

الجمهورية الجزائرية الديمقراطية الشعبية  
PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA  
وزارة التعليم العالي والبحث العلمي  
MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH  
جامعة امحمد بوقرة ببومرداس  
UNIVERSITY M'HAMED BOUGARA OF BOUMERDES  
كلية المحروقات والكيمياء  
FACULTY OF HYDROCARBONS AND CHEMISTRY



# 60<sup>TH</sup> Anniversary of the creation of the Faculty of Hydrocarbons and Chemistry

الندوة الدولية التاسعة للمحروقات والكيمياء

## 9<sup>TH</sup> INTERNATIONAL SYMPOSIUM ON HYDROCARBONS AND CHEMISTRY

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# SYMPOSIUM SCHEDULE

25<sup>th</sup>-26<sup>th</sup> JUNE 2024

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# ORGANIZING COMMITTEE

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**Prof. YAHY Mostepha**

Rector of University of Boumerdes

## CONFERENCE CHAIRMAN

**Prof. HAMADA Boudjema**

Dean of Faculty of Hydrocarbons and Chemistry

## ORGANIZING COMMITTEE CHAIRMAN

**Dr YSBAA SAADIA**

Vice Dean in charge of Postgraduate Studies, Scientific Research, and External Relations. FHC-UMB Boumerdes

## ORGANIZING COMMITTEE

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**Mr. SAIFI REDHA** FHC-UMB Boumerdes

**Dr. HARKAT YAMINA** FHC-UMB Boumerdes

**Dr. BOUZID Rachid** Association, EX-INH

**Dr. LAHOUSSA Rabai** Association, EX-INH

**Dr. AIDENE Soraya** FHC-UMB Boumerdes

**Mrs. AIT ADJADJOU DORIA** FHC-UMB Boumerdes

**Mrs. AZRIL NADJET** FHC-UMB Boumerdes

**Dr. KAHOUL Fadela** FHC-UMB Boumerdes

**Mrs. CHELABI Kahina** FHC-UMB Boumerdes

**Mrs. AICHAOUI Louiza** FHC-UMB Boumerdes

# SCIENTIFIC COMMITTEE

## SCIENTIFIC COMMITTEE CHAIRMAN

**Prof. El Adj said** UMBB Algérie  
President of scientific council of faculty

## SCIENTIFIC COMMITTEE

**Prof. EL HADJ Said** FHC-UMBB / President of Scientific Council  
**Prof. ABDELHAMID Issa Hassene** INSP/MAO TCHAD  
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**Prof. AHRICHE Aimad** FT/UMBB ALGERIA  
**Dr, AIBECHE Abderrezak** FT/UMBB ALGERIA  
**Dr, AKROUM Hamza** FT/UMBB ALGERIA  
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**Prof. ALLEK Karim** FHC/UMBB ALGERIA  
**Prof. AZZI Abdelwahid** USTHB ALGERIA  
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**Prof. BENDJEGHABA OMAR** FHC/UMBB ALGERIA  
**Dr. Nait Amar Menad** CRD-SONTRACH

# SYNOPSIS

**Tuesday, June 25, 2024**

**PLAZA Hotel, Bourmerdes**

<b>SCHEDULES</b>	
08:30-09:30	Welcome and Registration
09:30-10:00	Opening remarks
10:00-10:30	Plenary 1
10:40-11:40	The awarding of diplomas for ex-graduates
11:50-12:30	Coffee break: Parallel Poster session - Visiting the stands - E - Poster evaluation
12:30-13:30	Plenary 2
13:40-15:00	Lunch
15:00-15:40	Plenary 4
16:00-16:40	Plenary 5
17:00-18:00	Coffee break: Parallel Poster session - Visiting the stands - E - Poster evaluation

