

## Starting Terms.

Credit where credit is due! Congratulations to VCE students who launched into Term 3 by participating in our annual VCE DNA Workshops. After a Sunday afternoon bus trip and an overnight local stay, schools from the (far) East Gippsland Cluster undertook the first session on Monday 13 July-the first day of Term 3. The remainder of the sessions were attended by over 280 students from 17 schools across Gippsland.

## Professor Ian Chubb is coming to Gippsland!

*'In the future, science will only become a bigger part of our lives, and the impacts will touch us all.'*

Monday 17 August 2015

Australia's Chief Scientist accepted an invitation to talk to Gippsland Science, Technology, and Engineering and Maths (STEM) teachers about the importance of STEM education in rural and remote areas.

Resourceful as ever, we followed up by extending an invitation to the CEO of the [Committee for Gippsland](#), Mary Aldred, to join Professor Chubb. Mary will address the issues and challenges we face in Gippsland and projects with STEM implications.

This promises to be an interesting and stimulating conversation in a local and informal setting. We invite you to join other secondary teachers and university staff and students to ensure that Professor Chubb's understands

that his audience is committed to growing opportunities for our students.

The discussion starts at 5pm and will be followed by light refreshments at 6.15pm on Monday 17 August.

[RSVP essential by 13 August. Download flyer \(pdf, 307kb\)](#)



Australia's Chief Scientist Professor Ian Chubb is set to visit Gippsland in August.

## Attention all Yrs 8-9 students: the challenge is on.

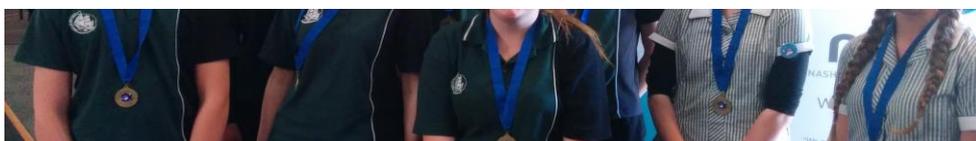
Tuesday 19 August 2015

The annual maths challenge is on again. This year it will be held during National Science Week 2015 and we can tell you that that Trafalgar HS is coming back to defend their title.

Participants will discover their mathematical talents during this event. Working in teams, students will tackle a range of novel and challenging problems designed to develop their thinking skills.

The challenge takes place in the morning and after a light lunch, students will learn how they performed.

[It's time to register your teams!](#)



### In this issue

You will find information about all our upcoming activities and about [transport](#) support.

Also included is your invitation to join us to hear from Australia's Chief Scientist, Professor Ian Chubb.

Please join us as we want the take home message to be loud and clear – Gippsland teachers are engaged with science education.

We will host lectures in physics and chemistry providing the opportunity for your students to hear from speakers usually confined to the metropolitan areas.

### Dates

- [Women in Physics Lecture Series](#)
- [Guest Speaker, Australia's Chief Scientist Professor Ian Chubb](#)
- [Maths Challenge](#)
- [CEA Development Workshop](#)
- [Hartung Youth Lecture](#)
- [The Science Experience](#)
- [LEAP into...Science](#)

*This newsletter contains links to websites for information, flyers and registration details.*

*These links are underscored for your convenience*

## Women in Physics 2015 Lecture Series.

Uncovering new materials under extreme pressures: Diamonds are a scientists' best friend.

11am Wednesday 5 August 2015

Diamonds are formed deep in the earth where high pressures and high temperatures slowly work to turn carbon-containing minerals into the hardest material known to science.

In this talk, the discovery of a range of exciting new and useful materials formed at similar pressures and temperatures will be discussed. Many of these new crystal structures form naturally as nano-materials and have various applications including potential new materials for solar applications.

**Speaker:** A/Prof Jodie Bradby from Australian National University. Jodie is currently a Research Fellow in the Department of Electronic Materials Engineering in the Research School of Physics and Engineering.. Her research interests concern the physical response of materials to various forms of mechanical stress.

