

**May 25, 2007**

**TECHNISCHE UNIVERSITÄT MÜNCHEN (TUM),**

**and**

**THE PETROLEUM INSTITUTE (PI)**

**Sign a MEMORANDUM OF UNDERSTANDING for collaboration in research and educational activities**

On May 25<sup>th</sup>, 2007 Professor Wolfgang A. Herrmann, President of Technical University of Munich, and Professor Michael Ohadi, Acting Executive Director and Chief Academic Officer of the Petroleum Institute, signed a Memorandum of Understanding (MOU) with the objective for the two institutions to collaborate in academic education and research in select areas of mutual interest. TUM is a public State university, ranking among the top-three in Germany. PI is an independent engineering institute with focus areas in the oil/gas and the broader energy industries and sponsored by the Abu Dhabi National Oil Company (ADNOC) and four other major international oil/gas companies and with aspiration to be a well recognized engineering institution in the region and beyond.

**(1) Academic Education**

- (a) TUM and PI intend to design a (double-degree) Master study course in "Industrial Chemistry and Catalysis" (working title) with an emphasis on oil- and natural gas technologies. Further details are to be agreed upon until October 31, 2007, so that the legal TUM bodies can give admission in January 2008 and the first study course can start during the year of 2008.
- (b) The course program has to meet international standards so that it can receive approval by US-American or any European accreditation agencies.

**(2) Research**

- (a) TUM and PI intend to engage in joint research work in parallel to and in support of the above Master study Course and the future PhD research programs that PI envisions to establish.
- (b) The tentative list of research topics is as follows:
  - Catalysis conversion of natural gas to value-added chemicals
  - Certain topics in Chemical Engineering: (Topics to be more specifically identified in the feasibility study)
  - Certain topics in Mechanical Engineering or other fields of study at the Institute (Topics to be more specifically identified in the feasibility study)

- (c) TUM will support the PI in establishing the Ph.D. programs at PI. In the interim period, it is the mutual understanding that PhD candidates will receive the PhD degree from TUM in the select areas of interest to both sides until PI has its own Ph.D. programs and the licence to confer the Ph.D. degree. External memberships of selected TUM professors and other support staff (e.g., consultants and visiting researchers) at PI are supposed to accelerate this process and are beneficial towards the integration process.

### **(3) Contract Study**

TUM and PI will conduct a detailed study covering the contents and feasibility of all items of this MOU. The tentative deadline for the final version of this study is November 30, 2007.

### **(4) Contract of Collaboration**

The present MOU is assumed by the two parties to finally be replaced by a contract of collaboration, which will then make firm agreements between the two institutions as to how they perform items (1) and (2) of the present MOU and the underlying legal framework.

### **(5) Exclusivity**

TUM will not engage in an identical, related or similar MOU or contract with any other research institute relating to the area specified in (2) (b) of this MOU until a final decision is made by the two parties whether the anticipated contract of collaboration become reality; the deadline is November 30, 2007.

At the signing ceremonies both President Hermann and the PI's chief Academic Officer Professor Michael Ohadi expressed enthusiasm for the potential success this mutually beneficial collaboration can bring to both the Petroleum Institute and the Technical University of Munich. In the months to come the two institutions will work closely to establish a working contract for the collaboration areas listed in this MOU.