



STAV Physics Workshops

for teachers of middle years science



- ? Are you a teacher of science in the middle-years (5-8) or lower secondary years (7-10), wondering how to engage students in learning the basics of physics?
- ? Do your students find it hard to see how physics ideas relate to their experiences outside the classroom?
- ? Do you wish your students were asking more questions about physics topics?
- ? Do you feel your own physics background has not prepared you well for teaching some physics topics?
- ? Would you like to feel more confident about your own understanding of the physics in your school's science curriculum?

Then, these one-day workshops are designed for you!

(These workshops may also be suitable for teachers of year 11 physics who do not have a strong physics background.)

Included:

- Booklet of students notes and activities
- CD of other resources.
- Morning tea, lunch and afternoon tea.

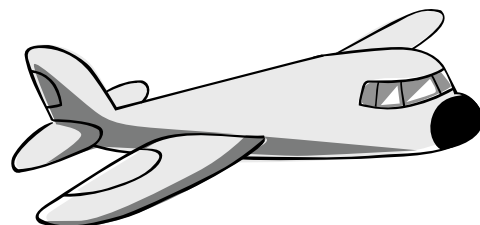
To register, download a registration form from our website:

<http://www.stav.org.au/html/scienceEvents.html>

Registration fee:

STAV Individual members: \$100

Subscribers/Non-members: \$120



Turn over for individual workshop details

Modelling electricity: from batteries to power stations



Students enjoy setting up electric circuits, but even simple circuits can raise curly conceptual questions. If teachers are apprehensive about such questions, they may resort to teaching equations that obscure the fascination and relevance of electricity in students' lives. In this workshop we will explore some models that allow us to interpret what is happening and make simple predictions without using equations. The journey takes us from batteries to the state power-supply system.

This workshop is intended for teachers of years 5-10 science who wish to develop their own conceptual understanding; the concepts are presented at the level of year 9-11 students. Some pedagogical implications of the axiomatic nature of the concepts will be considered, including the year levels at which the concepts can be meaningfully addressed, the limited scope for hands-on activities that contribute to students' conceptual understanding in this topic, and the consequent need for alternative strategies for engaging student interest. The workshop may also be useful for teachers of year 11 physics who have limited experience teaching at this level, and/or have limited formal background in physics.

STAV asks that teachers enrol for this workshop **only** if they will participate in the whole day.

What previous participants have said:

- Greatly increased my knowledge of this topic
- Well explained; willing to stop and explain when people couldn't understand. Hands-on activities to break up discussion.
- Excellent, a thoroughly enjoyable day. I feel that I learnt a lot from the day.
- Christina was fabulous!
- Excellent, small group questions and interactions.
- It was excellent. Lots of activities to explain concepts – I particularly liked the smartie activities.

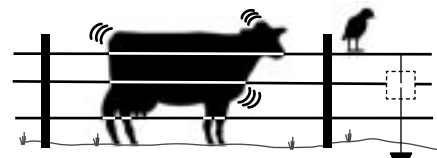
This workshop will be offered twice in 2011:

Friday 11 March; Friday 11 November

Time: 9.00am – 4.30pm

Venue: STAV House, 5 Munro Street, Coburg

Presenter: Christina Hart



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