

# BJRS

## Bolted Joint Reliability Symposium

Norris Conference Center, Houston, Texas

Conference: October 1 - 3, 2019

Exhibition: October 1 - 2, 2019

### Overview:

The ASME PVP Bolted Joint Reliability Symposium (BJRS) promotes knowledge sharing, technological progress and international co-operation for advancing bolted Joints and sealing technology for the pressure vessel and piping industry. The presentations will disseminate the scientific and real-world knowledge in the area of bolted joints, including current and future design rules for bolted flange connections based on tightness (ASME SWG-BJ, EN1591), modern flange assembly guidelines and best practices (ASME PCC-1), gasket selection and assembly for obtaining desired performance/reliability (Example LDAR), and sharing of Lessons-Learned and Best Practices from industry experts and engineering colleagues.

Don't miss the unique Symposium centered around Bolted Flange Connection:

Design

Trouble-  
shooting

Assembly

Performance

Reliability

### Included in the Symposium:

- (28) BFC-focused technical presentations
- Over (20) BFC equipment, product, engineering and services suppliers exhibits + demonstrations
- Networking with notable industry professionals from the U.S + around the world
- Lunch + Breaks Provided

- (2) Special Tutorials:

**Keynote #1: *Background and Application of WRC 538 for Determining Flange Strength.*  
Warren Brown- Integrity Engineering**

The information presented will assist in developing general limits for acceptable bolt stresses that can be applied to flanged joints without damaging them. All attendees will receive an Excel spreadsheet containing the analysis methods and approach.

**Keynote #2: *ASME PCC-1-2019 Update, Appendix A Acceptance and Use*  
Clay Rodery- Former Chairman, PCC-1 S/C Flanged Joint Assembly**

This tutorial will provide a review of the updated PCC-1 document, including expanded Appendices, and review the intent and implementation of Appendix A Qualification approaches and the impact on improved assembly/reliability of Bolted Flanged Connections.

For more information on registration, exhibiting + sponsorships contact ASME Staff Representative - **Jamie Hart (HartJE@asme.org)** - or - visit the symposium website at: <https://event.asme.org/BJRS>

# BJRS 2019 Schedule

October 1-3, 2019

Day 1	Room	Start	Finish			
Tuesday, October 1	Magnolia Ballroom	7:30	8:30	Registration, Breakfast, Exhibits Open		
		8:30	8:45	Welcome		
	Red Oak Ballroom	8:45	9:15	<b>Session 2: Gasket Testing</b>		
				#7032	On the ASME proposed New Flange Design Rules Based on Tightness	Bouzid
		9:15	9:45	#7017	Tightness-Based Design of Bolted Flanged Joints	Schaaf
		9:45	10:15	#7014	A Comparison Between Current BFJ Design Methods	Brown
	Magnolia Ballroom	10:15	10:45	Break		
	Red Oak Ballroom	10:45	11:15	<b>Session 2: Gasket Testing</b>		
				#7022	The Effect of Thermal Transients on Bolt Tension and Gasket Compression	Hawkins
		11:15	11:45	#7030	Performance Testing per ASME B16.20 (2017)	Baulch
		11:45	12:15	#7016	Effect of Heating Rate and Gasket Stress at Assembly on Hot Blowout Test	Wheeler
	Magnolia Ballroom	12:15	1:15	Lunch		
		1:15	1:45	#7019	Room Temperature Tightness Test (ROTT) – Derivation and Use of gasket Factors	Schaaf
	Red Oak Ballroom	1:45	2:15	<b>Session 3: Gaskets/Technology</b>		
				#7004	PERFORMANCE OF SEMI-METALLIC GASKETS WITH NUBBIN	Taylor
		2:15	2:45	#7003	Stress Multiplier for Segmented Gaskets	Wilson
		2:45	3:15	#7036	Characteristics, Manufacturing and Performance Capabilities Of Flexible Graphite Gasket Materials	Sautter
	Magnolia Ballroom	3:15	3:45	Break		
		3:45	4:15	#7026	COMBINED STATISTICAL-MECHANICAL CHARACTERIZATION OF A NEXT GENERATION TEXTURED PTFE FOR EXTREME ENVIRONMENTS	Schinde
	Red Oak Ballroom	4:15	4:45	<b>Session 4: Fasteners</b>		
			#7035	Are there Nut factor differences at several elevated temperatures on anti-seize compounds	Oldiges	
	4:45	5:15	#7034	THE EFFECTS OF FLUOROPOLYMER COATED FASTENERS ON NUT FRICTION FACTORS	Clark	
	5:15		Adjourn Day 1			

