



# INDUSTRY UPDATE – UNIVERSITY OF AUCKLAND

29 January 2014

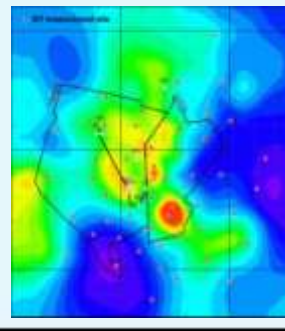
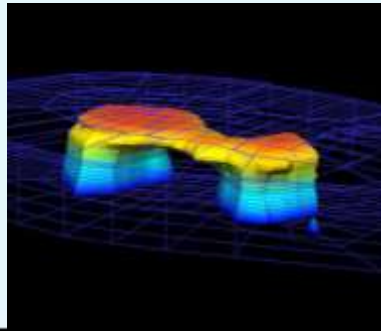


THE UNIVERSITY  
OF AUCKLAND

NEW ZEALAND

Te Whare Wānanga o Tāmaki Makaurau

Emily Clearwater



# Students

- ❑ 22 in Postgraduate Certificate in Geothermal Energy Technology
- ❑ 15 from Pertamina taking part of PGCert as part of an ITB Masters program (continuing collaboration)
- ❑ 8 taking Master of Energy with a geothermal flavour
- ❑ Several new ME, MSc and PhD students with geothermal research projects
- ❑ A few interns from France, Germany and USA

# People

- Rosalind Archer appointed to Mighty River Power chair in geothermal reservoir engineering (PhD in petroleum engineering from Stanford, professor at Texas A&M before joining Department of Engineering Science at UOA)
- Rosalind is also Director of the Geothermal Institute

# People

- ❑ Sadiq Zarrouk elected to IGA Board
- ❑ One of our alumni, Juliet Newson, elected president of IGA Board (following on from Roland Horne – also an alumnus)

# Funding

- ❑ “Super Models” project funded by MBIE (joint with GNS Science). ~\$4500K over 4 years
- ❑ Look at interaction between multiple geothermal systems
- ❑ Develop modelling techniques for the 21<sup>st</sup> century
- ❑ Combine reservoir modelling geophysics and geochemistry

# Commercial highlights

- ❑ IESE - downhole seismic array results for Wairakei-Tauhara
- ❑ Modelling (Mike O'Sullivan's team) – modelling component of Ohaaki re-consenting application, continuation of Lihir modelling project, Ngawha modelling study
- ❑ System optimisation studies (Brent Young, C&M)

# Other good things

- ❑ Two short-courses delivered at Gadjah Mada University (Jogjakarta, Indonesia)
- ❑ Worldwide interest and uptake of PyTOUGH (developed by Adrian Croucher)
- ❑ Collaboration with Los Alamos National Laboratory (through David Dempsey)

- Geothermal research is going on in many places:
- Engineering Science – modelling, reservoir engineering
  - Chemical and Materials – system simulation, corrosion, mineral extraction
  - Civil - rock mechanics
  - Physics – geophysics, rock physics
  - IESE - geology, geophysics
  - School of Environment – geology, geochemistry