Join an SPE Technical Section

SPE International®

Society of Petroleum Engineers

SPE Technical Communities

We have a Technical Community for each Technical Discipline. Technical Communities are housed on SPE Connect and provide an online platform for professional members to hold technical discussions with other members across the globe.

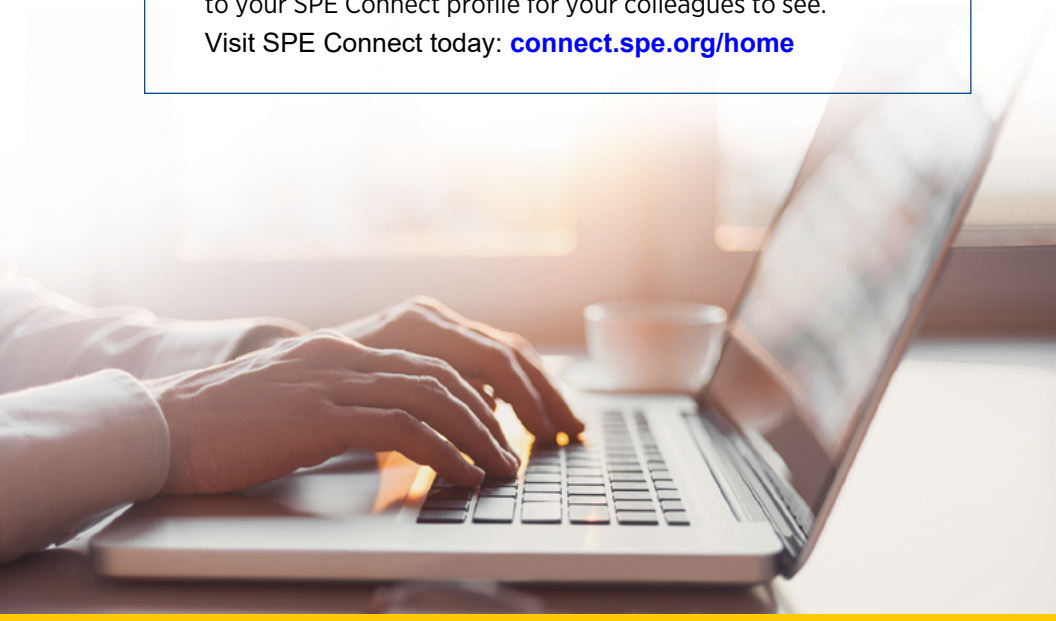
Every professional member of SPE is automatically assigned to a Technical Community based on their primary (and secondary) disciplines. They can also sign up for any of the other technical communities at **go.spe.org/SPEConnect_TCHSEC.**

Technical Pro

Become a Technical Pro in SPE Connect today!

It's easy, just post 5 discussions in a technical discipline community this year. As thanks, we'll add this blue ribbon to your SPE Connect profile for your colleagues to see.

Visit SPE Connect today: **connect.spe.org/home**



SPE Technical Sections

Technical sections are similar in many ways to our geographic sections. While geographic sections bring people together based on a common location, technical sections bring people together on a common topic. Technical sections are more focused than a Technical Community. Technical section members can be located any place in the world and they use the SPE Connect platform for their website and online communication tool.

Most technical sections hold at least one in-person meeting or event that is alongside an SPE conference. Some have special activities such as the Drillbotics student competition that is organized by the Drilling Systems Automation Technical Section.

To learn more about Technical Sections, visit connect.spe.org/technical-sections/tshome on SPE Connect and go.spe.org/TCHSEC on SPE.org. Use the QR code below to join technical sections!

Each Technical Section falls under one of SPE's eight primary disciplines.

Completions

Data Science and Engineering Analytics

Projects, Facilities, and Construction

Health, Safety, Environment, and Sustainability

Asset Management

Drilling

Production and Operations

Reservoir

For more information on starting a Technical Section, contact technicalsections@spe.org

Current Technical Sections

- Artificial Lift
- Asset Management
- Carbon Dioxide Capture, Utilization and Storage
- Critical Minerals
- Data Science and Engineering
- Drilling Systems Advancement
- Drilling Uncertainty Prediction
- Flow Assurance
- Flow Measurement
- Geomechanics
- Geothermal
- Human Factors
- Hydraulic Fracturing
- Hydrogen
- Integrated Reservoir Management
- Methane
- Offshore Completions
- Plug and Abandonment
- Research and Development
- Robotics and Autonomous Systems
- Separations Technology
- Sustainable Development
- Water Life Cycle and Strategy
- Wellbore Positioning
- Well Integrity

Artificial Lift Technical Section (ALTS)

Artificial Lift encompasses the subject of artificial lift and gas well deliquification between the reservoir/wellbore interface and the wellhead.

