Lab Techs Workshops Sept 2024
The Program of Workshops:

Please select seven of these nine offerings. A program for six sessions with repeats will be constructed from your choices.

1. **Learning new skills**: **Using a CRO**
   A separate workshop, beginning with demonstrations with support notes followed by time to try out the activities yourself

2. **Caring for a Van De Graaff generator**
   Advice on getting the most out of your Van De Graaff
   A separate workshop, beginning with demonstrations with support notes followed by time to try out the activities yourself

3. **Using a Ruhmkorff Coil for high voltage demonstrations**
   A separate workshop, beginning with demonstrations with support notes followed by time to try out the activities yourself

4. **Constructing your own demos, kits and prac equipment with Harvey Edwards from Principles and Practice**
   This session will cover techniques on assembling your own gear along with examples, such as resistance boxes and inertia apparatus

5. **Electronic data methods in Physical Sciences with Megan Simkin from Ciderhouse**
   Making the most of the digital data acquisition available to schools. The workshop will include some experiments, chat through tips, maintenance, calibration and analyse some data to help support the use of this equipment. The session will use PASCO gear but is intended for support of all equipment.

6. **Bringing the Fun to Physics! With Amanda Lovett: Modern Teaching Aids**
   Discover new and exciting ways to teach Year 7-10 Environmental and Physics concepts with simple, easy to run activities. Participants will explore exciting hands-on experiments and activities and see how easy it is to deepen students' understanding in a fun and engaging environment with curriculum aligned resources to take back to school. Participants will design an energy efficient house, explore forces and motion using a rollercoaster, launch ping pong balls using slingshots and catapults, and more!

7. **Random walk with science toys: Demos for Open Days with Man Lam, Lyndale Secondary College**
   Physics demonstrations are always good for open day as they are easy to setup and pack up. No chemical wastes and no smell. As the title of this session named as "Random Walk", we are trying to include new demonstrations each time so that even if you attended in previous year sessions, there are still new ideas for you to bring back to your school.

8. **Innovative physics equipment designed in Australia with Peter Mansell, Haines Educational**
   The theme of the session will be to demonstrate some of the unique products invented/designed in Australia for capturing and stimulating the minds of physics students. Products showcased will include those that demonstrate how/why power loss in transmission lines is reduced; how teachers can quickly and easily convert their dynamics cart into a fan cart for Newton's Laws; demonstrating a visual way of explaining the inverse square law; conversion of kinetic energy into heat). If time permits, there will be an opportunity for attendees to have a play with the items of equipment presented.

9. **Tour of lab and prep room facilities including animal house plus Laboratory management hints** with **Svetlana Marchouba, the Lab Manager at Camberwell Grammar School**
   A comprehensive tour of facilities in the classrooms as well as the storage and work areas in the various prep rooms. The tour also includes the animal house in the primary school section. Hints are also generated in the conversations on the way.