Welcome to the start of semester! ...

...which went smoothly and we have welcomed new members to the department’s team.

Stefan Iglauer joined us as Senior Lecturer, to our department. Stefan comes to us from Imperial College, London where he developed a strong track record in understanding fluid flow through porous media. He is slated to teach Hydrocarbon Phase Behaviour in the future as well as assist the department’s growth in oil and gas research. We are also very pleased to welcome Post-Doctorates David Parks and Ali Saeedi who finished their PhDs with us last year and will be teaching Fundamentals of Reservoir Engineering this year. Not to be outdone, our administration staff welcome Gemma Haynes to the fold, and we look forward to her enjoying life in the oil & gas lane.

DURING THE BREAK...
Thanks to Peter Robinson at BP for organising a field trip to the Kwinana plant for our Indigenous Summer School students. The week which is sponsored by industry and Engineers Aid Australia was a great success and culminated with a dinner hosted by the Vice Chancellor with honorary guest Major General Michael Jeffery, former governor of WA and former Governor General of Australia. If you are interested in supporting this annual program, please contact Larissa Andrews on l.andrews@curtin.edu.au. BP’s offer of lecture support to petroleum engineering students is also very appreciated.

Congratulations to another three PhD students who have graduated, Hiwa Sidiq, Abdullah Al-Abri, Armin Hosseinian (abstract overleaf) and Hamed Soroush.

ALI SAEEDI: “My thesis title was “Experimental study of multi-phase flow in porous media during CO2 geosequestration processes”.

STEFAN IGLAUER: “Thanks for the great Perth welcome. I’m looking forward to doing some great research in multiphase flow of porous media”.

DAVID PARKS: “My main areas of interest are sub-sea gas processing, hydrate controls and pipeline flow assurance”.
“Numerical simulations of fluid flow through a single rough-walled fracture”

For more detail please email: arminh79@gmail.com

Fluid flow through natural fractures is significantly affected by the morphology of the fracture surface. Simulations of fluid flow using FLUENT software carried out for synthetic and real fractures indicated such correlation. Roughness of a fracture surface was characterised using a dispersion parameter, $D_{32}$, which is a 2D multivariate statistical parameter in Riemannian space. Anisotropy in roughness determination was also characterised using isotropy parameter ($I_{32}$).

### PHD THESIS ABSTRACT

- **Contours of velocity magnitude when fluid travels in Y-axis direction (left).**

Geometry of a statistically generated fracture

### STUDENT ENGINEERS NUMBERS GROWING

We will be teaching 4 cohorts of petroleum engineering students (2nd/3rd year BEng, 1st/2nd year MPet Eng) this semester taking our student numbers to over 150 including our PhD students. An orientation morning was held for our new students and we are thankful to HESS, Origin and Key Petroleum, who have sponsored our SPE student chapter. Their support is most appreciated, as is Apache’s sponsorship of the end of year student function last December.

Lecture support will come from Santos and Woodside (again) this year and we are pleased to have received two scholarships for petroleum engineering students from Air Energi. All of this helps to grow our student numbers.

Thanks also to Bill Robinson and Chidi Amundo for their lecture support last year.

It is also pleasing to note that a few of our undergraduate students have secured vacation work with local industry. If you have any vacation opportunities please contact Lisa Smith: lisa.smith@curtin.edu.au.

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**Petroleum Engineering Student Numbers**

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