

ANDREI MAXIM ANDREI

Education

- 2016 – Present **Phd in Chemical Engineering at University Polytechnic Bucharest**
Faculty of “Applied Chemistry and Material Science”
- 2012 – 2014 **MSc in Chemical Engineering at University Polytechnic Bucharest**
Faculty of “Applied Chemistry and Material Science”
- 2008 – 2012 **BSc in Chemical Engineering at University Polytechnic Bucharest**
Faculty of “Applied Chemistry and Material Science”
University rank top 5%
- 2004 – 2008 **“Alexandru Ioan Cuza” National College of Ploiesti**
“Mathematics and Informatics” specialization.

Work Experience

- 07/2019 – present **Advanced Refining Technologies**
W.R Grace Davidson and Chevron Joint Venture
Hydroprocessing Technical Service Engineer for ART
Providing technical support in achieving successful test runs by co-processing several types of renewables oils enabling production of SAF, green hydrogen with emphasis on the safety and environmental aspects.
Providing technical support and safety aspects to customers (yield estimates, hydrogen consumption, contaminants limits etc.) related with co-processing renewables and potential safety and environmental impact on the unit.
Coordinate and provide recommendations to CLIENTS for enabling maximum utilization of units and full potential of catalyst while adhering to safety limits.
Safety audits and pre-safety meetings prior to reactor loading/ start-ups.
- 09.2016 – 07/2019 **OMV PETROM S.A**
Plant Manager in PETROBRAZI Refinery
Responsible for ***Isomerization – ETBE Unit & NHT,KHT,DHT,RC,PSA***
- Led a diverse team of over 40 operators, fostering a culture of safety and ensuring safe and economical operability of the units without any recordable LTIs.
 - Collaborated with cross-functional departments to coordinate equipment inspections, catalyst loadings, unit start-ups, and performance testing.
 - Championed safety culture during normal operation and especially during unit turnarounds, promoting adherence to OMS guidelines for safe shutdowns and start-ups while adhering to SIMOPS guidelines.
 - Participated as leader in HAZOP, HAZID, and Bow-ties workshops, facilitating comprehensive risk assessments and proactive hazard management.

- Monitored unit parameters and performance, utilizing data analysis to optimize operational efficiency and output.
- Implemented safety audits and provided targeted training sessions to direct reports, ensuring ongoing safety awareness and compliance.
- Direct accountable for all related works related to designated site through PTW protocol.

09.2017- 05.2019

Commissioning Manager for OMV Petrom S.A

- Successfully led commissioning activities for Oligomerization unit ensuring adherence to safety protocols and operational standards.
- Implemented standardized procedures for my site unit, enhancing operational efficiency and reducing risks.
- Spearheaded the integration of Control of Work processes, resulting in improved safety culture and risk mitigation.
- Led cross-functional teams to achieve on-time and on-budget commissioning outcomes, fostering collaborative teamwork.
- Successful start-up on time and on budget.

11.2012 – 09.2016

OMV PETROM S.A

Process Engineer in PETROBRAZI Refinery

Responsible for *FCCU, TAME, HDS*:

- Lead investigations into process-related incidents, utilizing technical insights to prevent future occurrences and further promote safety awareness.
- Collaborate with cross-functional teams to implement safety strategies, influencing a proactive safety culture across the refining facility.
- Employ process simulations (PetroSIM, Aspen Hysys) to evaluate and optimize operations, prioritizing safety parameters and environmental impact.
- Involved in hazard analyses, including HAZOP, HAZID, and Bow-tie workshops, ensuring risks are identified and mitigated to protect personnel and assets and responsible for implementation.
- Monitoring process variables (KPIs) to ensure operational excellence and safety aspects adhered.

06.2012 – 11.2012

POERNER ROMANIA

Process Design Engineer

- Develop process simulations using Aspen Hysys/ AspenPlus;
- Process and system calculation for the design of equipment and systems;
- Equipment design, datasheets, specification and selection;
- Process safety analysis;

06.2011 – 06.2011

OMV PETROM S.A – Petrobrazi Refinery

Chemical Operator

- Performed a steady-state simulation for optimizing the hydrogen purity in the catalytic reforming unit
- Created a report on the optimization of the catalytic reforming unit, including operating alternatives and cost analysis
- Fulfilled various engineering tasks in the Process Engineering Department

Relevant skills

- Solid Refining Operations knowledge and experience
- Safety Culture and Cross functional collaboration
- Risk Management and Hazard Analysis
- Equipment Inspection and Optimization
- SIMOPS Coordination and Safety Integration
- Safety Workshops and Training
- Process Simulation Expertise
- Troubleshooting and Debottlenecking
- Technical Reporting and Recommendations
- Unit Start-up and Shutdown Coordination
- HAZOP, HAZID, Bow-ties Facilitation;

Languages Romanian (native), English (fluent), French (beginner), Netherlands (beginner)

Driving license Category B

Research reports

July 2023	“Linear Model Predictive Control of Olefin Metathesis Process” Andrei Maxim and C.S Bildea
March 2023	“Optimization and Control of Propylene Production by Metathesis of 2-Butene” Andrei Maxim and C.S Bildea
July 2012	“Production of GTBE by etherification with isobutene” supervised by Prof. Ph.D. Sorin C. Bildea
May 2011	“Analytical solutions for solid-solid extraction” supervised by Prof.PhD. Tanase DOBRE