

## June 2021 – CSUR Technical Webinar #2

### The PVT Lab of the Future, and a new method for Minimum Miscibility Pressure Measurement



**JUN  
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**TECHNICAL  
WEBINAR  
SERIES**

**PRESENTER**  
Stuart Kinnear

**MODERATOR**  
Kelly Zukowski

**THE PVT LAB OF THE FUTURE, AND A NEW  
METHOD FOR MINIMUM MISCIBILITY  
PRESSURE MEASUREMENT**

PRESENTED BY  
**STUART KINNEAR** - INTERFACE FLUIDICS  
MODERATED BY  
**KELLY ZUKOWSKI** - GLJ

WEBINAR  
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For June 2021's 2<sup>nd</sup> Technical Webinar, CSUR was delighted to have a guest speaker from an organization that is bringing disruptive technology to traditional oilfield chemistry and reservoir fluid property measurement techniques. The featured speaker, Stuart Kinnear – CEO & Co-Founder of Interface Fluidics, spoke of potentially game-changing technology within this space. The session was moderated by Kelly Zukowski, Senior Manager – Engineering, GLJ Ltd. Although Interface Fluidics' capability goes far beyond phase behavior related measurements (hydraulic fracturing fluid optimization, SAGD applications, etc.), the focus of the talk was on PVT (Pressure-Volume-Temperature) measurements and in particular, minimum miscibility pressure (MMP) determination for enhanced oil recovery (EOR) applications.

Since its inception as an organization in 2015, Interface Fluidics' mandate has been to leverage (& apply) microfluidic technology from other industries (medical for example) into the energy sector. In relating this technology and its various advantages, Stuart made reference to examples from the medical field to communicate his organization's strategy: pregnancy & diabetes testing and therapeutics. Gradual and continuous evolution of technology has allowed for the aforementioned testing to be done very easily, quickly and conveniently. Similarly, the technology is now available, as showcased during the webinar, for critical PVT and phase behavior parameters to be determined at a fraction of the

time, cost & sample size compared to traditional laboratory experiments. Another important advantage of the microfluidic platform, as emphasized by the speaker, is the ability to conduct experiments on a pore scale and to be able to visualize, using optical imaging, the fundamental fluid-to-fluid or fluid-to-rock interactions as they happen.

In bringing this disruptive technology to market, Interface Fluidics' objective is to facilitate an industry platform which allows for accelerated decision timelines, enables new business models and creates new markets or opportunities. Their vision for the future includes being able to provide the entire suite of experiments (PVT, Phase Behavior, flowback & production optimization, regain conductivity testing, SAGD applications, and more) that can be done on location and relatively quickly. Their vision also lends to the demands of the prevailing new carbon economy and has applications that can be utilized for projects such as carbon capture, utilization and storage (CCUS). As mentioned by Stuart on several occasions during the session, Interface Fluidics is also open to active partnerships with operators, laboratories,

technology organizations, and other collaborators in the application of their methodology and to create efficiencies & provide unique solutions using microfluidics.

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## Summary

Interface Fluidics is an Albertan technology company that provides insights into the interactions and properties of reservoir fluids. Since its founding in 2015 our microfluidic technology has transformed the way oil and gas producers select chemistry for conventional and unconventional reservoirs, and in 2021, we are taking on the biggest challenge in the oil analysis space - quick, accurate, and accessible phase behavior analysis. Phase behavior analysis is a critical decision point for all producers, and especially in hard to access areas of the world. In this presentation, we will present what Interface is setting our sights on, when we think we'll get there, as well as discuss case studies from our recent developments with companies like Equinor, Ovintiv, and others.

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**PRESENTER:** Stuart Kinnear, CEO, MBA - Interface Fluidics

Stuart provides leadership developing and managing Interface's strategic initiatives.

He is passionate about leveraging information and data to increase efficiencies in oil production. With over a decade leading teams in the oil and gas industry, Stuart brings an extensive background in business intelligence, supply management, and contract negotiations.

He holds a Masters of Business Administration, with a specialization in International Business, and a Bachelor's Degree in Music Performance from the University of Victoria.

**Moderator:** Kelly Zukowski, Senior Manager, Engineering - GLJ

Kelly has in excess of 18 years of experience in the energy industry and currently co-leads GLJ's CCUS (carbon capture use and storage) team delivering independent services to help our clients develop strategies to apply this technology commercially on their path to decarbonization. In oil and gas, he has extensive experience in reserves and resources appraisals and economic evaluations used in corporate governance, regulatory filings, disclosure, financing and asset transactions. Kelly specializes in unconventional resources with a specific focus on the Montney. As a Senior Manager, Engineering, he leads a dynamic team to assess risks and uncertainties for our clients to enhance and accelerate outcomes.



**About GLJ:** As global energy consultants, GLJ illuminates a better path forward. We support organizations to improve business strategies, stakeholder engagement and the ability to attract and sustain investors. GLJ works to accelerate sustainable technology development and corporate growth by identifying and assessing material business risks and uncertainties. As the energy sector transforms, GLJ brings peace of mind to clients to enhance their decision making and stakeholder engagements, ensuring success as they move forward.



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## TECHNICAL WEBINAR

### The PVT lab of the Future, and a new method for Minimum Miscibility Pressure Measurement

presented by **Stuart Kinnear**, Interface Fluidics

AND

moderated by **Kelly Zukowski**, GLJ

Tuesday, June 15, 2021 | 10:00am MT  
**\*\*pre-registration is mandatory\*\***

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