

Industry Funded Final Year Research Projects

Research Projects

Civil and Natural Resources Engineering

Research Projects

The University of Canterbury Department of Civil and Natural Resources Engineering (CNRE) is ranked within the top 50 Civil Engineering Departments in the world (QS World University Rankings 2016). This distinction is partly due to our close association with industry in Christchurch and throughout New Zealand. Your organisation can partner with us through sponsoring our final year research projects to benefit both organisations.

All students completing a Bachelor of Engineering (Honours) degree in Civil or Natural Resources Engineering must complete a research and development project in the final year of their degree. The project builds upon

the knowledge and skills that students have gained from coursework in their professional engineering degree. CNRE has developed a programme that provides opportunities for industry to engage in this challenging, research-practical orientated educational experience.

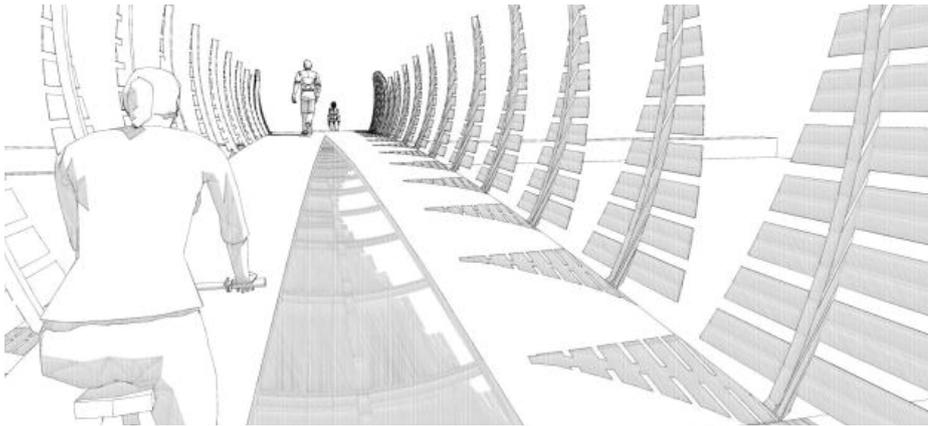
The programme allows projects which are of particular interest to industry to be integrated into CNRE's final year project system. It is also possible for industry to sponsor staff-driven innovations or research, where the outcomes are mutually beneficial. In addition, CNRE runs at least one project for the benefit of the community or a charitable organisation. These

projects are run free of charge, but expenses can be supported by another organisation.

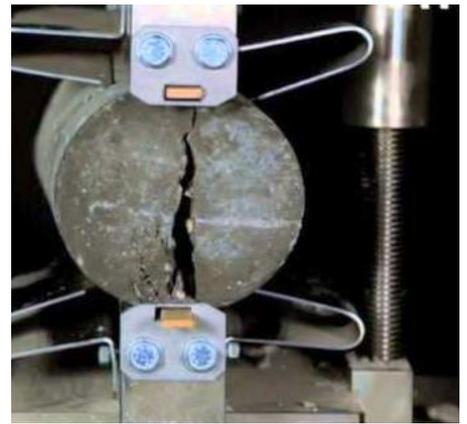
At the end of the academic year, around mid-October, the "Student Conference" takes place on campus. The Conference is organised professionally with academics chairing multiple sessions and students presenting their findings. A panel of academics scrutinises each student presentation. The Conference is a unique event because it gathers together all the knowledge in one place and teaches students how to interact in a teamwork environment. Prizes are also awarded for best projects/presentations.



Plenary Session - "Student Conference" - 2015



High performance concrete, structural glass and innovative architectural forms.



Mechanical properties of magnesium silicate hydrate as alternative cement paste.

Sponsorship

Industry sponsors provide relevant projects, a mentor, and a modest financial grant. CNRE, in accordance with your organisation, will provide a team of final year students (typically two), an academic supervisor, and where appropriate the use of the department's laboratories, computing facilities and technical staff.

- Sponsors provide a donation of \$5000 made payable to the University of Canterbury Foundation.
- Full sponsorship entitles the sponsor to ownership of all Intellectual Property generated during the project.
- Confidentiality can be designed into the programme and reinforced with the students signing a non-disclosure agreement.

Each sponsor will be properly acknowledged at the "Student Conference" and attendance to the Conference will be free of charge for one or two staff from your organisation.

Similarly to a professional Conference, your organisation can apply for different levels of sponsorships based on the number of projects supported in the same year:

- Platinum Sponsorship: four projects or more;
- Gold Sponsorship: three projects;
- Silver Sponsorship: two projects;
- Bronze Sponsorship: one project.

Why should you sponsor a CNRE final year research project?

The main benefit is the completion of a significant research and development project, with a value that is many times greater than the donation. The hours dedicated to a given project will vary, but typically are of the following order:

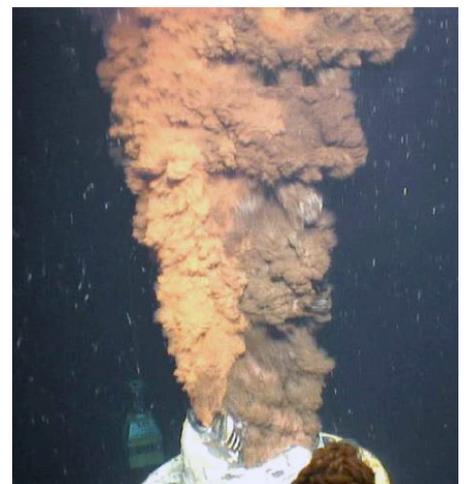
- 300 hours of student work (usually more)
- 30 hours of academic staff supervision
- 15 hours of technician time
- use of software, fabrication, measurement, testing facilities and specialist equipment

Projects run from February-October each year, with students providing final reports and presentations to sponsors upon completion at the "Student Conference".

Combining industry projects with our expertise and resources could add significant value to your organisation. Moreover, the "Student Conference" is a unique vehicle for interaction and learning through a different set of projects and a great initiative that directly exposes your organisation into our teaching programme.

Expressions of Interest

We encourage discussion and submission of expressions of interest starting January 1, and finalisation of projects by August 1 in order to allocate projects to students in August and September. These projects will begin in February of the following year.



Physical modeling of oil jet discharges

Contacts and information

If you are interested in sponsoring a final year research project, or have any questions about the programme, please contact Associate Professor Alessandro Palermo in CNRE.

Associate Professor Alessandro Palermo

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