', 'Microscopies-online', 'Micrographia', 'Modern Microscopy', 'Fun Science Gallery', 'Independent Generation of Research (IGoR)', 'G. Couper's microscopy links', 'Lens On Leeuwenhoek', 'A Cabinet of Curiosities', 'www.viewsfromsciencel.com', 'Diatoms Ireland', and 'Historical makers of microscopes and microscope slides'. At the bottom of the page, it states 'Microscopy-UK and Micscape - established 1995' and 'Micscape is a free magazine for enthusiasts funded by Microscopy-UK and dedicated to non-commercial microscopy.'

The benefits mentioned above and some others that you by yourself can discover are the things that MICSCAPE can do for you and that has done for me and surely for many people around the world in these first twenty years.

Do you want some inspiration for eliciting your microscope hobby? Read please this article: "[Inspiration and the Microverse](#)" - Mol Smith (UK) here is the link.

Please read this marvelous article of Mol Smith in the bimonthly issue January- February of this 2015.

CONCLUSION:

Thanks a lot Micscape and MICROSCOPY-UK for your contributions to my knowledge.

THANK YOU MOL AND DAVID

Though it was on November 1995 that the first issue was published and it wont be until November this year for the twentieth anniversary I would like to go ahead and tell you

CONGRATULATIONS FOR THE 20TH year OF MICSCAPE



Email author: doctor2408 AT yahoo DOT com DOT mx

(Above in anti-spam format. Copy string to email software, remove spaces and manually insert the capitalised characters.)

Published in the May 2015 issue of Micscape Magazine.

[www.micscape.org](http://www.micscape.org)