**wednesday, June 26, 2024**

<b>SCHEDULES</b>	<b>Faculty of Hydrocarbons and Chemistry - UMB Bourmerdes</b>		
	FHC library - Block B - Side A1 -	FHC library - Block B - Side A2	Conference room - Block B -
	Topic : Exploitation and transport of Hydrocarbons	Topic :Electrical Engineering in the oil industry	Topic : Geosciences
09:00-11:00	Communications : Session 1	Communications : Session 1	Communications : Session 1
11:00-11:30	<b>Coffee break: Library – side B - : Parallel Poster session - Visiting the stands - E - Poster evaluation</b>		
11:40-14:00	Communications : Session 2	Communications : Session 2	Communications : Session 2
14:00-15 :30	<b>Lunch - PLAZA Hotel -</b>		
15:30-17:10	Communications : Session 3	Communications : Session 3	Communications : Session 2
17:00 -17:30	<b>Coffee break: Library – side B - : Parallel Poster session - Visiting the stands - E - Poster evaluation</b>		
17:30-18 :00	Closing remarks		
19:30	Closing Ceremony		



# **SYMPOSIUM SCHEDULE**

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UNIVERSITY M'HAMED BOUGARA OF BOUMERDES

25<sup>th</sup>-26<sup>th</sup> JUNE 2024

FACULTY OF HYDROCARBONS AND CHEMISTRY

**TUESDAY 25<sup>th</sup> JUNE 2024**

**Conference Day 1 - PLAZA Hotel**

- 08:30-09:30**      **Welcome and Registration**
- 09:30-10:00**      **Opening remarks**  
Dean of the faculty hydrocarbons and chemistry. **Pr. Boudjema HAMADA**  
Rector of the university of Boumerdes.  
**Pr. Mostepha YAH**
- 10:00-10:30**      **Plenary 1:** Algeria facing the “geostrategic of gas exchanges and strategy of actors”  
Presented by **Dr. Lagha CHEGROUCHE**
- 10:40-11:40**      The awarding of diplomas for ex-graduates from the Faculty of Hydrocarbons and Chemistry.
- 11:50-12:30**      **Coffee break**  
**Visiting the stands**  
**Parallel Poster session**
- 12 :30 - 13 :30**      **Plenary 2:** Natural Gas remains the best Alternative for a reliable global energy transition  
**Dr. Djamel BELHARECHE**

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FACULTY OF HYDROCARBONS AND CHEMISTRY

**TUESDAY 25<sup>th</sup> JUNE 2024**

**Conference Day 1 - PLAZA Hotel**

**13:40-15:00 Lunch**

**15:00-15:40 Plenary 3:** Green Hydrogen: Socio-economic political and technological issues. What's in it for Algeria?

**Pr. Belkacem OULD BOUAMAMA**

**16:00-16:40 Plenary 4:** Algeria leads the way in sustainable energy development in Africa.

**Dr. Mohamed KHODJA**

**17:00-18:00 Coffee break**  
Visiting the stands  
Parallel Poster session

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FACULTY OF HYDROCARBONS AND CHEMISTRY

**WEDNESDAY 26<sup>th</sup> JUNE 2024**

Conference Day 2 - Conference room  
Block D

## **Topic : Process Engineering and Environment**

Session Oral Communication

**Session Chair: Prof. Yahia DJAOUED  
& Dr. Zaher IHDENE**

- 09:00-09:20**      **Communication 1:** Risk based inspection application on oil and gas facilities  
**Mr. Taha Benikhlef**
- 09:40-09:50**      **Communication 2:** Study of the process of incomplete oxidation of natural gas methane in a reactor with an upflow catalyst  
**Mr. Alakbar GASANOV**
- 10:20-10:40**      **Communication 3:** Investigating the influence of gas flow and membrane conductivity on high-temperature PEM fuel cells performance  
**Mr. Mohamed GUERBAZI**
- 11:00-11:30**      **Coffee break : Library – side B - Parallel Poster session**  
**Visiting the stands**  
**E - Poster evaluation (15 posters)**
- 11:40-12:00**      **Communication 4:** Impact of seawater temperature variation on GNL production from the GL1Z complex by ASPEN HYSYS and ASPEN EDR  
**Mr. Morsli NOUREDINE**

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FACULTY OF HYDROCARBONS AND CHEMISTRY

