GPA Midstream Technical Committee Charter: Research Committee

Chair: Karl Gerdes, Consultant
Subgroup 1 Chair: Dan McCartney, McCartney Gas Advisors
Subgroup 2 Chair: Chris Root, DCP Midstream
GPA Midstream Staff Liaison: Martin Erne

Scope of Work

GPA Midstream's **Research Committee** is responsible for monitoring the availability and reliability of thermodynamic and physical property data that are needed to design and operate midstream facilities. The primary role of the committee is to identify gaps in data, to address midstream design and operating issues, and to define and manage research projects to measure the data. The group occasionally evaluates new correlations and new computer models for calculation of thermodynamic and physical properties data for the midstream industry.

The committee consists of two subgroups for ease in managing the workload of the section; the ample number of active research projects would be difficult for the entire committee to review individually.

- Subgroup 1 focuses on hydrocarbon solubility in amines, mercury solubility, hydrocarbon freezing, and other topics.
- Subgroup 2 focuses on high pressure gas and liquids properties and equilibria, acid gas systems, water solubility in gas and liquids, and other topics.

This committee meets 2 times per year - at the GPA Midstream Convention in April and in the fall after the August Board meeting, when the Research Budget for the following year is approved, and prior to the December Board and TEC meetings, when the proposed research program for the year after next is reviewed and feedback sought.

Typical Committee Member

The committee is staffed by technical personnel from GPA Midstream and GPSA member companies. Committee member backgrounds range from plant operations and process design engineers to specialists with experience directing thermophysical property research. This committee accepts volunteers with appropriate experience, and members may also be assigned by a GPA Midstream member company.

Benefits of Committee Membership

History has shown that GPA Midstream research projects have stimulated additional research by other organizations and companies, so that total benefits accruing to the industry go substantially beyond the results obtained from just the association's efforts. GPA Midstream data have enabled the development of

advances in gas processing, such as advanced cryogenic LPG recovery, and the GPA Midstream research program has led to greatly improved predictive models for all to use. The extensive list of GPA Midstream research reports contains data that are the basis of most process simulators used in the gas processing industry. Committee members have a direct hand in, and can take credit for, all of the above.

Products & Services

To date, 237 Research Reports and 31 Technical Publications have been published and are available for sale. See the GPA Midstream Research Brochure for more information about GPA Midstream research and publications. The data produced by the research program are also used to update the material found in the industry standard GPSA Data Book. A session at the GPA Midstream Convention also highlights industry efforts in data development and use.

Interaction with other GPA Midstream Committees/Outside Organizations

The committee works with university professors, members of commercial laboratories and commercial software groups who are capable of experimental measurements and/or development of predictive models related to thermodynamic and physical properties and process simulation. The committee also works with the Editorial Review Board of the GPSA Engineering Data Book to see that new data are included and that there is proper research focus to support the industry. The committee solicits research ideas from the other GPA Midstream technical sections when appropriate.

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