Research Update
From the Office of Research & Development

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FUNDING OPPORTUNITIES

HEALTH SPECIFIC FUNDING OPPORTUNITIES

1. NATIONAL HEART FOUNDATION FELLOWSHIPS

Heart Foundation Postdoctoral Fellowships
The Heart Foundation are offering Postdoctoral Fellowships for Medical and science graduates who have completed an MD or PhD award within the last five years and who are seeking support to become independent researchers.

Postdoctoral Research Fellowships are tenable for up to two years. They may be full or part-time. The postdoctoral fellowship will only be awarded to postdoctoral fellows conducting research in an Australian university or other appropriate institutions. For application forms and more information, please see http://www.heartfoundation.org.au/Postdoctoral_Fellowships.htm

Heart Foundation and National Stroke Foundation Co-Funded and Postdoctoral Fellowships
The Heart Foundation and the National Stroke Foundation are partnering to offer funding for Postdoctoral Fellowships for research into the prevention, causes, diagnosis, treatment and long term support for stroke.

Awards are payable for up to two years for a Fellowship. Part-time applicants will also be considered. A separate application is not required for this award. If an applicant wishes to be considered for these postdoctoral fellowships, they must indicate this by ticking the box on the Heart Foundation Postdoctoral Fellowship application form available on the website.

Indigenous Health Postdoctoral Fellowship
The Heart Foundation is also offering postdoctoral fellowships for:

- An Indigenous researcher conducting research into cardiovascular disease and related disorders, or
- A researcher investigating cardiovascular disease in Aboriginal and Torres Strait Islander people.

The postdoctoral fellowship will only be awarded to postdoctoral fellows conducting research in an Australian university or other appropriate institutions. The value of the fellowship will be equivalent to that of the Heart Foundation Postdoctoral Fellowships and will be payable for two years. If an applicant wishes to be considered for this postdoctoral fellowships, they must indicate this by ticking the relevant box on the Heart Foundation Postdoctoral Fellowship application form available on the website.

Heart Foundation Overseas Research Fellowships
The Heart Foundation are offering Overseas Research Fellowships for Medical and science graduates who have completed a MD or PhD award within the last 18 months.

The purpose of the Heart Foundation's Overseas Research Fellowship Scheme is to support the training of Australian researchers who seek to begin or maintain a postdoctoral position investigating cardiovascular research at a relevant institution overseas.

Applicants are expected to have at least two years of cardiovascular research experience and must be Australian citizens or have permanent residency status. Applicants who have already planned/taken up a postdoctoral position overseas may also apply, provided they are within 12 months of the commencement of the position (at the time of application).

For more information, please see http://www.heartfoundation.org.au/Postdoctoral_Fellowships_(Overseas).htm

Heart Foundation Career Development Fellowships
The Heart Foundation are offering Career Development Fellowships for Australian citizens or permanent residents, who are 4-10 years postdoctoral.

Applicants are expected to have spent at least 4 years actively contributing to cardiovascular research. Career Development Fellowships are tenable for five years and may be full or part-time.
Appointment as a Career Development Fellow is not renewable.


**Fellowship applications are to be submitted to the Office of Research and Development no later than Friday 9th May 2008 and accompanied by a completed Research Project Application Tool (RPAT) – Coversheet only.**

### 2. NATIONAL HEART FOUNDATION SCHOLARSHIPS

**Indigenous Health Postgraduate Research Scholarship**

The Heart Foundation is offering a postgraduate scholarship for:

- An Indigenous researcher conducting research into cardiovascular disease and related disorders, or
- A researcher investigating cardiovascular disease in Aboriginal and Torres Strait Islander people.

The scholarship will only be awarded to a postgraduate student who is studying for a PhD and is enrolled at an Australian university or appropriate institution. The value of the scholarships will be equivalent to that of the Heart Foundation Postgraduate Biomedical, Clinical or Public Health Research Scholarships (depending on the candidate’s academic qualification) and will be payable for three years.

A separate application is not required for this award however there are extra requirements so please check the form for full details. If an applicant wishes to be considered for this scholarship, they must indicate this by ticking the box on the Heart Foundation Postgraduate Research Scholarship application form available on our website.

**NHF and National Stroke Foundation Postgraduate Scholarship**

The Heart Foundation and the National Stroke Foundation are partnering to offer funding for Postgraduate Scholarships for research into the prevention, causes, diagnosis, treatment and long term support for stroke. Scholarships will only be awarded to postgraduate students to support study towards a PhD.

