



ACLNGF
Australian Centre for LNG Futures



THE UNIVERSITY OF
**WESTERN
AUSTRALIA**

Leading the way in employability: pathways into WA's LNG industry *The UWA Perspective*

Professor Eric F. May
Chevron Chair in Gas Process Engineering
The University of Western Australia

Australia International Education Conference
Perth
16th October 2019

Chevron Chair in Gas Process Engineering



Industry Chair means courses developed have clear links to real-world & deliver skills most valued by prospective employers in LNG industry

Greatly increased value proposition for students



2012 GPE students capture CO₂ using new teaching equipment funded by Chair



Since 2013, Chair has supported free Flow Assurance workshop where local industry attend & hear talks by students working on cutting-edge projects.

Gas Process Engineering Prizes



Chevron Chair funds used to establish Gas Process Engineering (GPE) Prizes: \$500 to top 5 students in 4 relevant units from 2nd to 4th year.

Prize winners invited to Meet 'n Greet event with Senior Chevron staff. Poster presentations highlighted relevance of student research projects.

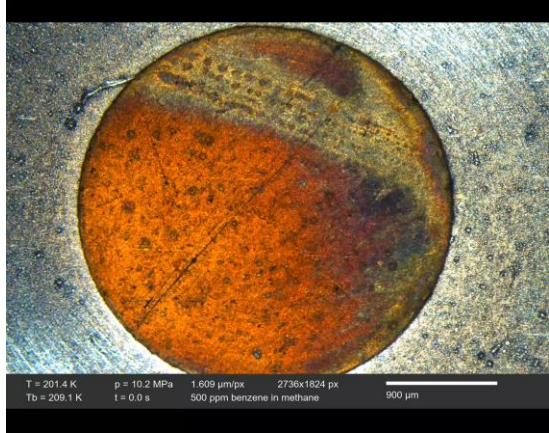


Student GPE prize-winners & Chevron staff, including Gorgon lead Mr Colin Beckett, at Meet 'n Greet event in 2010. Several now work with Chevron and/or did PhDs at UWA in Gas Processing 3

Industry-driven research projects for students



Partnership also gave rise to Chevron-driven research projects that attract & offer unique opportunities to UWA students



Enables development of highly valued & relevant skills plus make contribution to projects with real world impact

→ receive recognition!



PhD student Arman Siahvashi won 2018 WA Student Scientist of Year for work on solids formation in LNG plants (above)

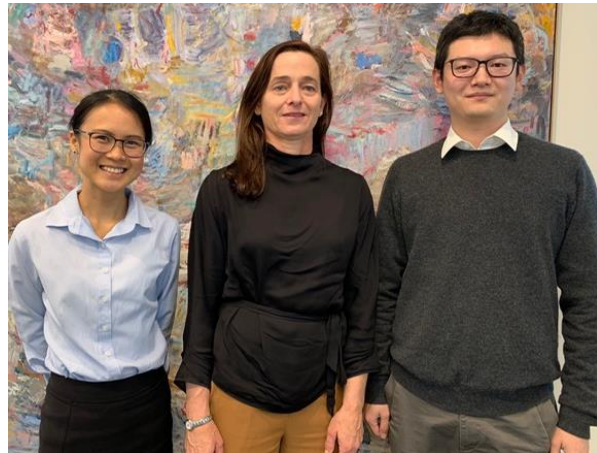


Chevron-driven project has supported 6 PhDs & 30 Honours projects since 2009. Led to 2015 WA Innovator of Year Award & now being commercialized

ARC Industrial Transformation Training Centre



Chevron & LNG industry support enabled UWA to secure state's first ITTC from Australian Research Council in 2015. \$8 million over 5 years, including 10 PhD scholarships, open to international students, with mentoring & industry placements



ACLNGF PhD student Fuyu Jiao (right) had 3 month placement in 2019 with Woodside working on liquid hydrogen



ACLNGF PhD student Temi Kuteyi had 3 month placement in 2019 with Clough working on multiple engineering projects



Graduates secure key jobs in LNG Industry

Multiple UWA PhD graduates from ACLNGF, including international students, have now secured jobs in the Australian LNG industry

LNG industry is global in nature & extent



Left: Dr Elisabeth Wagner (Germany).
Now working for INPEX

Centre Manager,
Jill Stajduhar (right), with
ACLNGF students on 2019
International Women's Day