**WEDNESDAY 26<sup>th</sup> JUNE 2024**

Conference Day 2 - Conference room  
Block D

- 12:20-12:40      **Communication 5** : Enhanced photocatalytic hydrogen production using multiphase titanium dioxide **Mr. Zakaria GUEBLI**
- 13:00-13:20      **Communication 6** : Suitable CO2 sources and integration in value chains  
**Mr. Djabeur MANSOUR**
- 13:40-14:00      **Communication 7** : A novel polyoxometalates-based corrosion inhibitor for carbon steel in acidic environments and albian water. **Mr. Faycel LOURI**
- 14:00-15:30      **Lunch - PLAZA Hotel -**
- Session Oral Communication**  
**Session Chair: Prof. KADDOUR Omar**  
**& Dr. TAOULI Mohamed**
- 15:30-15:50      **Communication 8** : Corrosion inhibition of pipeline carbon steel (N80) in acidic medium using clays modified as a possible environmentally friendly corrosion inhibitor  
**Mrs. Souheyla BOUDJEMA**

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FACULTY OF HYDROCARBONS AND CHEMISTRY

## WEDNESDAY 26<sup>th</sup> JUNE 2024

Conference Day 2 - Conference room  
Block D

- 16:00-16:20      **Communication 9** : Technological development in natural gas liquefaction process  
**Mr. Samir GOULMANE**
- 16:30-16:50      **Communication 10** : Exploring the dynamics of hydrogen internal combustion engines: insights into engine speed variations and power output optimization  
**Mrs. Hassina GHODBANE**
- 16:50 -17:10      **Communication 11** : Exploring PEM Water Electrolyzer Parameters and Characteristics for Green Hydrogen Production: A Comprehensive Investigation  
**Mr. Ayoub BOUTAGHANE**
- 17:10-17:30      **Coffee break: Library - side B - Parallel Poster session**  
Visiting the stands  
E - Poster evaluation
- 17:30-18:00      Closing remarks
- 19 :30              **Closing Ceremony**

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FACULTY OF HYDROCARBONS AND CHEMISTRY

**WEDNESDAY 26<sup>th</sup> JUNE 2024**

Conference Day 2 -FHC library -  
Block B - Side A2

## **Topic : Electrical Engineering in the oil industry**

Session Oral Communication

**Session Chair: Prof. Madjid KIDDOUCHE  
& Dr. Madjid FADEL**

- 09:00-09:20 **Communication 1** : How to design supervision of process engineering systems: from structural analysis and to online resilient control.  
**Pr. Belkacem OULD BOUAMAMA**
- 09:40-10:00 **Communication 2** : Interaction analysis and multivariable control of a fractionating column for separation (propane-butane) based on BLT method tuning  
**Ms. Alaa DRADOUM**
- 10:20-10:40 **Communication 3** : Attenuation of «stick-slip» phenomenon in rotary drilling systems using advanced control strategy  
**Mrs. Riache SAMAH**
- 11:00-11:30 **Coffee break: Library - side B -  
Parallel Poster session  
Visiting the stands -  
E - Poster evaluation**

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FACULTY OF HYDROCARBONS AND CHEMISTRY

**WEDNESDAY 26<sup>th</sup> JUNE 2024**

Conference Day 2 -FHC library -  
Block B - Side A2

## Session Oral Communication

Session Chair : Prof. Madjid KIDDOUCHE  
& Dr. Madjid FADEL

11:40-12:00

### Communication 4 :

Modeling and interaction analysis of coupled severe axial-torsional vibrations in petroleum rotary drilling systems

**Mrs.Sabrina MEDDAH**

12:20-12:40

**Communication 5 :** Optimizing optimal power flow with Particle Swarm Optimization (PSO) for power system integrated renewable generation

**Ms.Tadger SID AHMED**

13:00-13:20

**Communication 6:** Stateflow-based energy management system (EMS) for photovoltaic (PV)-battery hybrid micro-grid (MG)

**Mrs. Naziha CHOUIDER**

13:40-14:00

**Communication 7:** Improving rotary drilling systems in Algeria: Utilizing nonlinear control techniques to reduce torsional vibrations and enhance efficiency in the oil and gas industry

