



COULD YOU ENERGISE THE FUTURE OF ENERGY?

APPLY NOW! 



Process Engineer CO2 Abatement (PhD) | Part of Shell Graduate Programme

Location: Amsterdam

JOB DESCRIPTION

An exciting opportunity for a [Process Engineer CO2 Abatement \(PhD\)](#)

The CO2 Abatement group builds the techno-commercial pathway to Carbon Capture & Storage (CCS) for Shell's own assets in all businesses and gas customers. This technology platform sustains Shell's natural gas leadership in the energy mix and aims to develop cost effective technologies to reduce CO2 intensity by defining and executing R&D programs mainly focused on CO2 capture, CO2 compression and CO2 utilization.

The Shell Graduate Programme: a world of opportunities!

There has never been a more exciting time to work in the energy industry. Starting your career in Shell, you'll have a part to play in uniquely innovative projects which will provide unbeatable experience.

As a graduate within the Technical area of the Shell Graduate Programme you can expect an industry-leading two to three-year learning programme, offering real responsibilities, challenges and continued professional development. It's a great introduction to the exciting world of Engineering/R&D and a

chance for you to gain insights into some of Shell's most pioneering projects and operations. You'll benefit from formal training and continuous coaching will shape you into an accomplished professional. As part of Shell's global network of professionals, you'll have the chance to work alongside some of the industry's leading visionaries and work with cutting-edge technologies.

Process Engineer CO2 Abatement: the role

As a Process Engineer you ensure technical integrity/assurance in the deployment of the CO2 capture technologies and drive technology improvements with a focus on Capex reduction, development of new process line-ups and process integration. You will provide support to research & development business units, as well as be a technical focal point for interactions with other Shell businesses.

The role varies with the projects and will include conceptual process design, preparation of R&D proposals, preliminary process engineering as it applies to the processes under development, technical communication with third parties (research laboratories, internal & external R&D teams, assets, etc), and participation at project meetings.

- Development of new process line-ups driven by cost reduction demand and identified through collaboration within the group.
- Responsibility for project management controls such as ensuring project schedule is met, delivery within the budget and managing stakeholders and meeting scope/performance requirements.
- Furthermore, the Process Engineer is the focal point and/or will develop expertise in an area of criticality to the technology offer, ie: CO2 capture, concept design, process evaluation, focused development leading to project/concept deployment, etc.

You will be involved in R&D studies leading to development & deployment of CO2 Abatement technologies by

- Translating business strategy into fit-for-purpose R&D projects
 - Deciding and selecting promising leads as based on R&D data, evaluate potential to reduce cost, identify gaps to commercial deployment
 - Leading and providing validation for the engineering design for new technology based on issued R&D data, i.e.: performance data, public information, new generated data, industry know-how;
 - Challenging and understanding the impact of concepts, design line-ups as result of R&D proposals on project capital and on operating cost with a view to maximize business opportunities
 - Developing solutions that can lead to cost reduction and implementation of CCS technology
 - Leading the preparation and implementation of the technical development plan of new technology in coordination with internal and external stakeholders to ensure proper expertise is involved
 - Leading the Technology Development and Change Management procedure to convert new learnings into technology improvement
- CO2 Abatement has cross-business and international activities. Support might need to be provided remotely short-term international travel may be required

- Leading the development/improvements of process line-ups and process integration and simplify designs

Dimensions

- CO2 Abatement has cross-business and international activities, support might need to be provided remotely. Short-term international travel may be required.
- Requires willingness and eagerness to learn core fundamentals of patented technology in order to contribute to its development.

Who are we looking for

- Ambitious graduate (0-3 yrs work experience) pursuing or holding a PhD degree in Chemical Engineering or similar. Knowledge of multi-disciplinary collaboration required to deliver projects and develop opportunities
- Strong project delivery mindset and a high sense of personal accountability to deliver commitments
- Recognized team player with commercial mindset

Ready to apply?

Information on our global selection criteria (Capacity, Achievements and Relationships) and our graduate selection process can be found on: <https://www.shell.com/careers/students-and-graduates.html>

- **Leadership development** – you'll have the opportunity to progress globally while developing and diversifying your role to meet your full potential
- **Support** – you'll have a strong support network to help you succeed. Supervisors, coaches, mentors and professional experts will help you monitor and track your progress
- **Social and Young Professional Events** – Shell organises many professional events and there are also lots of social events, sports, etc.

When submitting your application please choose Process Engineering or R&D as preferred area of interest.

APPLY NOW