

## Discussion Group T07 - Advanced Topics In Centrifugal Compressor Design

### Leaders:

- Mark Sandberg (Sandberg Turbomachinery Consulting, LLC)
- Leonardo Baldassarre (Baker Hughes, a GE Company)
- Urs Baumann (MAN Energy Solutions Schweiz AG)
- Mark J. Kuzdzal (Siemens)
- Jeffrey Moore (Southwest Research Institute)
- Brian Pettinato (Elliott Group)
- James M. Sorokes (Siemens)

### Suggested Topics:

- Meeting current rotordynamics stability standards
- CO2 Compressors
- High flow coefficient/Mach number impellers
- Coupling and alignment impacts on asymmetric rotordynamics
- Sour gas/Chloride implications on material selection
- Complicated high pressure gas properties
- Validity of CFD modeling
- Modern manufacturing/forming methodologies
- Simulation and dynamic process modeling
- Helmholtz Resonators/Acoustic Attenuation
- Testing in extreme overload/choke conditions
- Tripping of compressors in surge conditions
- Future compressor design/development challenges
- Control challenges associated with sophisticated cent. compr. Design
- Performance and mechanical monitoring of compressors