**Ms.Ahmed Hichem ZEBBOUDJ**



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**WEDNESDAY 26<sup>th</sup> JUNE 2024**

Conference Day 2 -FHC library -  
Block B - Side A2

14:00-15:30 Lunch - PLAZA Hotel -

Session Oral Communication  
Session Chair : Prof. HABBI Hacene  
& Prof. NADJI Bouchra

15:30-15:50 **Communication 8:** Enhancing boiler water level regulation in refineries using a fuzzy logic approach **Mr. Omar RAMDANI**

16:10 -17:00 **Communication 9 :** Integration of multi-physic models and neural network diagnosis of electrolyzes.  
**Pr. Belkacem OULD BOUAMAMA**

17:00-17:30 **Coffee break: Library - side B -**  
Parallel Poster session  
Visiting the stands  
E - Poster evaluation

17:30-18:00 Closing remarks

19:30 **Closing Ceremony**

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Conference Day 2 -  
Conference room -Block B -

## **Topic: Geosciences**

Session Oral Communication

Session Chair: Prof. Nourreddine ZERAIBI  
& Dr. GUELIL Djamel

- 09:00-09:20 **Communication 1** : Structural analysis of archaeoseismological evidence for a possible destructive earthquake at the ancient sites of Bulla Regia and Chemtou (NW Tunisia)  
**Mrs. Soumaya ABDELKADER**
- 09:40-10:00 **Communication 2**: Neotectonics and active tectonics in the northwest Algeria: new data from structural geology and paleomagnetism  
**Mr. Said MAUCHE**
- 10:20-10:40 **Communication 3** :Intelligent algorithms of the multilayer perceptron to predict well-logs data in unconventional hydrocarbon reservoirs  
**Mrs. Leila ALIOUANE**
- 10:40- 11:00 **Communication 4** : Prediction of Permeability in a Shaly Triassic Reservoirs of the Hassi R'mel Field by using fuzzy logic and multilayer perceptron (MLP): a comparative study.  
**Mr. Abdelbassit SRIDI**

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Conference Day 2 -  
Conference room -Block B -

**11:00-11:30**      **Coffee break: Library – side B -**  
Parallel Poster session  
Visiting the stands  
E - Poster evaluation

### Session Oral Communication

**11:30-11:50**      **Communication 5:** Fishbone Drilling  
Technology for Recovery Enhancement  
**Dr. Habib Ouadi**  
University of North Dakota

**11:50-12:10**      **Communication 6 :** Predictive modeling:  
Towards an optimized approach to mineral  
resource exploration  
**Mr. Karim ALLEK**

**12:10 - 12:30**      **Communication 7 :** Porous sandstone  
deformation bands in the saharan atlas (ediss):  
permeability barriers in oil and water reservoirs  
**Mr. Khaled LOUMI**

**12 :30-12:50**      **Communication 8:** Seismic reflection data for  
accurate static corrections determination:  
A Novel Approach  
**Mr. Youcef LADJADJ**

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FACULTY OF HYDROCARBONS AND CHEMISTRY

**WEDNESDAY 26<sup>th</sup> JUNE 2024**

Conference Day 2 -  
Conference room -Block B -

**13:00 13:20**      **Communication 9:** Petrophysical Evaluation and Hydraulic Fracturing of the Ordovician Reservoirs in Illizi Basin (Algeria): An Investigative Study **Mr. Said ELADJ**

**13:30-13:50**      **Communication 10 :** Metamorphic evolution and mineral assemblages of calc-silicate granulites from the Tin Begane area (Laouni terrane, Central Hoggar) : Implications for high-pressure conditions **Mrs. Amel DERRIDJ**

**14:00-15:30**      **Lunch - PLAZA Hotel -**

**Session Oral Communication**  
**Session Chair : Prof. Said ELADJ**  
**& Dr. ABDELI Nourddine**

**15:30-15:50**      **Communication 11 :** Hydraulic Flow Unit and Permeability Prediction for Reservoir Characterization :Case Study of Quartzite El Hamra Ordovician Rock at Hassi Messaoud Field, ALGERIA.  
**Mr. El Hadi LOUNIS**

