

# The 2017 Oman Energy Industry-Academia R&D Protocol

*Narrow the Gap between Industry & Academia  
to Establish Efficient R&D Partnerships*



Ministry of Oil & Gas

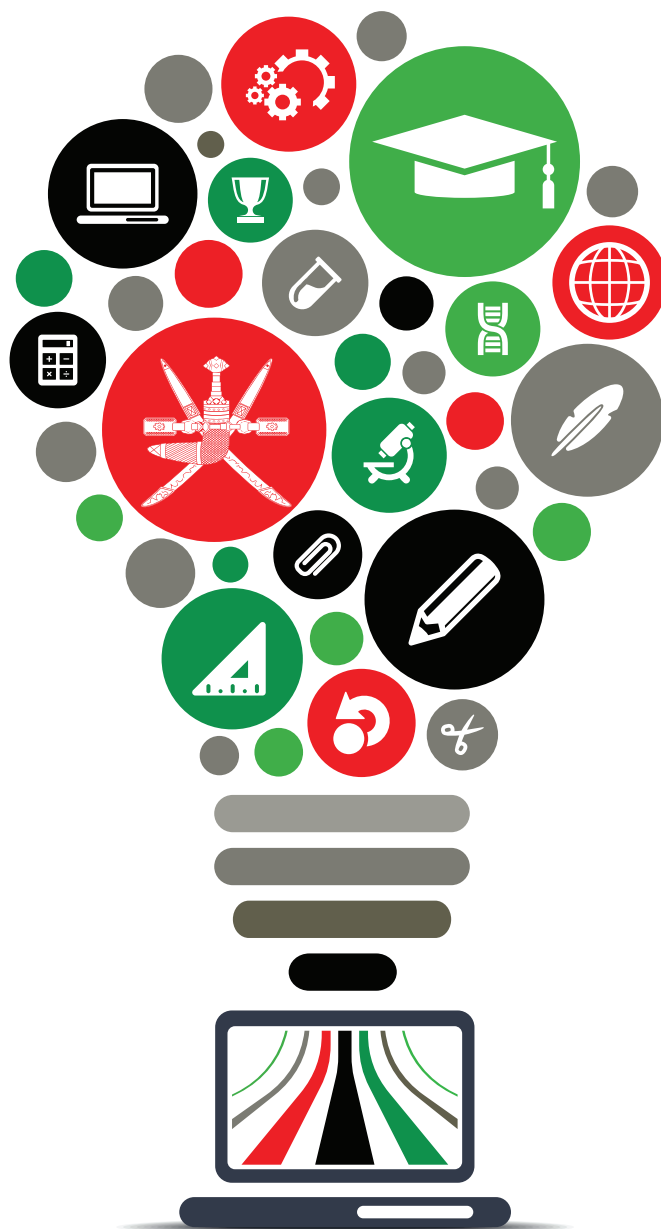


مجلس البحث العلمي  
The Research Council



شركة تنمية نفط عمان  
Petroleum Development Oman

في صميم الابتكار  
at the heart of innovation



#### **PREAMBLE:**

1. This Protocol takes cognizance of the recommendations of The Gulf Intelligence Oman Energy Forum 2015/2016 to bridge the gap between industry and academia to establish efficient R&D partnerships.
2. This Protocol defines 'Energy' as all activities related to petroleum and natural gas, electricity, new and renewable energy sources, energy efficiency and conservation, water management and other related themes of interests.

#### **OBJECTIVES:**

1. To contribute positively in the development of energy research and innovation activities at the national level
2. To participate in organizing and actively engaging in seminars, conferences, workshops, and training to build energy research and innovation capacity
3. To leverage the available financial resources in supporting energy research and innovation activities
4. To participate in a membership-based virtual collaborative platform (hereinafter referred to as Platform) where industry, academia and government can interact and engage in research and innovation activities. The Platform shall be managed by the Institute of Advanced Technology Integration (IATI) formed by the Research Council (TRC) and Petroleum Development Oman (PDO). The Platform shall provide the following:

#### **For industry:**

- i. Access to researcher's directory which contains searchable profiles of research institutions and the profiles of more than -3,000 researchers in Oman
- ii. Access to the research electronic submission system where call for funded research proposals or consultancy services can be announced. Further, researchers can respond to such calls by submitting professional proposals that are endorsed by their organization.
- iii. Access to a well-established electronic system for a) developing contractual research agreements, b) handling proposal evaluation mechanisms (through national and international evaluators) and c) handling progress and final reports.
- iv. Access to a "staff mobility" scheme that facilitates secondment/training of researchers/experts from academia to industry and vice versa.
- v. Access to application process to utilize university facilities and equipment for the purpose of testing and verification.
- vi. Access to a list of research/admin focal points available in academic institutions.

#### **For academia:**

- i. Access to list of industrial research challenges.
- ii. Access to industrial funding; based on submitting research proposals tackling industrial research challenges or consultancy requests.
- iii. Access to application process to utilize industrial facilities for the purpose of research and innovation.
- iv. Access to a "staff mobility" scheme that facilitates secondment/training of researchers/experts from academia to industry and vice versa.

#### **For government:**

- i. Maximize the utilization of national research funding via fund matching approach to support industrial research and innovation
- ii. Fulfill the mandate of bridging the gap between industry and academia
- iii. To contribute towards the establishment of centralized research facility at IATI to be carried out through research funding. In addition, the centralized facility will cater for lack of standardized equipment, maximize utilization of existing equipment and avoid duplication of acquiring large or expensive research equipment.

