

# **THE RICE UNIVERSITY CONSORTIUM ON PROCESSES IN POROUS MEDIA**

## **Industrial Membership**

### **BACKGROUND AND HISTORY**

The Rice University Consortium on Processes in Porous Media, under the direction of Professor George Hirasaki, is a group of Rice University faculty, staff and students engaged in collaborative research with industry partners and various academic researchers.

The Consortium began after Shell and Schlumberger purchased and donated a MARAN 2 NMR spectrometer in 1995. The first meeting was held on October 31, 1996, and included the following areas of research: Surfactant/foam processes for EOR and aquifer remediation Wettability and NMR: properties of fluids and rocks. The Consortium consisted of four students, one staff, and two faculty - George Hirasaki and Clarence Miller.

### **CURRENT RESEARCH AREAS**

- **Enhanced Oil Recovery (EOR) Processes**
- **Core analysis**
- **NMR Characterization studies**
- **Carbon Capture Processes**

### **THE RESEARCH PROGRAM**

Each Program Year is the period from January 1 through December 31 of each calendar year.

Rice University shall maintain and perform, but not necessarily complete, a research program of specific subprogram projects during any Program Year. Member understands that such Research Program is long term and has been in existence previously and may continue beyond the end of the Member's participation. A primary focus of a Research Program shall be the training of graduate and postdoctoral students in formation evaluation and oil and gas recovery methods.

Research Programs shall be administered through Rice University's Department of Chemical & Biomolecular Engineering, under the direction of the Consortium Director, Professor George Hirasaki, or his designated successor. The Consortium Director is free to choose at his/her sole discretion any topic within the field of the Research Program and also to select professional research staff, including postdoctoral and graduate students, for work within the Research Program. However, Member shall have the right to propose topics in which it is interested. The manner of performance of any research topic shall be determined by the Consortium Director. University does not guarantee specific results or success of any research under the Research Program.

## **MEMBERSHIP FEES**

Participation Period: Members shall pay Rice University a non-refundable membership fee of \$20,000 for each Program Year.

## **BENEFITS OF BEING A MEMBER**

During each Program Year that a Member participates, the Member is entitled to a reasonable number of representatives at the annual meeting which Rice University sponsors to review progress of the Research Program and to discuss potential new areas of research. A record of the material presented at the annual meeting is distributed to the attendees.

At the end of each Program Year, annual presentations, student theses and other manuscripts which were submitted for publication are posted on the Consortium on Processes in Porous Media website and are available to all consortium members.

## **INTELLECTUAL PROPERTY MANAGEMENT**

Any inventions by Rice University and patents resulting therefrom, software, or copyrights in works made during the course of the research program and any other information from the research program shall be the property of Rice, even if made jointly with Member personnel. Inventions made solely by a Member or its personnel shall be the property of Member. An invention is made during the Research Program if it is either conceived or reduced to practice during such research program or is subsequently conceived based on information generated by such research program. The term "invention" shall mean any discovery, concept, or idea, whether or not patentable or copyrightable, made during and as a result of the research program, including but not limited to processes, methods, software, formulas, methodologies and techniques, improvements thereof, and know-how relating thereto. Whether an invention, copyright, or other intellectual property is made during the Participation Period shall be determined at the sole discretion of the University.

## **DISCLAIMER OF WARRANTIES; LIABILITY LIMITATION; INDEMNIFICATION**

Rice University makes no representations or warranties of any kind, express or implied, concerning the results of the research program or any intellectual property, including, but not limited to, representations and warranties as to non-infringement, merchantability and fitness for any particular purpose.

Neither Members nor Rice University shall be liable for any incidental, consequential, special or other economic damages, such as loss of anticipated business or profits, suffered by the other party in connection with this Consortium, the research program or the intellectual property, including, but not limited to, any use or commercialization thereof.

**MEMBER SHALL INDEMNIFY, HOLD HARMLESS AND DEFEND RICE UNIVERSITY (INCLUDING, BUT NOT LIMITED TO, ITS TRUSTEES, OFFICERS, EMPLOYEES, AGENTS AND REPRESENTATIVES) FOR, FROM AND AGAINST ANY AND ALL DEMANDS, CLAIMS, CAUSES OF ACTION, DAMAGES, LOSSES, LIABILITIES, COSTS AND EXPENSES (INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEY'S FEES AND COURT COSTS), FROM ANY CAUSE WHATSOEVER (INCLUDING, BUT NOT LIMITED TO, PROPERTY DAMAGE OR LOSS, PERSONAL INJURY OR DEATH, PRODUCT LIABILITY OR DEFECT, OR PATENT OR COPYRIGHT INFRINGEMENT) ARISING AS A RESULT OF OR IN CONNECTION**

WITH MEMBER'S USE OR COMMERCIALIZATION OF THE RESULTS OF THE RESEARCH PROGRAM OR ANY RELATED INTELLECTUAL PROPERTY, WHETHER ARISING AT LAW OR IN EQUITY, AND WHETHER UNDER CONTRACT, TORT OR STRICT LIABILITY PRINCIPLES.

## **MISCELLANEOUS**

Neither Member nor Rice University shall have the right to use the names, trademarks, trade names or logos of the other, directly or indirectly, in connection with any product, promotion or publication without the prior written approval of the other party.

This Consortium is governed by, and construed and enforced in accordance with, the laws of the United States and the laws of the State of Texas (without regard to the conflicts or choice of law principles thereof). Members and Rice University irrevocably consent to the jurisdiction of the State of Texas, and agree that any court of competent jurisdiction sitting in the Harris County, Texas, shall be an appropriate and convenient place of venue to resolve any dispute with respect to this Agreement. In the event either party commences any proceeding against the other party with respect to this Agreement, the prevailing party (as determined by the authority before whom such proceeding is commenced) shall be entitled to recover reasonable attorneys' fees and costs as may be incurred in connection therewith in addition to any such other relief as may be granted.

Member shall be responsible for complying with any applicable U.S. Government Laws, including U.S. export control laws. All rights granted to Member in connection with this Consortium are subject to compliance with U.S. laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities. Participant shall not, directly or indirectly, export any such controlled commodities in connection with this Consortium unless the required authorization and/or license is obtained from the proper governmental authorities prior to export. Rice University does not represent that an export authorization and/or license will not be necessary or, if necessary, that such authorization and/or license will be granted.