The goals of the technical section are: Capability development through virtual events, workshops, conferences, new training materials, and PetroWiki contributions. Transfer of knowledge and best practices through events, communications, articles in JPT, TWA, and other SPE publications. Promote professionalism, certification, and HSSE-SR considerations related to Artificial Lift.

Learn more and join today at **connect.spe.org/algwd/.**

Asset Management Technical Section (MTS)

The Asset Management Technical Section provides a forum for technical professionals and academia in the area of management. This technical section focuses on the subject of management with applications in the upstream petroleum industry, including:

- Asset and Portfolio Management
- Risk Management and Decision-Making
- Strategic Planning and Management
- Energy Economics
- Professionalism, Training, and Education

Learn more and join today at **connect.spe.org/management.**

Carbon Dioxide Capture, Utilization and Storage Technical Section (CCUS)

Carbon dioxide capture, utilization and storage (CCUS) involves capturing CO_2 emissions from large point sources such as power plants and either re-utilizing or storing the emissions to keep them from entering the atmosphere. Industry interest in CCUS as a way to reduce emissions and for sequestering or storing carbon dioxide has increased over the past decade. In response, SPE established this technical section.

Possessing the know-how for evaluation, selection, and monitoring of underground storage sites garnered through decades of experience in the fields of CO_2, Enhanced Oil Recovery (EOR), and gas storage operations, the E&P segment of the oil and gas industry is anticipated to play a major role in the advancement of CCUS including broader application of CO_2-EOR.

Learn more and join today at **connect.spe.org/ccusts.**

Critical Minerals (CMTS)

As global energy systems evolve toward expansion of existing energy sources, reliable access to lithium, cobalt, nickel, rare earth elements, bromine, and other strategic minerals has become essential. Many of these resources occur in geological environments long understood by petroleum professionals. The petroleum sector's experience in reservoir characterization, drilling, completion design, produced fluid management, and large scale process engineering aligns directly with emerging mineral extraction opportunities. By connecting established subsurface expertise with mineral extraction technologies, SPE plans to play a meaningful role in shaping this emerging resource field. The SPE Critical Minerals Technical Section represents a strategic bridge between traditional oil and gas expertise and next generation mineral and energy transition technologies.

Learn more and join today at **connect.spe.org/cmts.**

Data Science and Engineering (DSEATS)

The Data Science and Engineering Analytics Technical Section is for all members focused on Digitalization, creating value from data. Given the size of prize, where even a small percentage improvement in efficiency or production can yield big bottom-line impact, the interest and relevance of DSEA applies across all SPE disciplines and beyond.

As Petroleum industry rapidly evolves towards better and faster innovative end-to-end processes – the role of DSEA is increasingly recognized by all disciplines and upstream business sectors, beyond typical IT and data organizations.

Learn more and join today at **connect.spe.org/dseats.**

Drilling Systems Advancement Technical Section (DSATS)

The purpose of DSATS is to accelerate the development and implementation of systems advancement in the well drilling industry by supporting initiatives that communicate the technology, recommend best practices, standardize nomenclature, and help define the value of drilling systems automation. Appropriate initiatives include workshops, forums, lectures, and technical and white papers, among others, and DSATS actively encourages participation of automation experts from outside the drilling industry.

Learn more and join today at **connect.spe.org/dsats.**

Drilling Uncertainty Prediction Technical Section (DUPTS)

SPE has formed a technical section for sharing technical knowledge, experiences, best practices, and solutions in Drilling Uncertainty Prediction. This section seeks to promote awareness of key industry challenges, work with relevant SPE groups to develop necessary training initiatives, identify areas for collaborative problem-solving, and address gaps between operators' requirements and available solutions.

Learn more and join today at **connect.spe.org/dupts.**

Flow Assurance Technical Section (FTS)

SPE has formed this technical section to give members the opportunity to focus on flow assurance, a key area of interest for facilities engineers. This new technical section seeks to further the objectives of SPE by convening online discussions of matters relating to flow assurance, establishing consensus on industry best practices, and promoting these practices widely.

Learn more and join today at **connect.spe.org/fts.**

Flow Measurement Technical Section (FMTS)

The Flow Measurement Technical Section will provide a forum from which technical professionals and academia can share knowledge, experiences, and best practices in the area of Single-Phase and Multiphase Flow Measurement. The section will identify major issues and technology areas on which to focus cooperation and discussions, maintain and promote industry awareness of flow measurement-related issues and technologies, and enhance their own technical competencies to meet the needs of the petroleum industry. We will accomplish our objectives through the transfer of knowledge via webinars, online discussions, monthly meetings, and SPE events.