Awards are payable for up to three years for a Scholarship. Part-time applicants will also be considered. A separate application is not required for this award. If an applicant wishes to be considered for these postgraduate scholarships, they must indicate this by ticking the box on the Heart Foundation Postgraduate Scholarships form available on the website.

For more information please see - [http://www.heartfoundation.org.au/Postgraduate_Scholarships.htm](http://www.heartfoundation.org.au/Postgraduate_Scholarships.htm)

**Applications are to be submitted to the Scholarships Office no later than Friday 8th August 2008.**

### 3. DIABETES AUSTRALIA RESEARCH TRUST (DART) GRANTS AND FELLOWSHIPS

Applications are invited for 2009 diabetes research projects. Along with basic scientific and clinical research, applications relating to research into diabetes within remote and rural, culturally diverse and Indigenous communities are also invited.

The following grants and fellowships are available:

- The Viertel Postdoctoral Fellowship in Diabetes of $300,000 (for research in diabetes that will benefit an ageing population)
- A number of one year DART research grants up to a value of $60,000

In 2009, approximately $4 million will be allocated for peer review research into diabetes. Over 50 one-year Diabetes Australia Research Trust (DART) grants will be awarded to the highest ranked applicants.

**Applications for 2009/10 grants and the fellowship are to be submitted to the Office of Research and Development no later than Wednesday 28th May 2008 and accompanied by a completed Research Project Application Tool (RPAT).**

GENERAL FUNDING OPPORTUNITIES

1. FRANK BURKE CPA AUSTRALIA GRANTS
CPA Australia is offering a scholarship of up to $10,000 for research into the area of taxation and/or superannuation to academic accounting researchers based in Australian universities.

Applicants must be CPA Australia members. The applicant must be able to supply evidence that tenure at the relevant institution will be sufficient to complete any approved project. To this end, project timelines will have to be within the duration of tenure. Research projects that could form the basis of a Ph.D. dissertation are acceptable, provided they are complete projects within themselves.

Applications are to be submitted to the Office of Research and Development no later than Friday 22nd August 2008 and accompanied by a completed Research Project Application Tool (RPAT).


2. NORTHERN TERRITORY GOVERNMENT GAMBLING-RELATED RESEARCH GRANTS
The Community Benefit Funds’ Research Grants Program supports research activities directed at problem gambling, the economic impact of gambling activities and associated gambling issues in the Northern Territory. The intent of the program is to enable priority issues to be investigated.

Applications for amounts in excess of $100 000 or 12 months duration must meet at least one of the following special criteria:

- The project is a partnership between two or more organisations.
- The project covers a wide geographic area or has peculiar methodological demands.
- The project will bring substantial benefit to the whole community.

Funds can only be used for research into gambling related issues such as problem gambling, economic impacts, and associated issues. This may include the social and economic impact of gambling on individuals, families, and communities

Applications are to be submitted to the Office of Research and Development no later than Friday 22nd August 2008 and accompanied by a completed Research Project Application Tool (RPAT).

For more information please see: http://www.nt.gov.au/justice/policycoord/cbf/gambling_res_grants.shtml

3. EU/AUSTRALIA COOPERATION IN HIGHER EDUCATION AND VET PROJECTS – STUDENT MOBILITY PROJECTS
While not specifically for research, you may be interested in these grants.

The Commonwealth Department of Education, Employment and Workplace Relations (DEEWR), in conjunction with the European Commission (EC), is pleased to announce the call for applications for the fifth round of EU/Australia Cooperation in Higher Education and VET projects.

This fifth round of EU/Australia Cooperation in Higher Education and VET projects seeks applications from consortiums of both Australian higher education and VET institutions to undertake student mobility projects between the EU and Australia.

Funding up to a maximum of $500,000 per project (depending on the numbers of participants) is available.
These projects offer the opportunity for Australian students in higher education and VET to undertake a period of study at a partner institution in the EU for a minimum of five months (three months for VET institutions) and for European students from partner institutions in the EU to undertake a period of study in Australia. Proposals from the VET sector are particularly encouraged. Such proposals may include work placements and/or internships as part of a study period in the EU. Funding is also available for academics and administrative staff to visit partner institutions in the EU as part of a successful project. Australia and the EU have previously funded seven student mobility projects. DEEWR anticipate that 4-5 projects will be funded in this round.