This is a free lecture  
For: Yrs. 9-12 students  
[Download a registration form \(pdf, 156kb\)](#)

## Hartung Youth Lecture.

The chemistry of the atmosphere and climate change.

11.30am Thursday 27 August 2015

Climate change is going to affect everyone in the near future, but few know the science behind the atmosphere and how our carbon emissions are really giving rise to higher temperatures.

This lecture will present the chemistry of the atmosphere, how our carbon emissions are changing the atmosphere and the climate, as well as a discussion on methods available to us to reduce or remove the carbon in the atmosphere. It will have a lot of chemistry, some physics and meteorology and even a small amount of engineering.

**Speaker:** Colin Scholes is a University of Melbourne lecturer who studies ways in which Australia and the world can reduce their carbon emissions to the atmosphere, and help limit, or even prevent climate change.

This is a free lecture.  
For: Yrs. 9-12 students  
[Download a registration form \(pdf, 61kb\)](#)  
[Download an information flyer \(pdf, 837kb\)](#)

## VCE study design developmental workshop.

Chemistry Education Association

4-6pm Wednesday 2 September 2015

These Developmental Workshops (mainly for 2016 Units 1 and 2) are being organised across the State by the Chemistry Education Association.

These workshops will be discussion sessions so that teachers can raise issues, thoughts and ideas that they will have as a consequence of having attended the VCAA sessions in Term 2. This will enable everyone to share concerns and clever solutions. Fed Uni Associate Dean, Learning and Teaching for the Faculty of Science, [Dr Barbie Panther](#), will host this workshop.

There is no charge for attendance, light refreshments served.  
For: Chemistry Teachers  
[RSVP essential by 26 August](#)

Participants in our activities will connect, at some stage, with academic and technical staff of the [School of Applied and Biomedical Sciences](#).

*Introducing ...*

*A/Prof David Piedrafita*

*Parasites are his field of interest and sometimes he steps outside his undergraduate teaching and his research activities to engage with visiting secondary students, introducing them to the world of parasites!*



Pic 1 far left: David is Executive Secretary of the Council of The Australian Society for Parasitology Inc.

Pic 2: David addressing a visiting group of students on his favourite topic!

# LEAP into ... Sciences can come to your school.



Equipped with a range of hands on activities that are linked with career outcomes, the LEAP into ... Sciences team delivers hands on activities designed for students to explore and connect science and food, science and well-being and science communication.

Taking on the role of a quality control officer, participants test food prior to release on the supermarket shelves. They can also explore the role of an agronomist, testing fresh produce to guide growers when crops are ready for harvest.

Formulation Chemistry and pharmacologists are important fields of science in the well-being industry; formulating protective sunscreen and calculating the concentration of an active drug in medications allow students to perform an aspect of these roles.

Scientists are often challenged when talking about their work to wider audiences; communication has become a very important aspect of this field and the communication activity challenges students to translate scientific topics for the information of these audiences.

Hub Days are held in a central location that provide a laboratory experience; school visits involve a team visit to your school.

Find out how you can participate in a Hub Day or organise these activities to be held at your school visit <https://www.leap.vic.edu.au/activities/sciences>. There is no charge for these workshops.

## The Science Experience.

22-24 September 2015 (school holidays)

This event happens every year. And every year our program changes because we aim to provide students with a diverse range of experiences in science and associated fields.

Participants will join undergraduate students in the labs, experience a range of science fields, enjoy the company of like-minded peers, meet members of the Young Scientists of Australia and head out into the field to examine the application of science. Our field trip this year will include a visit to the Victorian Space Science Education Centre.

This is a day program although on campus accommodation is available for students who will need to travel to be part of this unique activity.

Our team members are available to work with interested students and their families to facilitate their attendance. We'd love to hear from them.

For: Yrs. 9 and 10 students in 2015  
Contact us to find out how we can help.

### Need help with transport?

*We know that the cost of transport prohibits schools from participating in our activities.*

*We have some good news!*

*The team has been able to acquire funding to assist schools with reasonable transport costs associated with our activities, until the end of 2015.*

Contact us for more information.

### Contact us:

#### Email

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