Learn more and join today at **connect.spe.org/FMTS.**

Geomechanics Technical Section (GTS)

The Geomechanics Technical Section (GTS) was created in 2016 to focus on geomechanics and its applications in the oil & gas industry. The section combines geology, geophysics, petrophysics, reservoir engineering, drilling, completions, and production data to build an integrated understanding of subsurface formations. This section seeks to promote industry awareness of geomechanics-related issues and technologies, provide a forum to share knowledge and best practices and identify issues in need of attention.

Learn more and join today at **connect.spe.org/geomechanics.**

Geothermal Technical Section (GTTS)

The Geothermal Technical Section is for members with a common interest in geothermal energy and its potential to transform generation of electric power and direct heating and cooling across the globe.

Geothermal energy is the only “green” energy source that has the potential to provide grid baseload power at scale. It is in many ways, the closest energy source in terms of required skills to the upstream oil and gas industry.

Geothermal and the oil and gas industry have been learning from each other for decades and are currently well placed to transfer technology and practices that can accelerate the drilling and completion of geothermal wells, reduce costs and revolutionize reservoir monitoring practices.

Learn more and join today at **connect.spe.org/geothermal.**

Human Factors Technical Section (HFTS)

This section promotes the exchange of information, technology, and development of understanding and competence in the area of Human Factors for application to the petroleum industry. Key objectives include knowledge sharing and raising awareness of the role Human Factors plays in the oil and gas industry. Additionally, the section promotes improved HSE performance through better application of Human Factors technology by coordinating with, and learning from other industry organizations.

Learn more and join today at **connect.spe.org/hfts.**

Hydraulic Fracturing Technical Section (HYFTS)

The Hydraulic Fracturing Technical Section is for members interested in the topic of hydraulic fracturing and encompasses the subject of hydraulic fracturing technology through online events, networking, workshops, and conferences. The purpose of this section shall be to provide a forum from which technical professionals and academia can:

• Share knowledge, experience, and best practices

• Identify major issues and technology areas on which to focus cooperation and discussions

• Maintain and promote industry awareness of related issues and technologies

• Enhance their own technical competencies that meet the needs of the petroleum industry

Learn more and join today at **connect.spe.org/hydraulicfracturing/home.**

Hydrogen Technical Section (H2TS)

The Hydrogen Technical Section is for technical professionals and academia who are active, or have a deep interest, in the use of hydrogen as an energy carrier. This new technical section aims to share knowledge, experiences, leading practice, promote industry awareness, and enhance technical competencies.

We use the term “energy carrier” to denote all aspects of the hydrogen supply chain including production, transport, storage, and use. Ammonia and other compounds of hydrogen are also included for their potential as an energy carrier solution. Hydrogen will play a part to sustainably meet our energy needs in the future, and you are invited to join our new technical section to help make it so.

Learn more and join today at **connect.spe.org/hydrogen/home.**

Integrated Reservoir Management Technical Section (IRMTS)

The Integrated Reservoir Management Technical Section is committed to unite a community of technical professionals and academia, driven to enhance reservoir performance by harnessing today's technological innovations and creating a collaborative space for strategic discussions and sustainable practices. In line with SPE's mission, we aim to facilitate the exchange of technical knowledge and best practices, supporting the industry's drive toward operational excellence with a reduced carbon footprint.
Crucially, the IRMTS will foster collaboration with other SPE technical sections to enhance reservoir management practices, ensuring we collectively address global energy demands efficiently and with environmental mindfulness.

Learn more and join today at
connect.spe.org/integratedreservoirmanagement/home.

Methane Technical Section (MTS)

The mission of this technical section is to collect, disseminate, and exchange technical knowledge concerning the measurement, reporting and cost-effective abatement of methane emissions from oil and gas operations and related technologies for the public benefit; and to provide opportunities for professionals to enhance their technical and professional competence in this area.

We are building on the work undertaken over the last few years by the SPE Sustainable Development Technical Section and the Gaia Measuring What Matters Work Group to measure, report and reduce Methane Emissions. This technical section is intended to create a platform to share experiences, success stories and cautionary tales so we can learn from each other's mistakes and learnings.

Learn more and join today at
connect.spe.org/methaneemissionsmanagement.

Offshore Completion Technical Section (OCTS)

The Offshore Completions Technical Section is for technical professionals and academia who are active or have a deep interest in Offshore Completions and promotes the capability development related to Offshore Completions including sand control, hydraulic fracturing, delivery systems such as crossover tools, fluids, wellwork access and optimization etc. through on-line events, online networking, workshops, and conferences. It also promotes sustainability and mitigation of the environmental impact of Offshore Completions in pursuit of operational excellence.

The OCTS encourages SPE global outreach and diversity, with emphasis on recognition of professionals in Offshore Completions, and their contribution to the Completions Community.

