Use of a Rocking Rig for Flow Assurance Testing
Incorporated Multiphase Flow

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Summary: A simple and low-cost method for measuring flow assurance issues.

Description: This invention is of a rocking rig for flow assurance testing of hydrates, wax, asphaltenes, scale, corrosion, and sand transport. Measurements are made under pseudo-flow conditions that are typically found in production flowlines, such as stratified flow, stratified wavy flow, slug flow, and dispersed bubble flow. The device is compact and inexpensive to build and to operate, unlike flowloop systems which are the only reliable testing rig with proper flow conditions. The rocking rig can easily be used for testing of chemicals (anti-agglomerants and kinetic inhibitors) for hydrate management, for accessing the wax deposition of crude oil, for testing of scale precipitation, and for testing of sand transport. Each of these flow assurance issues can be tested separated or combined.

Main Advantages of this Invention
- Low-cost, simple, and compact design
- Flow assurance issues can be tested separated or combined
- Can be used for testing of steady state or transient conditions typically encountered in flow assurance

Potential Areas of Application
- Oil and Gas
- Chemical Companies

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Opportunity: We are seeking an exclusive or non-exclusive licensee for implementation of this technology.

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