

# GABRIEL EDUARDO PÉREZ AYALA

Cll 4 # 21 – 66, CS E21, Valledupar, Cesar  
H: (035) 5838492  
C: (57) 3115633791

C: (966) 543525756  
[geperezayala@gmail.com](mailto:geperezayala@gmail.com)  
[gabriel.perez@kaust.edu.sa](mailto:gabriel.perez@kaust.edu.sa)

## PROFESSIONAL SUMMARY

I am a Petroleum engineer focused on innovation and delivering research and economic value to engineering projects in the oil and gas industry. I have worked as an application engineer treating Heavy Oil production using Smart Fluid additives. My experience also includes working as a Laboratory Engineer at the Petrophysics and Formation Damage laboratory from the Industrial University of Santander. Moreover, as a production control intern at Ecopetrol S.A.

I am a dynamic, responsible person always looking for learning and growth, with defined goals and objectives to short and mid-term. I am a fast learner. I stand out to achieve honestly and effectively the responsibilities that I acquired. Fluent in English and Spanish.

## SKILLS

- Critical Thinking
- Written/Verbal Communication
- Extensive Organizational Skills
- Team leadership Skills
- Adaptive learner
- Microsoft Office proficiency
- Visual Basic, Python
- CMG, OPEN WELLS
- Fast Well Test
- CorelDraw X7

## WORK HISTORY

### SMART FLUID INTERNATIONAL S.L.

Application Engineer | Bucaramanga | April 2019 – December 2021

Technical support engineer handling Smart Fluid products. Conduct internal application trials for verification and qualification of products. Work with Sales Director to develop plans to meet sales goals. Prepare training and marketing presentations for customers. Visit key customers to support specific design problems or competitive situations.

### UNIVERSIDAD INDUSTRIAL DE SANTANDER – Petrophysics Analysis and Formation Damage Laboratory.

Laboratory Engineer | Piedecuesta | October 2018 – April 2019

Petrophysics and Formation Damage Engineer. Petroleum Engineer at Petrophysics and Formation Damage UIS - Laboratory. Simulation and interpretation of relative permeability tests, design, and application of core flooding tests.

### UNIVERSIDAD INDUSTRIAL DE SANTANDER – Petrophysics Analysis and Formation Damage Laboratory.

Laboratory Assistant | Piedecuesta | February – July 2018

Assist projects carried out at Petrophysics Analysis and Formation Damage Laboratory, which provides laboratory services for petrophysical analysis, pressure tests, volume, temperature, formation damage, and fluid characterization for the Colombian hydrocarbon industry.

### **ECOPETROL S.A.**

Production Control Intern | Barrancabermeja | January 2017 – July 2017

Support field engineers in the elaboration of well intervention programs for producer wells in Mares Management's fields. Monitoring of well production performance and identification of opportunities for oil pumping optimization in Mares Management's fields. ALS failure analysis, KPI's and statistical surveillance for Mares Management. Received training in production control, Artificial Lift Systems, Well Completions and Services, ALS failure identification, and Wells monitoring.

### **UNIVERSIDAD INDUSTRIAL DE SANTANDER**

Teaching Assistant – Reservoir Engineering | Bucaramanga | March 2016 – December 2017

Support the reservoir's teacher to prepare educative material for the subject, including the technological resources, perform the qualification of the tests, lead supporting activities like workshops, and take charge of the class teacher's absence.

### **GRM-UIS**

Research Assistant – Steamflooding | Bucaramanga | February 2015 – March 2016

Develop research activities on steam injection (Cyclic steam stimulation and Steamflooding), providing investigative assets to the research group.

