

THE S-LABS NEWSLETTER,
A LOOK AT SUSTAINABILITY IN LABORATORIES AT THE UNIVERSITY OF BRISTOL.

CHRISTMAS SHUT DOWN

Did you know that each year, University of Bristol labs use the same amount of electricity as around 7,400 typical UK homes and cost us around £2.2million? If we want to carry on expanding in terms of staff and students, as well as equipment and lab space we need to save energy whenever possible to balance this. UoB uses around £130,000 of unnecessary electricity over the Christmas break and with your help we can reduce this. You can help by switching off all unnecessary electrical lab equipment at night, over weekends, and especially before you leave for the Christmas holiday period. Many thanks for your support, and have a great seasonal break.



Does everyone in your lab know what they can recycle? If you're unsure, please contact the Sustainable Labs Officer for some clarification and extra signage.

S-LAB WORKSHOP

S-Labs are hosting a workshop at the University of Bristol this February 29th. The workshop takes advantage of the UK visit of Kathy Ramirez Aguila, Green Labs Program Manager at the University of Colorado, Boulder – a campus and university that is a US leader on many sustainability topics. Kathy will share her experience on topics such as:

- Identifying and auctioning improvement opportunities such as more energy efficient cold storage and fume cupboard use, more effective use of chemicals and materials, better waste practices.
- Boulder's network of green champions, and its use of assessment tools such as the Freezer Challenge.
- Raising environmental awareness amongst both staff and students in laboratory contexts.
- Demonstrating synergies between environmental improvement and other areas such as health and safety and quality assurance.

The University's Sustainable Labs Officer (Anna Lewis) and the Head of Sustainability (Martin Wiles) will talk about progress here at Bristol followed by discussions focusing on:

- how to get engagement from academics, technical staff and students.
- value/benefits/experience of dedicated lab efficiency/sustainable lab roles.
- value of, and next steps for, S-Lab/Green Impact assessment.
- sustainable procurement, effective maintenance and management, raising ULT temperatures and more.

This workshop is open to UoB staff and the greater GW4 (Universities of Bath, Cardiff and Exeter) region. If you are interested in attending please get in contact.

What S-Labs has planned for 2016

1) **Raising our re-use.**

In the New Year we are going to develop our current RESTORE facility alongside UniGreenScheme which offer an external equipment reuse service. We are pleased to announce that we have a new member of staff Nacho Aparicio (Environmental Operative) who will assist Sam Fitzsimmons, our Environmental Supervisor (Waste and Resources) with the running of this.

2) **Chemical inventory system.**

We are going to trial a chemical inventory software system called Labsafe in the School of Chemistry in 2016 with the intention of integrating this university-wide.

3) **Waterless condensers in Chemistry.**

Recirculating water is used to cool chemical reactions. This consumes water, energy for cooling and pumping as well as the occasional yet highly disruptive and expensive flood. To try and tackle some of these issues, S-Labs and Chemistry are going to trial and roll-out waterless condensers (Condesyn and Findenser).

4) **Chilling up across the university.**

Following the Biomedical Sciences 'Chill Up' trial, we are going to work with other departments to chill up most of the ultralow temperature freezers across the University to 70°C.

5) **Fume cupboard upgrades in Chemistry.**

Synthetic Chemistry has 198 fume cupboards which are in operation daily. They cost us over £230,000 per year mainly due to associated costs with moving and cooling air. We are going to refurbish and upgrade the cupboards and hopefully reduce their annual energy and cost by up to half.

6) **Sustainable lab inductions, exits and moves.**

With such a high throughput of students in the University it is important that all new staff and students are made aware of sustainable lab behaviour upon joining. An online system for inductions and exits will be developed alongside an upgrade of the Sustainability website. Any suggestions on content are welcomed.

Collaborate on the equipment database

Knowing what and where equipment is enables us to determine energy consumption as well as identifying potential upgrades. It can also help us promote sharing and liberate space.

All staff can add to the live equipment database. If you think you could help us catalogue your lab's equipment, or if you think you have any inefficient equipment you can do the following:

- 1) Contact the Sustainable Labs Officer for access to the database and an energy monitor.
- 2) Plug in the monitor, leave for a few days and take a reading.
- 3) Add the equipment details and the energy consumption to the database.

IF YOU HAVE ANY QUESTIONS, IDEAS
OR WOULD LIKE TO BECOME AN S-LAB
CHAMPION PLEASE FEEL FREE TO
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