

Schools Membership costs only £10 a year. For this, a named teacher representative will receive *Microbiology Today* each quarter, advance notification and copies of new microbiology teaching resources and discounted fees for attendance on SGM training courses and workshops. Application forms are available on the membership page of the SGM website ([www.sgm.ac.uk](http://www.sgm.ac.uk)).

SGM has recently initiated a new category of membership for schools. Although this does not officially take effect until January 2002, we are delighted to report that at the time of going to press (September) over 100 UK schools have already signed up. A big welcome to them all. They will receive this issue of *Microbiology Today* with our compliments and we hope they find lots of interest to read.

## SGM services to schools

Although the Society has only just started to offer membership to schools, we have a good track record of supporting microbiology teaching at all Key Stages. Many resources are available either free or at low cost and we also offer advice and training. We are regular attendees at events such as the ASE Annual Meeting.

The Education activities are administered by **Dariel Burdass**, a microbiology graduate who also has a PGCE and has taught in both primary and secondary schools. She is supported by other members of the External Relations Office team who lend a hand when required and reports to the External Relations Manager, **Janet Hurst**, and the Council Education Officer, **Liz Sockett**, both of whom have extensive experience in raising the profile of microbiology to schools and the public.

## Resources

- **Posters** (all free):  
*World of Microbes*;  
*Microbes and Food* (set of three);  
*Microbes and the Environment* (set of two).
- **Factsheets** (free) cover a wide variety of topics, including safety, safe micro-organisms for schools, practical investigations, culture maintenance, etc. All are available on the website.
- **Primary Pack – *The World of Microbes***: a new set of booklets and a poster for KS2, in support of NC Unit 6B. £15.00 inc. p&p.
- **Careers posters and leaflets** (free).

## On the web

The SGM careers and education pages are at [www.sgm.ac.uk](http://www.sgm.ac.uk)

The database of microbiology teaching resources, which records the extensive collection of material we hold in the office, is also available on the Schoolscience website ([www.schoolscience.co.uk](http://www.schoolscience.co.uk)).

The database is searchable by keywords. It is updated monthly.

## Microbiology on-line

A new website devoted to microbiology education is under development. Watch this space for further news.

## Enquiries

We are happy to answer questions on any aspect of microbiology teaching and have a panel of experts to call on when required.

email [education@sgm.ac.uk](mailto:education@sgm.ac.uk)

## Over to you...

From now on *SchoolZone* will be a regular feature and contributions are welcome from teachers who have interesting microbiology material to share, such as novel investigations, useful tips, or good sources of information. A copy of the post-16 resource *Practical Fermentation* (worth £15.00) will be sent to any school whose submission is published. Of course the Editors of *Microbiology Today* reserve the right to edit any material.



## Training Courses

One-day basic practical microbiology training courses for teachers and technicians are being held at venues around the country.

- **11 & 12 October 2001** University of Reading  
(fully booked)
- **6 November 2001** Sir John Deane's College,  
Northwich, Cheshire  
(fully booked)
- **1 February 2002** At-Bristol
- **8 February 2002** Woodlands Centre,  
Chorley, Lancashire
- **2 July 2002** Institute of Education,  
London
- **Summer Term** Institute of Education,  
(date tbc) University of Warwick

The cost is £25.00 per head. A grant towards cover costs is available. Places are filling quickly on a first come, first served basis.

## Summer School, 15–19 July 2002

SGM will be running a *Post-16 Microbiology Summer School* in the School of Food Biosciences, University of Reading.

The main objective of this summer school is to raise levels of knowledge and confidence in the teaching of microbiology. The programme has been carefully designed to reflect the content of post-16 examining bodies' specifications, but aims to go beyond the basics by covering the latest research findings in each topic. The summer school also aims to put microbiology into a wider educational perspective and will show how it can be used to teach other issues, such as bioethics, science communication and educational research.

The target audience will be teachers and technicians of post-16 biology and the course will be compulsorily residential. Further details will be available in the near future on the SGM website.

## Developing microbiology practicals

One of the frustrating aspects of developing schools microbiology activities at the SGM is that we are based in an office. We can create posters and paper resources, but we have no lab in which to test practical ideas. All this has changed, thanks to a special grant from SGM Council. In August Helen Nankervis was appointed as research assistant to work in Education Officer Liz Sockett's laboratory at Nottingham University, specifically to develop new microbiology investigations. These will be aimed primarily at the post-16 level where there are many options to study microbiology and biotechnology, but few practicals to choose from. She will also be working up other ideas for different age groups. All of the protocols will be thoroughly trialled in schools before being published. The activities will be posted on the SGM website as they become available.

Helen graduated this year in microbiology from the University of Leeds and we hope that she enjoys her exciting new job.

## Post-16 Microbiology and Biochemistry Workshop for Teachers

7 June 2001, Glasgow University

■ Dariel Burdass

The one-day workshop, sponsored jointly by the Society for General Microbiology, The Biochemical Society and Glasgow University, was aimed at supporting Advanced Higher Biology teaching and updating teachers' own knowledge. The programme included two practical sessions, one on isolation and observation of *Rhizobium*, a nitrogen-fixing bacterium, and the other on the structure and digestibility of carbohydrates. There were also two talks on the Human Genome Project and an update on bacterial resistance to antibiotics delivered by SGM member Professor Tim Mitchell.

John Grainger, Chairman of the Microbiology in Schools Advisory Committee (MISAC), led the microbiology practical session. He demonstrated how to locate root nodules on both clover and other leguminous plants before washing, sterilizing and crushing some of the *Rhizobium*-containing nodules. A sample of the contents was then inoculated onto an agar culture medium that included a source of fixed nitrogen. The plates were sealed so that they could be taken away and incubated at school.



A second sample was taken, stained and examined under the microscope. One student was fortunate to observe the 'bacteroid' in its Y-shaped form. This created much excitement as in his 30+ years of teaching John Grainger had only seen this form in text books.

Feedback from the teachers was very positive and they found the day extremely informative. As one reported about the microbiology practical, '*it was simple to do, gave good results, was specific to the Scottish curriculum and could be used with students.*' The teachers were keen to attend any future activities.

A copy of the protocol for the *Rhizobium* investigation is available from the External Relations Office of the SGM (email [education@sgm.ac.uk](mailto:education@sgm.ac.uk)).

ABOVE:  
John Grainger helping teachers with the *Rhizobium* practical in Glasgow.

FAR LEFT (UPPER):  
An SGM teachers' workshop led by John Schollar of NCBE.

FAR LEFT (LOWER):  
Dariel Burdass (SGM Education Projects Administrator; right) and John Grainger (MISAC Chairman; left) on the SGM/MISAC stand at the ASE Annual Meeting.

PHOTOS SGM