This round of projects builds on the 2007 EU/Australia Joint Declaration on cooperation in education and training which sought to further develop this key bilateral relationship for Australia.

**Applications close on 6 June 2008.** If you intend to submit an application for a research project please contact your Research and Development Officer well in advance of this date.


A list of successful projects from the fourth round is available at: [http://www.dest.gov.au/sectors/international_education/policy_issues_reviews/key_issues/eu_australia_cooperation/fourth_round_institutions.htm](http://www.dest.gov.au/sectors/international_education/policy_issues_reviews/key_issues/eu_australia_cooperation/fourth_round_institutions.htm)

### 4. UNLOCKING THE HYDROCARBON POTENTIAL – CALL FOR PROPOSALS

The Industry Technology Facilitator (ITF) has issued an open invitation for all organisations seeking sponsorship for innovative technologies to submit proposals for research, development, and/or field trial of technology in the following areas:

- Remote Hydrocarbon Developments
- Subsea Production Enhancement
- Flexibles, Flowlines and Pipeline Technology
- Flow Assurance
- Integrity, Maintenance and Reliability
- Large Floating Structures

ITF (The Industry Technology Facilitator) is a not-for-profit organisation owned and supported by 14 major global oil & gas operating companies and 5 service companies (the ‘members’). ITF is the vehicle through which the members fund joint industry projects that meet the technology needs of the upstream oil and gas industry. ITF has the remit to facilitate the research, development, and application of new, high impact technologies that will increase overall hydrocarbon recovery from mature and developing basins.

Please see the attached document and contact Robert Johnson for further information on 08 9266 7929 or via email at R.W.Johnson@curtin.edu.au

**Applications are to be submitted to the Office of Research and Development no later than Thursday 15th May 2008 and accompanied by a completed Research Project Application Tool (RPAT).**

### PRIZES AND AWARDS

#### 1. DIABETES AUSTRALIA RESEARCH TRUST (DART) MILLENIUM AWARDS

The two Awards of up to $150,000 are each are granted over two years, 2009 to 2010. All applications are reviewed by five independent assessors. Only one application in an Award category will be considered from each researcher.


- The Type 1 Diabetes Millennium Award
- The Type 2 Diabetes Underworks Award

For more information on Research at Curtin please visit the research website [www.research.curtin.edu.au](http://www.research.curtin.edu.au)
The Type 1 Diabetes Millennium Award - up to $150,000 The award is made available for research into Type 1 Diabetes including the following priority areas:
- Modulation of the immune system;
- Beta cell replacement / islet transplantation;
- Genetic engineering / gene therapy;
- Hypoglycemia; and
- Complications (Retinopathy, Neuropathy, Nephropathy).

The Type 2 Diabetes Underworks Award - up to $150,000. This award is made available for research into Type 2 Diabetes including the following priority areas:
- Insulin secretion and action;
- Insulin resistance; and
- Complications

SEMINARS, CONFERENCES, TRAINING AND INFORMATION

1. EMERGING RESEARCHERS IN AGEING “SHAPING RESEARCH LANDSCAPES” CONFERENCE

The Centre for Research on Ageing at Curtin University of Technology is pleased to invite PhD, Professional Doctorate and Masters students to participate in the 7th National Conference of Emerging Researchers in Ageing to be held on Tuesday, 18th November 2008. The conference also welcomes new researchers working within research roles in areas of ageing. The theme for the conference is “Shaping Research Landscapes”, and will explore a wide range of aging related topics.

The benefits of participating in ERA 2008 include:
- Publish your paper in peer reviewed conference proceedings.
- Present your research findings to a diverse audience including students, academics, policy makers and practitioners.
- Contact prospective employers from the government, non-government and private sectors.
- Meet with other PhD, Professional Doctorate and Masters students researching ageing from a wide range of disciplines.
- Learn more about the broader policy context of ageing.


2. CONVERSION TOOL FOR NEW RFCD AND SEO RESEARCH CODES

As advised in Research Update 11, the ABS recently released a new set of research codes. The codes used to classify research activity are important as the codes are being used to determine research discipline clusters in the Excellence in Research for Australia, so ensuring an accurate conversion is critical.