Learn more and join today at
connect.spe.org/offshorecompletions/home.

Plug and Abandonment Technical Section (P&ATS)

This technical section is dedicated to cost effective well decommissioning and leakage prevention from abandoned wells, including the repair of failed or patently inadequate prior abandonments of old wells that were plugged-off under outdated industry practices or regulatory expectations.

The P&ATS is established for technical professionals, academia, and stakeholders working in well decommissioning to come together and share knowledge, experiences, best practices and expectations or regulations; identify opportunities for innovation; promote industry awareness of technical challenges, solutions, and the expectations of society; and enhance technical competency.

Learn more and join today at
connect.spe.org/plugandabandonment.

Research and Development Technical Section (RDTS)

The Research and Development Technical section (RDTS) is comprised of SPE members who are interested in research and technology development with applications in the upstream oil and gas industry.

The section seeks to:

- Promote R&D and technology development
- Encourage development of a cooperative framework for R&D
- Provide a means of communication among the R&D community in the petroleum industry
- Facilitate R&D efforts that meet the needs of industry, government, research companies, institutes, and academia
- Offer opportunities to network and discuss research needs
- Identify major issues/technology areas on which to focus interaction and discussions

Learn more and join today at **connect.spe.org/rdts.**

Robotics and Autonomous Systems Technical Section (RASTS)

This new technical area covers remotely operated and autonomous vehicle systems, software solutions, and power systems for marine, air, and land environments such as ROVs and drones. The technical section seeks to:

- Develop capability through contributions to workshop and conference programs
- Transfer knowledge through in-person meetings, online communication, and adding content to SPE's PetroWiki®
- Promote safety, professionalism, and social responsibility
- Provide public education through STEM volunteering and student competition engagement

Learn more and join today at **connect.spe.org/roboticsautonomoussystems/home.**

Separations Technology Technical Section (STTS)

The purpose of this section is to provide a forum in which Separations technical professionals can:

- Share knowledge, experience, and best practices
- Identify major issues and technology areas on which to focus cooperation and discussions
- Maintain and promote industry awareness of separation related issues and technologies
- Enhance their own technical competencies to meet the needs of the petroleum industry

Learn more and join today at **connect.spe.org/SeparationsTechnology.**

Sustainable Development Technical Section (SDTS)

This technical section provides members, regardless of discipline, an increased awareness and opportunity to network in the area of sustainable development. Its main objectives are:

- Exchanging sustainable development technical information
- Supporting members in acquiring sustainable development competencies
- Raising awareness of the role sustainable development plays in the oil and gas industry
- Improving performance through better application of sustainable development principles and practices
- Liaising with and learning from other industry organizations

Learn more and join today at **connect.spe.org/sdts.**

Water Life Cycle and Strategy Technical Section (WLCSTS)

The purpose of the section is to expedite, facilitate, and provide a forum for discussion and cooperation on Water Life Cycle and Strategy in the upstream oil and gas industry.

Objectives include:

- Promote Water Life Cycle strategy and technology development
- Encourage development of a cooperative framework for Water Life Cycle and Strategy
- Provide a means for communication among the Water Life Cycle and Strategy community within the petroleum industry
- Facilitate Water Life Cycle and Strategy efforts that meet the needs of industry, government, research companies and institutes, and academia
- Offer opportunities to network and discuss research needs
- Identify major issues and technology areas on which to focus interaction and discussion

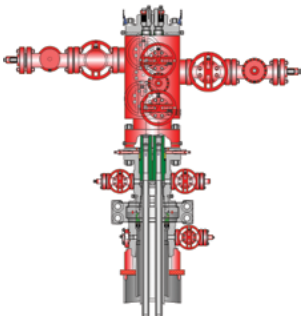
Learn more and join today at **connect.spe.org/wts.**

Wellbore Positioning Technical Section (WPTS)

The primary aim of this group is to produce and maintain standards for the industry relating to wellbore survey accuracy. To set standards for terminology and accuracy specifications. Establish a standard framework for modeling and validation of tool performance. Raise awareness and understanding of wellbore survey accuracy issues across the industry.

Learn more and join today at **connect.spe.org/wellborepositioning.**

Well Integrity Technical Section (WITS)



This Technical Section, formerly called a Technical Interest Group, was developed to focus on well integrity and well integrity management. The subject areas for this Technical Section is the design, construction, operation, maintenance, and abandonment of a well, with an emphasis on containment and control of well fluids for the entire life of the well.

Learn more and join today at **connect.spe.org/wellintegrity.**

Contact SPE

Contact Customer Service
by email at **service@spe.org**
or by fax at **+1.214.545.5201**.

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or **1.800.456.6863***
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