

MULTIPHASE 2018 - THE JIM BRILL CELEBRATION CONFERENCE

BHR Group is a leading organiser of specialist Multiphase Conferences. Its series of International Events began in Europe in 1983.

This year, we were delighted to honour one of the legends in the field multiphase flow and production, Professor Jim Brill. His pioneering work, through Tulsa University Fluid Flow Projects, on large-scale experimental analysis and mechanistic modeling of multiphase flow transformed oil and gas industry practices and helped the offshore industry expand its horizons. As the highlight of the event, Jim shared his memories from 35 years of the Multiphase Conference.



WOW! BHR Multiphase North America 2018 - the Jim Brill Celebration Conference. I am thrilled, absolutely overwhelmed, but never speechless. Thank you all for attending this 11th Multiphase Flow conference in Banff and the 29th BHR Multiphase Flow conference since the first one in Coventry, England in 1983.

My love of multiphase flow began in 1963. As a graduate student at the University of Texas, I took a graduate course on multiphase flow from Kermit Brown. I loved it. We worked our butts off. At the end of the semester, I wrote a paper for the next SPE ATCE in Denver, my first published paper - basically on what we now call Nodal Analysis.

So how did this conference happen?

It all started at a dinner in Tulsa a year ago. One of my former TUFFP Research Associates, Tom Chen, and his family were in the United States to celebrate their son Max's graduation at the University of Texas. Tom and his family came to Tulsa, and they, together with Cem Sarica and his wife, Holden Zhang and his wife and Marilyn and I had a wonderful reunion at the Bluestone Steak restaurant. During the dinner, someone innocently asked me, how old are you? I said I would soon be 79. Later, Tom and Cem decided to approach BHR Group and other members of the program committee for this year's conference, to see if there was support to recognize and celebrate my contributions to the multiphase community at this event. It was like a runaway train.

Keynote talks by long-term friends

Late in the planning I learned about the people that agreed to give Keynote talks ... all were long-time friends that could also be on this stage tonight. So, I am truly thrilled that Khalid Aziz, Rene Oliemans, Trevor Hill, and Yehuda Taitel agreed to give keynote talks. Khalid, I know that Multiphase Flow was your first love - culminating with the classic book you and George Govier wrote in 1972 on "The Flow of Complex Mixtures in Pipes." Rene, I think you were in the first Multiphase Flow Short Course that I ever taught (in The Netherlands in the early 1970s). I have worked with Trevor Hill for much of my career, have stayed in his home south of London and had his daughter stay at our house this past year as she and a friend toured the United States. My relationship with Yehuda Taitel is truly special. I have always stated that the single, most significant publication in the field of Multiphase Flow was in 1976 - the Taitel-Dukler paper "A Model for Predicting Flow Regime Transition in Horizontal and Near-Horizontal Gas-Liquid Flow." It opened the door from empirical correlations into mechanistic modeling. Yehuda visited TUFFP many times, once on a sabbatical leave from Tel Aviv, and several times in the summer. I would set him up in our conference room and have each of our graduate students meet with him individually, pick his brain, and solicit suggestions to enhance their research. He was absolutely remarkable. So Yehuda, I salute you tonight.

Alistair Muir officially opened this conference on Wednesday, and has been a great friend for many years. I remember fondly when the Gregory's and the Brill's visited their "new" French farm house a few years ago.

It is also very special to me that my good friend, Tom Danielson, is this year's Conference Chairman. Tom represented Phillips and then Conoco-Phillips for many years on the Advisory Board for TUFFP. I consider him the "King of Drift Flux Modelling!" He is a passionate fan of multiphase flow.

I am also thrilled that my good friend and colleague, Jeff Creek is one of the Invited Speakers at this conference. Jeff and I had severable memorable trips together as we were forming the Tulsa University Paraffin Deposition Projects in the 1990s. I will always remember our unique experiences in Edmonton, Norway and Paris, especially the trip up the Eifel Tower.

Finally, I must salute my good friend Garry Gregory and his wife Jan for the incredible role they have played throughout the history of the BHR Multiphase Conferences.

At one time, Garry was the only person that had attended every conference. This is a wonderful example of the lasting friendships that often result during professional careers. Following several of the conferences in France, the Gregorys and the Brills stayed and took side trips around Cannes, San Remo and Barcelona. Jan Gregory is a talented travel agent; Garry is a great driver and beer drinker; and Jan, Marilyn, Gloria Oliemans, Cecilia Muir, Jonas Moe's friend, Kari, and others had great times shopping and visiting surrounding areas.

Part of Multiphase Since 1985

My first BHR conference was the second conference, held in London in 1985 and I served on the organizing Committee. This was 12 years after I started the Tulsa University Fluid Flow Projects. I was asked to do something new for an American - give a very short speech representing the delegates from abroad at the Gala dinner in the Guild Hall, a dark dungeon-like building. The previous speaker was a faculty member from Scotland, a really funny guy by the name of Dave Runey. It must have been very entertaining to be a student in his classes. He told hilarious stories as he represented the delegates from the UK, and then it became my turn.

Some guy in a befeater's uniform snuck up behind me and struck a gavel loudly on a piece of wood about 6 inches from my ear. I suddenly went deaf. He then said, Dr. Brill will now speak on behalf of the delegates from abroad. I was still laughing inside from the previous speaker, couldn't hear a thing, but I stood up and gave the briefest speech of my career.

The Conception of "The Cannes Conference"

I attended every BHR meeting after that until I retired, and I served on most of the organizing committees. Following the 3rd BHR conference in The Hague in 1987, there was a rumor that Norwegian researchers were going to hold a similar conference in 1989. Panic time! The Norwegian attendance in London and The Hague was quite large, and BHR was afraid that without them at the 1989 conference, it could be a financial disaster. What to do? Garry Gregory and I sat down with BHR Personnel and brainstormed. Aha we decided, we will hold the next conference in a very attractive place - the French Riviera - and that will attract more people. We went to Nice in 1989 and the Norwegians were there in force. Great conference, but the beaches were too rocky.

"I was deeply touched by the recognition, respect and friendliness at the BHR Multiphase 2018 Conference in Banff. I am so grateful to everyone that attended this Jim Brill Conference. What an honor! I thoroughly enjoyed everything about the conference, especially the opportunity to see people, perhaps for the last time."

Jill Brill

No problem, we will go to Cannes for the 1991 conference. It has been there every time, except for 2003, 2005 and 2007, when hotel negotiations broke down. No problem - we went to San Remo, Italy in 2003, Barcelona in 2005 and Edinburgh in 2007.

At the 1997 Conference in Cannes, there were only a handful of delegates from the Western Hemisphere. So, we had another hall conference. BHR asked if we could have a conference in the even year, i.e. 1998, in North America. Sure, but where? I suggested New York City - rejected; New Orleans - rejected; Las Vegas - rejected; Tulsa - rejected. Then Garry Gregory made a genius suggestion - Banff. It was so successful that this is the 11th conference in Banff.

I hope you have enjoyed this little historical review. I think it is miraculous that BHR has now sponsored 29 of these conferences. I believe that the conferences have developed an amazing international reputation. Many of the papers given at these conferences have subsequently appeared in excellent peer reviewed journals. Lasting friendships have been made, collaborations among industry and academia have flourished, and significant advancements in multiphase flow technology have been made as a result of the many papers and discussions that have taken place. I will always have a soft place in my heart for BHR, especially since the 11th North American Conference is **MY CONFERENCE**.

Jim Brill