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SSR in Practice

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Contributing to *SSR in Practice*

If you have an idea for an article for *SSR in Practice*, please submit your idea using the form: <https://forms.gle/wcgWj1267Bi6RN7x>
Writing guidance is available to support authors with the writing process. See www.ase.org.uk/submission-guidelines

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- the requirements of UK health & safety law are observed;
- all recognised hazards have been identified;
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- where possible, procedures are in accordance with commonly adopted model risk assessments;
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However, errors and omissions can be made, and employers may have adopted different standards. Therefore, before any practical activity, teachers and technicians should always check their employer's risk assessment. Any local rules issued by their employer must be obeyed, whatever is recommended in *SSR in Practice*. Unless the context dictates otherwise it is assumed that:

- practical work is conducted in a properly equipped laboratory;
- any mains-operated and other equipment is properly maintained;
- any fume cupboard operates at least to the standard of CLEAPSS Guide G9;
- care is taken with normal laboratory operations such as heating substances or handling heavy objects;
- good laboratory practice is observed when chemicals or living organisms are handled;
- eye protection is worn whenever there is any recognised risk to the eyes;
- fieldwork takes account of any guidelines issued by the employer;
- pupils are taught safe techniques for such activities as heating or smelling chemicals, and for handling microorganisms.

For further guidance, please see page 3 of *SSR in Depth*.

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Editorial

Fiona Williams, SSR Content Editor



Welcome to the July issue of SSR.

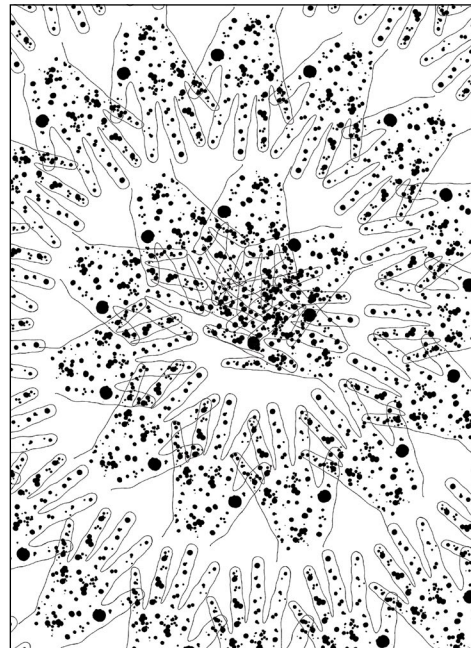
The topic of teacher recruitment and retention is of ongoing concern. In *SSR in Depth*, Mark Whalley and Ian Horsewell share their study of the experiences of physics teachers in England in the first five years of their teaching careers. In the next issue, a follow-up article from Mark will explore the reasons why physics teachers have left the profession.

Examples of different teaching and learning opportunities are always welcome and there are some great examples of these in this issue. Chris Graham looks at 'kitchen classification' to engage students with the topic of classification in biology. Meanwhile, Simon Lewis gives an insight into running an after-school genetics club and the opportunities that can be gained for both students and teachers. Articles from technicians Laura Smith and Katrina Cornell also provide examples of further learning opportunities. Laura shares a collaboration between art and science in a STEAM project that uses the microbiology technique of environmental swabbing. Katrina shares her experience as a STEM Ambassador, what this has involved and some potential benefits.

In *SSR in Depth*, Laura Hobbs, Carly Stevens and Rowena Fletcher-Wood share findings from their study into the effects of COVID-19 on UK environmental science projects.

Maths skills in science can be a tricky area for some science teachers. With this in mind, we hear from Rachael Benson who shares her experience as a science teacher. She also introduces her doctoral research, which focuses on creating resources and CPD to enhance teacher competence and student performance in maths skills. Allied to this, in *SSR in Practice*, Sarah Denison writes about using ratio tables to support the understanding and use

of maths in science. This approach is part of the Maths for Teachers of A-level Biology professional development course (<https://amsp.org.uk/events/maths-for-teachers-of-a-level-biology>).



Integrating art and science – see Laura Smith's article on page 26

There are increasing numbers of students with English as an Additional Language (EAL). Sheila Hopkins, a trainer for the Bell Foundation, writes about her knowledge and experience in supporting EAL students with the language of science.

Inclusion is an important area of focus and as a companion article to one published in the latest edition of *Primary Science*, Romaiza Naseem and Nasima Hassan describe some ways to introduce global perspectives in science education.

This is just a taste of the array of articles in this issue; I hope that you find them interesting and useful.

Fiona Williams

For further articles you can access *SSR in Depth* online at www.ase.org.uk/SSR-in-depth/issue-391



All the weblinks mentioned in articles in this issue are listed in one convenient document available at www.ase.org.uk/ssr-resources