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UNIVERSITY M'HAMED BOUGARA OF BOUMERDES

25<sup>th</sup>-26<sup>th</sup> JUNE 2024

FACULTY OF HYDROCARBONS AND CHEMISTRY

**WEDNESDAY 26<sup>th</sup> JUNE 2024**

Conference Day 2 -  
Conference room -Block B -

- 16:00-16:20**      **Communication 12:** Application of conjugate gradient algorithm for the residual static corrections optimization in Southern Algerian Geophysical Survey  
**Mr. Fateh BANSIR**
- 16:30-16:50**      **Communication 13:** Reservoir Quality Prediction: Result From Sedimentological Petrophysical And Rock Typing Studies Saharan Plateforme, Algeria.  
**Mr. Mohamed Mounir AZRAREK**
- 17:00-17:30**      **Coffee break: Library - side B -**  
**Parallel Poster session**  
**Visiting the stands**  
**E - Poster evaluation**
- 17:30-18:00**      **Closing remarks**
- 19:30**              **Closing Ceremony**

# 60<sup>TH</sup>

Anniversary of the creation of the  
Faculty of Hydrocarbons and Chemistry  
ex - INH



# 9<sup>TH</sup>

INTERNATIONAL SYMPOSIUM ON  
HYDROCARBONS AND CHEMISTRY  
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FACULTY OF HYDROCARBONS AND CHEMISTRY

**WEDNESDAY 26<sup>th</sup> JUNE 2024**

Conference Day 2 -  
FHC library -Block B- Side A1 -

## **Topic : Exploitation and transport of Hydrocarbons**

Session Oral Communication  
Session Chair: **Dr. Karim YOUNSI**  
& **Dr. Lakhder BENZINA**

:

- 09:00-09:20**      **Communication 1** : Turbulence models comparison in an axial drilling turbine flow simulation. **Mr. Khaled SAHNOUNE**
- 09:40-10:00**      **Communication 2** : Flow pattern prediction during flow boiling using a numerical simulation **Mr. Ahmed KOUIDRI**
- 10:20-10:40**      **Communication 3** :Theoretical approche of the mean hydrodynamic field in the conical taylor-couette flow. **Mrs. Fatma YAHI**
- 11:00-11:30**      **Coffee break: Library – side B -**  
**Parallel Poster session**  
**Visiting the stands**  
**E - Poster evaluation**

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Conference Day 2 -  
FHC library - Block B- Side A1 -

- 11:40-12:00      **Communication 4** : Well monitoring in Hassi Messaoud Field via the application of machine learning algorithms  
Mrs. Amel HADJADJ
- 12:40-12:20      **Communication 5** :Tribological and corrosion resistant multilayer coatings for natural gas and green hydrogen transportation applications  
Mr. Khaled CHEMAA
- 12:20-12:40      **Communication 6** :Production accounting in Hassi Messaoud Oil Field via the application of LSTM end GRU models  
Mrs. Thileli HADJARI
- 14:00-15:30      **Lunch - PLAZA Hotel -**
- Session Oral Communication**  
**Session Chair: Pr. Abderrahmane BENBRIK**  
**& Pr. Abdenacer SMATI**
- 15:30-15:50      **Communication 7** : Numerical study of drilling mud flow in the desander  
Mr. Aymen HAMOUDA

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**WEDNESDAY 26<sup>th</sup> JUNE 2024**

Conference Day 2 -  
FHC library - Block B - Side A1 -

- 16:00-16:20**      **Communication 8 :** Improving oil & gas fault detection: Innovative criteria for wrapper feature felection  
**Mr. Mohammed Amine SAHRAOUI**
- 16:20- 16:40**      **Communication 9:** Realization of an Automation Framework for the Digitization of an Oil Field.  
**Mrs. Dounia Halla ABDERRAHIM**
- 16:40 - 17:00**      **Communication 10:** Comparative study of different porous medium models on the stability of parallel natural convection flow in a horizontal channel filled with porous medium: effect of form drags and convective inertial term. **Mrs. Amina TELKHOUKH**
- 17:00-17:30**      **Coffee break: Library - side B - Parallel Poster session**  
**Visiting the stands**  
**E - Poster evaluation**
- 17:30-18:00**      Closing remarks
- 19:30**              **Closing Ceremony**