The University of New England has developed an online tool to assist in the conversion from old to new research codes. You may find this tool useful. Access to the tool is via the Research Administrators Wiki: http://www.radwiki.edu.au/index.php/Research_codes#Conversion_of_Research_Codes

# HELP, TOOLS and TIPS

## TOOLS AND TIPS

### LINKS

**Community of Science (COS)**

[www.cos.com](http://www.cos.com)

**Research Project Application Tool (RPAT)**


**New RFCD and SEO codes**


### TIP OF THE WEEK

Are you working on a project with commercial potential? Do you want to know more about Intellectual Property Commercialisation?

The Office of IP Commercialisation is offering to hold presentations to individual research groups, Schools or Faculties on this very subject.

Further information can be obtained from Elise-Maree Heffernan on extension x1799 or email e.heffernan@curtin.edu.au.

## HELP, TOOLS and TIPS

### Research and Development Officer

#### CBS and Humanities

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#### Science and Engineering & Vice Chancellory

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### Manager, Contracts and Committee Servicing and Curtin Research Fellowships contact

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### Training and Development Officer

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For more information on Research at Curtin please visit the research website [www.research.curtin.edu.au](http://www.research.curtin.edu.au)
Unlocking the Hydrocarbon Potential
(Output from Theme Day, Perth, Western Australia)

Background to the Theme

A central part of ITF’s work is to take views from a number of industry sources, such as end users, service providers, and suppliers, to identify key technology challenges that would bring about a substantial increase in production, improve recovery rates or extend the life of a facility.

ITF uses a thematic approach working in collaborative participation with its members and industry to identify common areas of interest and technology needs. This Call for Proposals has resulted from the output of an ITF Theme Day held in Perth, Western Australia, on 11th March 2008. This intensive facilitated workshop brought together ITF members, local operators, service companies, small and medium-sized enterprises, and research and academia players to discuss the challenges now facing this region in unlocking the hydrocarbon potential.

This Call aims to stimulate proposals from both local and global development expertise to meet operator needs which can be deployed both within the region and for similar applications throughout the world. ITF and its members will assess, and our members will fund those proposals of highest interest. The ITF process seeks to bridge the gap between the large global players of our industry and the development community with the ultimate aim of deploying new technology solutions.

Key drivers for 2008, identified by ITF members, are the desire to produce fields in a more cost effective and efficient manner. The focus of all ITF themes is to bring forward technologies, with clear benefits to sponsors, which require assistance in research, development, and/or field trial.

It is not the aim of ITF, or its members, to prescribe specific technology solutions but to stimulate innovative proposals that fit with identified needs. The descriptions for each topic have therefore highlighted key information in order to allow for innovation and flexibility in interpreting the most appropriate technical solutions.

A Collaborative Approach to Investment in Technology

ITF has an impressive track record in delivering finance to help develop new initiatives for oil and gas technologies from early stage joint industry projects (JIPs) through to field trials and commercialisation. Since 1999 ITF has raised over £31 million in direct JIP support, with projects linked to an estimated £20 million of equity investment, and over £20 million in trials funding.

ITF accesses funds from the 19 major oil and gas operating and service companies that are ITF members. Proposals submitted under this call will be reviewed for financial sponsorship by all ITF members. This is an excellent opportunity to gain a wide audience in seeking support for your technology.
ITF has contractual arrangements on confidentiality with ALL its members (operators and service companies) and ITF will enter into a parallel agreement with all developers submitting proposal applications. Proposals will be submitted to our members only for the purpose for which they are provided, i.e. assessment for funding support and implementation.

(Note: our members are listed on our website - www.oil-itf.com)

**An Open Invitation for All Technology Developers and Suppliers**

Increasingly a number of hydrocarbon developments are becoming expensive to develop because of their location in deep water and remoteness from civilisation. Hence the industry is always seeking to produce these fields in a more cost effective and efficient manner.

This is your opportunity to help define the technical challenges which face the industry and thus directly help improve these production issues.

This is an open invitation for all organisations seeking sponsorship for innovative technologies to submit proposals for research, development, and/or field trial of technology in the following areas:

- Remote Hydrocarbon Developments
- Subsea Production Enhancement
- Flexibles, Flowlines and Pipeline Technology
- Flow Assurance
- Integrity, Maintenance and Reliability
- Large Floating Structures

A list of specific technology challenges that are of interest to ITF members may be found later in this document.

ITF Member companies have assets and operations throughout the world. We are therefore inviting proposals for technologies that may be applicable not only in the Australasian region but to any other geographical area.