### **EDUCATION**

**Bachelor of Science** Petroleum Engineering – July 2018

Universidad Industrial de Santander

GPA 4.23

Bucaramanga, Santander, Colombia

### **LANGUAGE**

**Spanish** Native Proficiency

**English** Full Professional Proficiency

**Italian** Limited Working Proficiency

### **VOLUNTEER EXPERIENCE**

**AFS – Intercultural Program Exchanges**

Social Volunteer | August 2019 – December 2021

**Colombian Association of Petroleum Engineers - ACIPET**

Student Volunteer | March 2016 – June 2018

**XV – Semana Técnica Internacional de Ingeniería de Petróleos – UIS**

Organizing Committee Member | Protocol Committee | July 2016

### **COMPLEMENTARY TRAINING**

1. Data Scientist with Python Track, Data Camp. November 2021.
2. Software development, ITC Ministry of Colombia – UTP. January 2021.
3. Programming fundamentals, ITC Ministry of Colombia – UTP. January 2021.
4. Chemical Products Handling. SENA. August 2020.
5. Python for Everybody. Coursera Specialization. July 2020.
6. Statistics with Python. Coursera Specialization. September 2020.

7. Participation as assistant in “Basic Reservoir Numerical Simulation Course”, course with an intensity of 40 hours, conducted on the days 15 – 18, July 2015.
8. Participation as assistant in “Chemical injection course”, course with an intensity of 16 hours, conducted on the days 27 and 28 October 2015.
9. Participation as assistant in “Well testing analysis applied”, course with an intensity of 24 hours, conducted on the days 7, 8 and July 9, 2016.
10. Participation as assistant in “Well logging and geosteering”, course with an intensity of 16 hours, conducted on the days 22 and 23, May 2018.

## ACADEMIC ACHIEVEMENTS

- **Publications:**

- E. Garcia., G. Perez., “Application of fluidifiers as viscosity reduction agents to improve Colombian heavy crude oil production” Oral Presentation. XVIII Oil and Gas Colombian Conference. ACIPET 2019.
- Garcia Edison O, Perez Gabriel E, “Application of fluidifiers as viscosity reduction agents to improve Colombian heavy crude oil production”. rev. ion. 2020;33(2):111-122. doi:10.18273/revion.v33n2-2020009.

**Abstract**

At least 50% of Colombia’s production is heavy crude oil. This crude oil is usually produced through water emulsions in oil showing an apparent viscosity greater than its actual viscosity. Due to the result of this increase, constraints are generated through the flow lines, thus decreasing fluid production.

As an alternative solution, the implementation of fluidifiers (viscosity reduction agents) is proposed. This case study starts from the basic characterization of two fluid samples supplied by two operating companies, 12 and 18 °API crudes, with emulsified water percentages of 20% and 0.2% respectively. The performance of fluidifier additives designed for these specific cases was evaluated in the laboratory, at various temperature conditions, to simulate field conditions and thus define the best fluidifier additive for application in the production system.

Smart Fluid has successfully tested its fluidifier additives in heavy oil-producing wells with different artificial lift systems, obtaining important results of viscosity reduction from treated fluids. For this case report, the cases analyzed are set as BES01 and UBH02, at actual field conditions were found reductions in viscosity between 20 and 40%; wellhead pressure of 45%; pressure losses in the collection system of 89%; and %BSW of 50%. Thus, contributing to increases in the production of wells, reduction of the energy consumption of the artificial lift systems, and improvements in the crude dewatering process, thus demonstrating the effectiveness of the technology to fulfill its purpose.

- **Undergraduate Research Project:** Tubing selection methodology for performance optimization of progressive cavity pumping artificial lift systems in La Cira Infantas field. Grade: 5.0

## REFERENCES

**Boris Castro**

Service Delivery Technical Manager  
 Drilling Services - LATAM  
 Correo: boris.castro@bakerhughes.com  
 Teléfono: +1 346 600 4272

**Hernando Buendia Lombana**

Director – Petrophysics and Formation  
 Damage Laboratory – Industrial University  
 of Santander  
 Correo: herbuen@uis.edu.co  
 Teléfono: +57 315 864 7898



**GABRIEL EDUARDO PÉREZ AYALA**

National ID 1.065.824.900, Passport AT030304