

# POWER

## Engineering



## Bursary Newsletter

### From the API

#### API Chief Executive Update and Welcome

Following feedback received from some of the graduating API Bursary holders in 2009 it has been decided to provide a short (maximum 2 pages) **Newsletter for API Bursary Holders**



on a quarterly basis to keep you informed of some of the interesting things both API and other Bursary Holders are doing to improve the understanding and profile of power engineering.

I would also encourage you to send any articles you think may be worthwhile sharing with others to your State Bursary coordinator.

The political and community environment is certainly very focussed on debating the energy future that all of you will have a significant part to play in as the future power engineering professionals tasked with implementing the decisions being made over the coming months and years.

The API State Coordinators and API Member organisations have been working hard to arrange vacation placements over the coming months where possible and I would like to thank everyone involved as we continue to improve the process.

Finally, I would like to wish all API Bursary Holders and their families a very Merry Xmas and Happy New Year and look forward to catching up with you personally at the first API Bursary Networking Function when university recommences.

### ATSE Essay Winners

#### What will Australia be like in 2050

*Andrew Barley from The University of Adelaide, Robert Bartlett from The University of Queensland, Genevieve Beart from the University of Melbourne, Jerom Fox from Queensland University of Technology and Beata Khaidurova from Monash University, are the five national winners of the jointly sponsored ATSE (Academy of Technological Sciences and Engineering) and API Essay Competition.*

*The competition entries on the topic of "What will Australia be like in the year 2050" were judged in the context of the ATSE Symposium Theme "Future-Proofing Australia – Rising to the Challenge of Climate Change", taking into consideration the relevance to the Theme, understanding of underlying issues, evaluation of alternative technologies, presentation and originality of the essay.*

*The winning essays were selected from the total of twenty two submissions by the current API Bursary holders.*

*All the entrants were offered complimentary registration to the [32<sup>nd</sup> ATSE National Symposium](#) and each winner received the prize of \$2,000 at the Cocktail Party on Monday 16 November 2009.*

*API congratulates the five winners and thanks all the entrants for their participation.*



### Power Engineering Educational Resources



The Australian Power Institute education portal is designed to give academic staff access to its programs and related learning and teaching resources. The **Collaborative Power Engineering Centres of Excellence** is the first of these programs.

The resources developed under this program are aimed at providing universities with modules on different subject areas for use in undergraduate and post-graduate power engineering programs. The partnership between industry and university subject matter experts, underpinning the development process, ensures that the modules are focused on the acquisition of industry-relevant knowledge, skills and competencies.

The **API Power Engineering Curriculum** consists of twenty-one undergraduate modules designed for use in 3rd and 4th year and nineteen postgraduate modules. In September 2009, the first suite of nine modules was released. Each module consists of course notes, presentation slides, activity sheets for practicals, tutorials and in some modules, videos and audio files.

To find out more about the program, follow the [Collaborative Power Engineering Centres of Excellence](#) link.

## 2009 API Bursary Awards

### Power Bursaries to Support Australia's Energy Skills Base

The Australian Power Institute has awarded **44 new Power Engineering Bursaries** across Australia in 2009 to support the development of graduates with specialised power engineering skills.

API would like to welcome all new bursary holders into a **current cohort of 164 API Bursary Holders** across Australia.

## API Academic Sabbaticals

### Experience in the Power Industry

Delivering on its strategic objective to support world class undergraduate power engineering teaching and learning, API has been facilitating matching of a number of industry projects offered with university academics who have expressed interest in summer sabbaticals.

Currently there are approximately **60 academics working in power engineering field** at Australian universities.

Some of the early career academics have already started their assignments in industry, generally for about 8-12 weeks in period from early December to late February.

## Survey of API Bursary Holders

### Guide for Future Curriculum Development



*Thank you all who participated in the recent API Survey – we had a fantastic response rate of over 90 replies from API bursary holders in every state.*

*The information from this survey will be presented at the next API Board Strategic Meeting in February'10. It will also be used as input for the undergraduate curriculum development and for consideration in the future undergraduate course design.*

*Following are some of the **key points** that received the **highest number of responses**:*

*\*When coming to study at the university, many of you were surprised by a very different study ethic.*

*\*The **MOST** satisfying aspects of your studies are the application of the knowledge to real life problems and finding real life solutions that are useful and applicable.*

## Survey results continued ....

*\*The **LEAST** satisfying aspects of your studies are: the poor quality of some lectures/practicals, exams, heavy study load and requirement to learn subjects which do not directly relate to the degree stream and to the profession.*

*\*Alternative methods of energy production received your highest vote as the **NEW TOPICS** you would like to have covered in your studies.*

*\*Regarding the topics that could have been covered better or in greater depth and topics that could have been removed from your studies without significant impact, surprisingly the highest response rate suggests that the subjects/studies you undertook so far met your expectations and most subjects in the course covered so far were useful/fundamental.*

*\*As the best way for you to learn the topics of interest most of you nominated the practical tutorials, followed by lectures and practical hands on projects.*

*\*Practical work experience in industry through vacation placements received the highest response rate as the best way of preparation for **PROFESSIONAL PRACTICE**.*

Please email any articles you think may be worthwhile sharing with others to your State Bursary coordinator.