Those interested in submitting a proposal should respond registering their interest as early as possible by sending an e-mail to info@oil-itf.com.

**Qualifying Technologies**

To qualify for this call, your technology must:

- Be applicable to issues identified
- Fulfil at least one of the items within this invitation
- Be novel or innovative
- Demonstrate a clear business case for support
- Have a clear and demonstrable path to commercialisation and implementation

**Qualifying Organisations**

Proposals are invited from any organisation including SME, academia, research institute, large organisation, consortium, or alliance. Proposals may be submitted by a national or international organisation, and equal opportunities will be extended to all proposers. Please bear in mind however that should your proposal be taken forward, you will be required to partake in meetings and make presentations to interested parties in the
United Kingdom or possibly Perth, Western Australia and in the English language (teleconference and video conference are acceptable).

**Process and Schedule**
The Proposal Application Form is available for downloading on our website at www.oil-itf.com. Using the Guidance Notes (also to be found on our website), please complete the form and return it electronically in **MS Word format (NOT PDF)** to Keith Mackie at k.mackie@oil-itf.com **NO LATER THAN 9th JUNE 2008.**

In addition, we request that you complete a two slide PowerPoint presentation as detailed in the Guidance Notes, which backs up your proposal submission in a concise form.

**NB. Please read the Guidance Notes carefully before completing the Proposal Application Form as failure to provide the necessary information in relation to your technology may result in premature disappointment. Proposals received after the deadline may not be processed. Therefore please ensure your submission reaches ITF before the specified deadline.**

**About the Industry Technology Facilitator (ITF)**
ITF (The Industry Technology Facilitator) is a not-for-profit organisation owned and supported by 14 major global oil & gas operating companies and 5 service companies (the ‘members’). ITF is the vehicle through which the members fund joint industry projects that meet the technology needs of the upstream oil and gas industry. ITF has the remit to facilitate the **research, development, and application** of new, high impact technologies that will increase overall hydrocarbon recovery from mature and developing basins.

To date, ITF has launched over 112 Joint Industry Projects representing a direct investment of over £31 million.

For further information about ITF click on www.oil-itf.com.

**ITF Contacts**
If you would like to discuss any matters related to this call or any other issue related to ITF, please contact any of the following people:

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" * " Denotes that Keith Mackie is the appointed Theme Manager for this programme and should be your first point of contact.

ITF, The Enterprise Centre, Exploration Drive, Bridge of Don, Aberdeen, UK, AB23 8GX
Theme: Unlocking the Hydrocarbon Potential

Call for Proposals

Specific Technology Needs

(Any proposal submitted to ITF must address one or more of these identified needs.)

Remote Hydrocarbon Developments

**Background:**
Many hydrocarbon developments are increasingly being found in remote parts of the world, far from civilisation and developed infrastructure support. Technologies are required to help overcome these challenges in the following areas:

**Requirements:**
- **Subsea Processing**
  - Subsea gas processing
- **Gas Monetization**
  - Hydrocarbon conversion linked to export strategy
  - CNG / GTL (including floating GTL)
  - Localised, Floating, and mid-scale LNG (including use in harsh, remote locations)
  - Nomad gel
  - Standardised liquefaction components
- **Environment**
  - More reliable and cost effective met-ocean data gathering
  - Environmental baseline data and monitoring capability
- **Automation**
  - Autonomous operations
  - Unmanned facilities
- **Processing**
  - In situ processing
  - Condensate issues
  - Compact processing plant
  - Compression efficiency
- **Power**
  - Long distance power distribution
  - Local power generation

Subsea Production Enhancement

**Background:**
Increasingly subsea techniques are being deployed as developments move into deeper water. These techniques are constantly developing but need to be enhanced in terms of efficiency and effectiveness. Some of the challenges the industry constantly wrestles with are:

**Requirements:**
- **Subsea Processing**
  - Subsea separation
  - Subsea pumping
  - Compression (pressures)
Call for Proposals: Unlocking the Hydrocarbon Potential

- Water separation
- Subsea sampling from production stream
- Gas compression
- Control fluids for 170degC

**Smart Wells**
- Fibre optic communication system
- Autonomous smart wells
- Instrumented reservoir
- Enhanced down-hole technology
- Integrated production modelling

**Power**
- Power supply and distribution
- Localised subsea power generation

**Intervention techniques**
- Smaller and lighter components/structures (<250 tonne)
- Improved installation methods at remote sites (depths 100 – 1500m)
- Light vessel intervention techniques