# **POSTER LIST**

# Exploitation

## **P1- Sizing of a heat exchanger for gas-lift optimization**

Mr. Mohamed Ali ARBAOUI

## **P2-Numerical simulation of heat transfer of hybrid nanofluid in PV/T solar panel**

Mrs. Souad BENKHERBACHE

## **P3-Leak detection of natural gas in pipes using the characteristics method**

Mrs. Khadidja AMARA

## **P4-State of the art of material fatigue**

Mrs. Yamina HARKAT

## **P5-Effect of divergent angle of the venturi on cavitating gasoil flow by using CFD**

Mrs. Imane BENGHALIA

## **P6-Optimization of the southern Algerian of crude oil and condensate network, using the genetic algorithms**

Mrs. Amina AISSAT

## **P7-Deep Learning-Based prediction and Classification of Gas Turbine Blade Defects using Synthetic Data**

Mr. Riad HARHOUT

## **P8- Dynamical structure of immiscible fluid flow inside real porous medium**

Mrs. Zineb LAOUICHI

## **P9-Rate of penetration prediction and optimization using machine learning algorithms based on drilling parameters.**

Mrs. Nadjet AZRIL

**P10-Progress in vertical gas-liquid two-phase slug flow: influence of upstream configuration on hydrodynamic parameters**

Mrs. Faiza SAIDJ

**P11-Enhanced prediction of CO<sub>2</sub> minimum miscibility pressures through hybrid KPCA-ANN Approach**

Mr. Redha SAIFI

**P12-Advancements in mono and multiphase flow research : from fundamentals to future applications**

Mrs. Sara ZIOUANI

**P13-Contribution to the efficiency of chemical enhanced oil recovery method: surfactant injection.**

Mrs. Celia MECHOUK

**P14- Rheological behavior of system xanthan gum/water in water- based drilling fluids**

Mr. Khaled BENYOUNES

**P15-Experimental investigation of the efficiency of CO<sub>2</sub> enhanced oil recovery (CO<sub>2</sub>-EOR) in sandstone cores from an Algerian oil field using NMR technology**

Mr. Zakaria ADJOU

**P16-Stability and performance analysis of rotary drilling systems under coupled Stick-Slip-Bit-Bounce vibrations in Algeria**

Mrs. Samira HADIBI

**P17-Study of a photovoltaic cell using SCAPS software (Application and modeling).**

Mrs. YAHIA Zineb

# **Electrical Engineering in the oil industry**

**P18- Energy efficiency performance analysis in massive MIMO system using the ABC algorithm**

Ms. Soualah BADR EDDINE

**P19- Enhancing drilling operations: Harnessing advanced tools for automatic mitigation of vibrations and shocks**

Mrs. Nora BENMIR

**P20-Development of efficient diagnostic and monitoring approaches for rotating oil drilling systems under severe stick-slip-whirling vibrations in Algeria**

Mrs. Chahrazad BENGANA

**P21-Microcontroller-based power line communication system for remote control and automation**

Ms. Hamid CHATBI

**P22-Control of multicell inverters series powered by photovoltaic array with floating voltage regulation**

Ms. Fateh KHELIFI

**P23-Implementation of RST control strategy in PLC controller**

Ms.Rezki HADDOUCHE

**P24-On the fractional biggest log modulus control method of TITO system**

Mrs. Nourelhouda FARTAS

**P25-Influences of the stiffness and damping parameters on the torsional vibrations severity**

Mrs. Chafiaa MENDIL

**P26-AI-based faults detection and localization in high voltage transmission lines with distance relay**

Ms. Moh Said BOUMEDINE

**P27-Design, modeling, and simulation of SiC MOSFET-based interleaved boost converter for PV application**

Ms. Mohammed cherif OKBA

**P28-Numerical simulation for Parabolic Trough Collectors (PTC)**

Mrs. Anfal BENREZKALLAH

**P29-Development of a remote and real-time monitoring device for the cathodic protection system of hydrocarbon pipelines**

