CINPAA | INTERNATIONAL COOPERATIVE FOR TRAINING & CONSULTING

سينبا | التعاونية الدولية للتدريب والاستشارات



Training programme:

Gas Lift Operation and How to Perform Chemical Treatment of Wells

Delivered in several cities and dates

OUR INTERNATIONAL PARTNERS:

ISDE Law Business School High Performance Education
Higher Institute of Law and Business (ISDE)

Professional Development Institute
Professional Development Institute

Universidad Camilo José Cela
Camilo José Cela University

SEK EDUCATION GROUP

ISO 29993:2017 Learning services for non-formal education and training

ISO 9001:2015

Gas Lift Operation and How to Perform Chemical Treatment of Wells

About the programme:

This programme examines gas lift operation and chemical treatment of wells, connecting the operating principles with the technical considerations involved in well treatment.

Objectives:

Developing participants' skills, knowledge, values and professional approaches in:

a. Understand the Basics of Gas Lift Operation:
b. Definition and importance of gas lift.
c. Components of the gas lift system and their functions.
d. Principles of gas lift system operation.
e. Apply Gas Lift Techniques:
f. Design and selection methods for gas lift systems.
g. Installation and operation procedures for gas lift systems.
h. Continuous improvement of gas lift systems.
i. Understand Chemical Treatment of Wells:
j. Definition and importance of chemical treatment.
k. Chemicals used in well treatment.
l. Techniques for applying chemical treatment in wells.
m. Apply Chemical Treatment Techniques:
n. Evaluating wells and selecting appropriate chemical treatments.
o. Procedures for implementing chemical treatment.
p. Monitoring and evaluating the effectiveness of chemical treatment.

Target audience:

a. Petroleum and gas engineers.
b. Field technicians and operators.
c. Specialists in well maintenance and management.
d. Project and operations managers in the oil and gas sector..

Daily programme:

• Day 1: Introduction to gas lift operation

a. Definition of gas lift and its importance in oil and gas production
b. The role of gas lift in sustaining and increasing well production
c. When gas lift is chosen over other artificial lift methods
d. Basic well performance concepts: reservoir inflow and lift requirements
e. Case study: reviewing a declining well and the case for introducing gas lift
f. Day output: summary of the case for gas lift in a selected well

• Day 2: Components of the gas lift system

a. Main components of the gas lift system: surface facilities, mandrels and valves
b. Surface equipment: compression, injection lines, manifolds and gas metering
c. Downhole equipment: side-pocket mandrels and the types of gas lift valve
d. Functions of each gas lift component and how they work together
e. Workshop: tracing the injection gas path from the compressor to the production tubing
f. Day output: gas lift system component map with functions

- **Day 3: Principles of gas lift operation and efficiency**

a. Basic principles of gas lift operation: injection, unloading and stable flow

b. Continuous and intermittent gas lift and the conditions that suit each

c. Factors affecting system efficiency: injection rate, pressure and well inflow

d. Common operating problems such as instability, heading and valve malfunction

e. Workshop: interpreting well test and pressure data to identify an efficiency problem

f. Day output: efficiency factor checklist for gas lift wells

- **Day 4: Design and selection of gas lift systems**

a. How to design a gas lift system and the data required for design

b. Determining injection depth, valve spacing and injection gas requirements

c. Criteria for selecting the appropriate gas lift system for a field

d. Checking a design against available gas supply and surface constraints

e. Workshop: compiling a design data sheet and selecting a gas lift option for a well

f. Day output: gas lift design data sheet with selection rationale

- **Day 5: Installation and operation of gas lift systems**

a. Steps for installing the system and pre-start safety checks

b. Unloading a well safely after installation and bringing it to stable production

c. Procedures for operating, adjusting and continuously improving the system

d. Optimising gas allocation between wells and monitoring daily performance

e. Workshop: preparing an operating and adjustment procedure for a gas lift well

f. Day output: gas lift operating and adjustment procedure

- **Day 6: Introduction to chemical treatment of wells**

a. Definition of chemical treatment and its importance in oil and gas operations

b. Common well problems addressed by chemical treatment: scale, corrosion and deposits

c. Effects of untreated well problems on production, equipment and safety

d. Health, safety and environmental principles for chemical treatment work

e. Case study: reviewing a producing well that lost output because of scale and corrosion

f. Day output: list of well problems with their likely chemical treatment needs

- **Day 7: Chemicals used in well treatment**

a. Types of chemicals used in well treatment and their purposes

b. Inhibitors, demulsifiers, solvents and acids: what each is designed to do

c. Properties of treatment chemicals and how to select them

d. Safe handling, storage and compatibility of well treatment chemicals

e. Workshop: selecting a chemical treatment for scale and corrosion problems in a producing well

f. Day output: chemical selection matrix by well problem

- **Day 8: Techniques for applying chemical treatment**

a. Methods and techniques of chemical treatment and their practical limits

b. Continuous injection, batch treatment and squeeze treatment compared

c. Challenges and potential issues: compatibility, placement and formation damage

d. Preventing and managing problems during and after chemical treatment

e. Case study: analysing a treatment that underperformed and identifying what went wrong

f. Day output: treatment technique comparison with risk controls

• Day 9: Evaluating wells and selecting appropriate treatments

a. Methods for evaluating well conditions before choosing a treatment

b. Using production data, fluid samples and water analysis to diagnose problems

c. How to select an appropriate chemical treatment for the diagnosed condition

d. Balancing treatment effectiveness, cost and operational constraints

e. Workshop: diagnosing a well from production and fluid data and recommending a treatment

f. Day output: well evaluation report with recommended treatment

• Day 10: Implementing and evaluating chemical treatment

a. Steps for implementing chemical treatment safely and in sequence

b. Monitoring, evaluating and improving the effectiveness of treatment

c. Key indicators of treatment success and when to adjust the programme

d. Integrating gas lift operation and chemical treatment in well management

e. Workshop: planning a treatment programme with monitoring indicators for a selected well

f. Day output: well treatment plan with monitoring and evaluation steps

Training methods and certificates:

Our programmes are built on modern pedagogy that combines theoretical knowledge with practical application, in line with participants' needs and the demands of the workplace. Methods include:

- **Interactive workshops:** analysis of real data and group discussions that strengthen practical understanding.
- **Case studies:** examples from international organisations that highlight real successes and challenges.
- **Realistic simulations:** participants train through professional scenarios that mirror real situations requiring decisions and situation management.
- **Advanced tools and technologies:** hands-on practice with up-to-date training software and tools suited to each field.

Certificates:

On successful completion, participants receive a certificate issued by CINPAA, a training institute officially registered in the European Union, Spain and the United Kingdom.

CINPAA - Cooperative International for Training and Consulting

Our programmes are delivered within academic and professional partnerships, cooperation agreements and memoranda of understanding with a number of academic and professional institutions, including:

- **Camilo José Cela University - Spain**
- **ISDE - Law & Business School - International**
- **Professional Development Institute - United Kingdom**

These partnerships aim to exchange expertise, develop training content and raise programme quality in line with international best practice.

Kind regards,
International Programmes Department
"CINPAA" INTERNATIONAL COOPERATIVE FOR TRAINING & CONSULTING

Course details and registration

Course Details | Registration

Programme	**Gas Lift Operation and How to Perform Chemical Treatment of Wells**	Course Title
Language	**English**	Course Language
Duration	**10 days**	Duration
Venue	**Several cities and dates – see the table below**	Venue
Financial offer	**Sent separately, according to the number of participants and the delivery conditions.**	Financial Offer

Registration and confirmation:

To register, please use one of the following:

a. Complete the programme request form on our website.

b. Or send an email from your training department.

c. Or a nomination letter from your organisation.

Send your confirmation by:

Email info@cinpaa.org

WhatsApp +34 635 867 686

Our team is ready to advise on accommodation and logistics before and during your stay.

Planned programme dates:

City	Dates
Barcelona, Spain	30 Nov - 11 Dec 2026
Barcelona, Spain	11 - 22 Jan 2027
London, United Kingdom	12 - 23 Apr 2027
Cairo, Egypt	12 - 23 Jul 2027
Madrid, Spain	11 - 22 Oct 2027

The programme can be delivered in other cities and on other dates to suit your organisation, at the length you need. The cities are listed on the last page.

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Cities where we deliver our programmes:

This programme can be delivered in any of the following cities, and elsewhere on request.

Albania Tirana, Saranda	**Australia** Sydney	**Austria** Vienna, Hallstatt, Salzburg / Zell am See	**Azerbaijan** Baku
Bahrain Manama	**Belgium** Brussels, Bruges	**Bosnia and Herzegovina** Sarajevo	**Canada** Toronto, Montreal
China Hong Kong, Shanghai, Beijing, Guangzhou	**Croatia** Dubrovnik	**Cyprus** Nicosia, Limassol, Larnaca	**Czech Republic** Prague
Egypt Cairo, Sharm El Sheikh, Alexandria, Hurghada	**France** Paris	**Georgia** Tbilisi, Batumi	**Germany** Munich, Berlin, Düsseldorf, Frankfurt
Greece Athens, Rhodes	**Hungary** Budapest	**Indonesia** Bali, Jakarta	**Ireland** Dublin
Italy Rome, Florence, Milan, Venice, Como	**Japan** Tokyo	**Jordan** Amman, Aqaba	**Kuwait** Kuwait City
Malaysia Kuala Lumpur	**Maldives** Maldives	**Mauritius** Mauritius	**Montenegro** Budva, Kotor
Morocco Casablanca, Marrakech, Tangier, Rabat	**Netherlands** Amsterdam	**Oman** Muscat, Salalah	**Philippines** Manila
Poland Krakow, Warsaw	**Portugal** Lisbon, Porto	**Qatar** Doha	**Russia** Moscow
Saudi Arabia Riyadh, Jeddah, Dammam	**Serbia** Belgrade	**Slovenia** Ljubljana	**South Korea** Seoul
Spain Madrid, Barcelona, Valencia, Alicante, Benidorm, Malaga / Marbella, San Sebastian, Granada, Cordoba, Canary Islands, Seville, Bilbao	**Switzerland** Geneva, Luzern, Zurich, Interlaken, Zermatt, Lugano	**Thailand** Bangkok, Phuket	**Tunisia** Tunis
Turkey Istanbul, Antalya, Trabzon, Bursa, Izmir, Bodrum, Antakya (Hatay)	**United Arab Emirates** Dubai, Abu Dhabi	**United Kingdom** London, Edinburgh, Manchester, Birmingham	**United States** Miami, New York, Los Angeles, Washington