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**Flexibles, Flow-lines, and Pipeline Technology**

*Background:*
Flexibles, flow-lines, and pipelines play a large part in the development of all offshore (and onshore) hydrocarbon discoveries. Nevertheless, these key elements still provide the industry with issues that need addressing, some of these issues are identified:

**Requirements:**
- Integrity and Reliability
  - Life extension
  - Reliability of flexibles
  - Integrity management for 40 year field life
  - Corrosion and erosion control
  - Monitoring and sensing of pipeline operating parameters
- New Materials
  - Composite pipeline
  - Composite material risers
  - Alternatives to exotic/expensive pipelines
- Limitations Pipe/Flex
  - Subsea pressure protection systems
  - Flexible flowline limitations (diameter, temp, pressure, etc)
  - Cryogenic applications for flexibles
  - Large diameter flexibles
  - Gas mitigation in umbilicals
- Pipeline Stability
  - Design of umbilicals to include installability cases
  - Seabed and shelf stability
- Operations
  - Deep water pipeline intervention
  - Installation
  - Shore-towed bundles (pipelines)
  - Pipelay issues, bathymetric escarpment
  - Light vessel intervention
- Dense Gas
  - Long pipelines
  - Dense gas pipelines
## Flow Assurance

**Background:**
Flow assurance is one of the industry’s biggest challenges as it seeks to develop remote fields and tie-back developments to infrastructure over ever increasing distances. Some of the defined challenges which the industry is currently facing are identified:

**Requirements:**
- **Hydrates**
  - Mitigate hydrate formation
  - Hydrates prediction and monitoring (prevention and management)
  - Alternatives and/or improvement of chemical technologies (e.g. MEG)
- **Long Distance Issues**
  - Long offset (all aspects)
  - Long distance, large multiphase flow issues up steep shelf
- **Sand Control**
  - Sand control and management
- **Wax**
  - Wax prevention, remediation, and/or management
- **Thermal Control**
  - Heat control
  - Improved thermal options
- **Slug Control**
  - Slugging prediction (prevention / management)
- **HPHT issues**
- **Monitoring**
  - Monitoring and sensing

## Integrity, Maintenance and Reliability

**Background:**
As infrastructure ages it is increasingly important to monitor for its integrity and reliability; hence, more effective, reliable and cost effective techniques are needed:

**Requirements:**
- **Long Field Life**
  - Longevity – 40 year design life
  - Prediction of remaining life
  - Corrosion and corrosion management
  - Simulation
- **Corrosion**
  - Corrosion prediction (prevention / management)
  - Corrosion protective coatings (e.g. nano-coatings)
  - Anti-fouling techniques
- **Met Ocean**
  - Met Ocean design criteria
  - Extreme environment operability
  - Met Ocean data
  - Climate change – understanding and application to protect integrity in future
- **Automation**
  - Subsea electrical / electronics
  - Remote monitoring and learning systems
  - Integration of maintenance / reliability and engineering information
systems

- Standardisation
  - Common processes onshore and offshore
  - Standardised procedures / standards / management systems
  - Knowledge Management
  - Subsea integrity process
  - Industry designed test specification as a baseline to new product introduction
- Improved underwater inspection techniques
  - Subsea retrievable sensors
  - Subsea sampling from production stream
- Large subsea pigging
- Well integrity fluids trapped in annulus

Large Floating Structures

Background:
As we move into deeper water floating production systems bring a host of new challenges, some of which are listed below:

Requirements:
- Substructure
  - TLP’s – self installing
  - ‘Big Cat’ FLNG / FGTL
  - Storage solutions
- Moorings
  - Mooring technologies
  - Anchoring at foundations
- Met Ocean
  - Weather monitoring
  - Suitability to local conditions
  - Cyclone and extreme storm survival
- Risers
  - Steel catenary risers
  - Shallow water flexible risers
- Offloading
  - Enhanced offloading capabilities
- Topsides
  - Reduced footprints of processing
- Safety
  - Emergency procedure management (e.g. weather lock-down)

Some acronyms used in this proposal are:

CNG = Compressed Natural Gas
LNG = Liquid Natural Gas
GTL = Gas to Liquids
FLNG = Floating Liquid Natural Gas
FGTL = Floating Gas to Liquids
HPHT = High Pressure High Temperature
TLP = Tension Leg Platform