EXHIBITS OPEN  
Red Oak Ballroom

Day 2	Room	Start	Finish			
Wednesday, October 2nd	Red Oak Ballroom	7:15	8:15	Breakfast, Exhibits Open		
	Red Oak Ballroom	8:15	9:30	Keynote: WRC 538 Background and Application of WRC 538 for Determining Flange Strength		Brown
	Magnolia Ballroom	9:30	10:00	Break		
	Red Oak Ballroom	10:00	10:30	<b>Session 5: BFC Assembly</b>		
				#7011	Evaluation of the optimum target assembly bolt load for some ASME B16.47 Series B flange joints	Abdelgalil
		10:30	11:00	#7020	Experience with Alternative Assembly Patterns for Bolted Flanged Joints	Bausman
		11:00	11:30	#7015	Common problems and pitfalls with current joint assembly methods and procedures	Brown
		11:30	12:00	#7028	ASME L&D Qualified Bolting Specialist Course - Status and Upgrades	Lay
	Magnolia Ballroom	12:00	1:00	Lunch		
		1:00	1:30	#7024	ASME - Bolting Safety	Knudsen
	Red Oak Ballroom	1:30	2:00	<b>Session 6: BFC Lessons Learned</b>		
				#7005	Lessons Learned In Ensuring Reliability and Performance Of Chemical Process Bolted Flanged Connections	Cary
		2:00	2:30	#7012	Lessons Learned: Top 5 Joint Integrity Issues for Refinery and Petrochemical Plants	Brown
		2:30	3:00	#7025	Coke Drum Bottom Flange to DeltaValve Bottom Unheading Device Joint Integrity Improvements	Smith
	Magnolia Ballroom	3:00	3:30	Break		
	Red Oak Ballroom	3:30	4:00	<b>Session 7: LDAR/Emissions</b>		
				#7033	An historical perspective on the basis and ASME code approach with M&Y gasket factors, their use and limitations, and the resultant impact on the difference between design bolt loads and assembly bolt loads.	Wacker
		4:00	4:30	#7009	Use of a Leak Rate Model to Develop Gasket Tightness Guidance	Rice
		4:30	5:00	#7029	Best Practices for Valve Packing Installation for Fugitive Emission Compliance	Baulch
		5:00		Adjourn Day 2		

EXHIBITS OPEN  
Red Oak Ballroom

Day 3	Room	Start	Finish			
Thursday, October 3rd	Magnolia Ballroom	7:15	8:15	Breakfast		
	Red Oak Ballroom	8:15	9:30	Keynote: ASME PCC-1 PCC-1-2019 Updates, Appendix A Acceptance and Use, Current Research		Rodery
	Magnolia Ballroom	9:30	10:00	Break		
	Red Oak Ballroom	10:00	10:30	<b>Session 8: High Temperature/High Pressure Technology</b>		
					Bolt Creep Relaxation In High Temperature Joints	Tze-Yew Lim
		10:30	11:00	#7021	New Subsea HPHT Flange Design Verification Analysis and Validation Testing Methodology	Manning
		11:00	11:30	#7027	Influence of Thermal Gradients in Design Verification of Uninsulated HPHT Bolted Connections	Luce
		11:30	12:00	#7013	Lessons Learned: Top 5 Joint Integrity Issues for LNG Plants	Brown
		12:00	12:30	#7001	Deformation and Stresses Generated on the Bolted Flange Joint Assembly and the Grayloc Clamp Connector at Elevated Temperatures	Mogri
		12:30		Symposium Closing		