**ROLES AND RESPONSIBILITIES:**

*For the purpose of realizing and accomplishing this Protocol, representatives shall:*

**Academia**

- i. Provide to the Platform systematic information on the capabilities and capacities of respective laboratories/consultancies/resources.
- ii. Provide to the Platform a list of completed and ongoing R&D and innovation projects.
- iii. Provide to the Platform a list of research facilities and equipment.
- iv. Facilitate access to university facilities and equipment whenever is needed subsequent to the fulfilment of an application process.
- v. Adopt a “staff mobility” scheme that facilitates secondment/training of researchers/experts from academia to industry and vice versa.
- vi. Encourage joint-supervision of Postgraduate Students with supervisors from industry and/or IATI.

**Industry**

- i. Assign a focal point to liaison with the Platform.
- ii. Provide a list of industrial research challenges and aspiration.
- iii. Support at least one R&D project initiative per year over the next three years. This will be on project bases and subject to the Technical Committee agreement.
- iv. Reasonable endeavor in deploying and commercializing the output of R&D activities into their respective industry, through developing plans or endeavor to adopt some of the outcomes.
- v. Provide possible industrial funding; based on submitting research proposals tackling industrial research challenges or consultancy requests.
- vi. Operators shall consider joint industry-industry collaboration on projects of common interest such as thermal applications, fracing, water shut-off technologies and others.
- vii. Endeavors to adopt possible “staff mobility” scheme that facilitates secondment/training of researchers/experts from academia to industry and vice versa.
- viii. Endeavors to engaging in join-supervision of Postgraduate Students with supervisors from academia and/or IATI

**Government**

- i. Support industry to introduce R&D and Innovation levy into major contracts and monitor performance.
- ii. Steer, support and facilitate the collaboration between industry and academia.
- iii. Promote and develop IATI as a center of research excellence.

**INSTITUTIONAL MECHANISM**

For the purpose of pursuing this Protocol, a Working Team (hereinafter referred to as Team) shall be established to be responsible for developing, improving and executing this Protocol. This Team shall comprise primarily of staff from The Research Council (TRC) and Petroleum Development Oman (PDO).

The Team shall have the following functions:

- i. Coordinate the national agenda and set the priorities for the energy-related R&D activities.
- ii. Coordinate with different organizations in Oman to get them engaged with the platform.
- iii. Establish procedure and criteria for the operation of the Platform (project posting, proposal selection, fund awarding, staff mobility, facility sharing, etc...)
- iv. Report the activities of the Platform to top management at MoG, PDO and TRC
- v. Produce a rating system that measures Industry & Academia compliance with the protocol.

For each project to be tackled by the Platform, a Technical Committee shall be formed comprising representatives of the respective industry (i.e. company), academic institution(s) and member(s) representing the Team above. This Technical Committee shall be responsible to:

- i. Produce a practical work plan for each project to assure effective implementation of the project
- ii. Drive measurable KPI for projects
- iii. Monitor performance
- iv. Produce a commercialization plan for projects and align industry/academia for project success and value realization.

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Raoul Restucci, Managing Director  
Petroleum Development Oman



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(Date)

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H.E. Mohammed Bin Hamad Al Rumhy  
Minister of Oil & Gas, Sultanate of Oman



Ministry of Oil & Gas

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(Date)

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H.E. Dr. Hilal Al Hinai  
Secretary General, The Research Council



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.....  
(Date)

## INDUSTRY

## ACADEMIA

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H.E. Mohammed Abdullah Al Mahrouqi, Chairman  
Public Authority for Electricity & Water

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Zaki Selim, Executive Chairman & Acting CEO  
GlassPoint Solar

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H.E. Dr. Ali Soud Al-Bemani, Vice Chancellor  
Sultan Qaboos University

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Dr. Hassan Kashoob, Vice Chancellor  
Dhofar University

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Eng. Isam bin Saud Al Zadjali, CEO  
Oman Oil Company

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Gong Changli, CEO  
Daleel Petroleum

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Dr.-Ing. Michael Modigell, Rector  
German University of Technology in Oman

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Dr. Ahmad Bin Khalfan Al-Rawahi, Chancellor  
University of Nizwa

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Harib Al Kitani, CEO  
Oman LNG

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Hilal Al Busaidy, CEO  
Gulf Energy

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Ahmed Saleh Al-Jahdhami, CEO  
ORPIC

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Amer Al Rawas, CEO  
Tasneea Oil and Gas Technologies

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Anthony Cahalan, Vice-Chancellor  
Muscat University

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Dr. Khalid Abdulaziz Ambusaidi, Dean  
Higher College of Technology

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Steve Kelley, President and General Manager  
Occidental Of Oman

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Said Al Maawali, Project Director  
Oman Tank Terminal Company

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Professor Barry Winn, Vice-Chancellor  
Sohar University

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Khulood Bint Mohamed Rashid Al Fannah Al Arami, Director & Vice Chair  
Caledonian College of Engineering

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Chris Breeze, Country Chairman  
Shell Oman

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Reggy Vermeulen, CEO  
Port of Duqm

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Yousuf Al-Ojaili, CEO  
BP Oman

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Said Mohammed Al Masoudi, CEO  
Sohar Aluminium

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Michael Vredevoort,  
Chief Country Representative & Energy Business Development Manager  
Lloyd's Register Oman

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Tariq Al Junaidi, CEO of Oman Shipping  
Oman Shipping

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Ray Richardson, Senior Vice President and Country Manager  
Petrofac Oman

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Paul Gregorowitsch, CEO  
Oman Air

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Mohsin Al Hadhrami, Vice President & General Manager  
Schlumberger Oman

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Lubna Alwahaibi, General Manager  
Oman Institute for Oil and Gas (instOG)