Prof. Aman & Dr Yahua Qin
(China), now @ Woodside

Future Energy Exports CRC (fenex.org.au)



\$80 million, 10 year CRC bid. Objectives (R&D and Education)

1. Innovation for higher levels of efficiency in Australia's LNG industry
2. Grow Australia's hydrogen export industry
3. Unlock value with interoperable digital technologies



Government of **Western Australia**
Department of **Jobs, Tourism, Science and Innovation**



Premier McGowan, Chevron CEO Mike Wirth & Prof May at LNG-19 in Shanghai

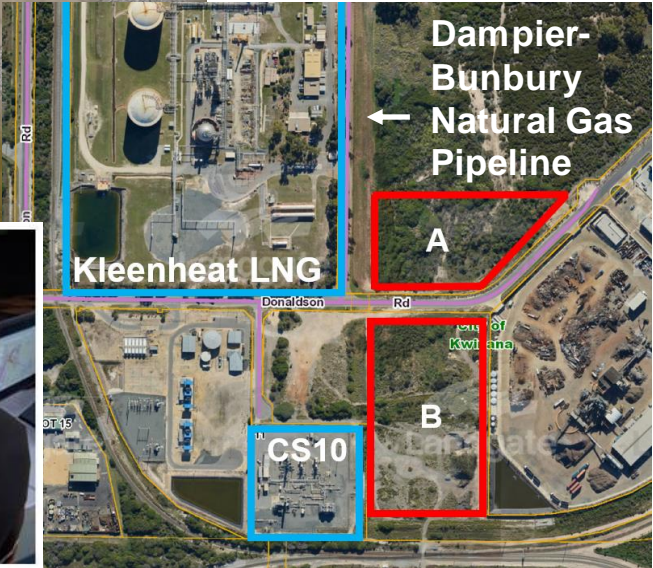
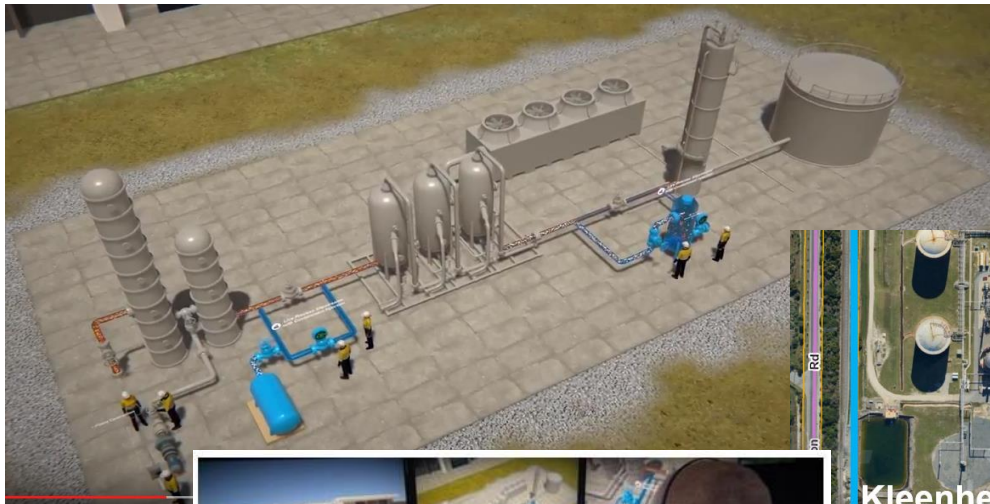
CRC Founding Project: LNG Futures Facility



World-first small-scale LNG plant dedicated to:

See video at lngfutures.edu.au/lng-futures-facility/

1. Process & digital technology development & demonstration
2. Education & training: from VET to PhD to industry PD



Now working with South Metro TAFE & UWA ERDi Testlab to develop micro-credentials for Industry 4.0 skills in LNG industry



Conclusion

Partnership with Chevron & LNG industry has allowed UWA to offer unique student experience leading to world-class opportunities

Now working with WA Govt to expand this to VET sector & beyond



ACLNGF PhD students (gas separations) @ adsorption conference in Cairns, May 2019



ACLNGF PhD students (flow assurance) in USA after industry workshop, April 2019



THANK YOU



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