Plant power!

Engaging students with plants and photosynthesis

Friday 12 July, 2019

St James the Less, 4 Moreton Street, Pimlico, London SW1V 2PS

Recent research, engaging practicals and active learning tasks that will excite your students about plant science

- Update your knowledge of the latest developments to bring real-life context into your classrooms and widen students' experience through cross-curricular links
- Discover engaging ideas and resources to teach challenging biochemistry and dispel the myth that photosynthesis is a 'boring' topic
- Increase your confidence and develop transferrable teaching ideas with like-minded teachers from other schools

All course materials and lunch included

Prices (subject to VAT at 20%)
£195 (PTI members)
£295 (non-members)
£145 (second person from same dept.)

Enquiries:
events@ptieducation.org
020 3174 2403

This course is for you if:

Limited early bird places
Only £145 + VAT

- You teach Biology at Key Stage 4 or 5
- You would like to refresh your understanding of plant topics and the many uses of plants
- You want to help students to score highly on challenging exam questions that require application to novel situations or experimental data

Book now at www.ptieducation.org/events

Speakers

Putting you in touch with specialist subject knowledge

Improving photosynthetic efficiency in crop plants: Why, when and how?
Dr Johannes Kromdijk, University of Cambridge
Growing up in an area of The Netherlands with an abundance of glasshouses, Johannes became interested in plants at an early age. Since September 2018 Johannes is a University Lecturer in the Department of Plant Sciences, where he employs a range of techniques from ecophysiology, mathematical modelling, biotechnology and genetic engineering to study plant physiology and applications to improve sustainability.

Photosynthesis: The electron factory, **Dr Paolo Bombelli, University of Cambridge**
How do plants generate electricity? They do so using the biochemical pathways of photosynthesis to generate electrons and then create electrical cells. Is this a way to both solve the food crisis and provide energy to developing countries? Dr Paolo Bombelli is a postdoctoral fellow and has the title of 'Algal Electrician'.

"Informative and thought provoking, with up-to-date Science to take back to colleagues and students"

- Previous photosynthesis CPD participant

Workshops

Led by a practising teacher, ensuring relevance to you and your classroom

Plant basics: What should our students know (but often don't)? - What are the common misconceptions of our students and the gaps in their knowledge? How can we correct these in memorable and engaging ways?

KS5 photosynthesis: Effective teaching and development of exam technique - Developing a deeper understanding of the biochemistry of photosynthesis can be a challenge, and even when students have learnt the key concepts, they can still struggle to apply them to exam questions. How can our teaching methods enable students to score highly on challenging questions and show resilience in exam situations?

Practical work with plants - Experiments and demonstrations with plants have the potential to really enhance learning, yet teachers may shy away from them. We will look at a variety of different practicals that can be used to demonstrate a whole range of unique adaptations of plants, from plant defences to tropisms, cloning and reproduction to field work, to give teachers some fresh ideas to take back to their classrooms.

This day will be led by Catherine Russell, Head of Biology at Altrincham Girls' Grammar School, a lead school for Biology. In 2014 Catherine won the Royal Society of Biology's Teacher of the Year prize.

Also coming up - Online courses

Atomic and nuclear physics

Two sessions:
Monday 3 June 1600-1700
Monday 10 June, 1600-1700

Biodiversity

Two sessions:
Wednesday 12 June 1600-1700
Wednesday 19 June, 1600-1700

Electrolysis vs electrochemistry

Thursday 13 June
1600-1700

Free for PTI members | £20 + VAT for non-members | Visit www.ptieducation.org to find out more