Ms. Younes SIRADJ

**P30-A comprehensive method for steel surface classification using mobile-Net-V2 and leaky ReLU activation function**

Mrs. Yousra KATEB

# Process Engineering and Environment

**P31-Liquid-liquid extraction process for oxidized sulfur compounds in diesel .**

Mrs. Louiza AICHAOUI

**P32-Technological advances in CO<sub>2</sub> conversion processes**

Mrs. Samira AMOKRANE

**P33-The use of metal oxide nanoparticles in the treatment of oil refinery wastewater**

Mrs. Djanette BLIZAK MERIEM

**P34-On the effect of the inlet conditions on bio-hydrogen production by carbon monoxide upgrading**

Mrs. Amel BOUCIOUF

**P35-Optimizing enhanced oil recovery ; Substituting HPAM with a biopolymer from an Algerian plant for a sustainable approach.**

Mrs. Kamila BOURKAIB

**P36-Transformation of hydrocarbons on transition metal catalysts: activity of NiAl<sub>2</sub>O<sub>4</sub> for the degradation of hydrocarbons in petroleum industry process waters.**

Mrs. Meriem BRAIK

**P37-Effect of the addition of an anionic polymer on the rheological behaviour of carboxymethylcellulose**

Mrs. Fatiha BELALIA

**P38-Optimization of catalytic process of octane number improvement in presence of molten salt**

Mrs. Boutheina MAKHLOUF

**P39-Effects of HEC polymer addition on the rheological properties of bentonite-based drilling fluids**

Mrs. Samia REMLI

**P40-Comparative study of machine learning models for predicting Fenton process**

Ms. Salah Eddine ZAHI

**P41-Polyaniline/Bi12TiO20 hybrid system for cefixime removal by combining adsorption and photocatalytic degradation : A critical assessment**

Mrs. Fairouz AOUIR

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Mrs. Karima MAHDI

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Advanced detection of sulfur compounds in commercial gas and condensate using GC with pulsed flame photometric instrument**

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Mrs. Amal BENHATAHAT

**P47-Mechanism for the formation of iron carbonate, a form of black powder, in the gas production chain.**

Mrs. Sadjia LAMRAOUI

**P48-Study of water purification using various coupling processes**

Mrs. Kahina CHELABI

**P49-Fire, Explosion and toxicity risk assessment in gas treatment plant by the application of fire explosion and toxicity index**

Mrs. Fatima zohra BENRAHOU

**P50- Proposition of a method for recovering CO<sub>2</sub> emitted by the natural gas decarbonation process in the liquefaction complex of LNG.**

Mrs. Meryem BRIKI.

**P51- Comparison between the classic multivariate calibration tools partial least squares (PLS), K-nearest neighbor regression (KNNR) and artificial neural networks (ANN) for quantitative analysis in EDXRF.**

Mrs. Soraya AIDENE



# Geosciences

**P52-Rare earth elements prediction in Phosphate Ore Deposits Using Machine Learning Techniques**

Mr. Nasreddine TAHAR BELKACEM

**P53-The choice of an acid system by matrix acidizing, application in the region of Haoud Berkaoui.**

Mr. Madjid YAROU

**P54-Fractured reservoir model for enhanced production and recovery optimization in the Chinguetti Field, Coastal Basin: Mauritania**

Mr. Dahmane BAH

**P55-Application of mud logging data and machine learning tools to improve real-time bulk density prediction accuracy**

Mr. Ayoub BOUTAGHANE

**P56-Petrophysical and sedimentological characteristics of a low resistivity pay, case study from the Silurian Argilo Gréseux "S.A.G" reservoir of the Sif Fatima field, Berkine basin, south east of Algeria.**

Mr. Ahmed SERHANE

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Mr. Ghanem BRAHMI

**P61-Real-time lithofacies prediction using drilling parameters and machine learning tools real-time**

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Mrs. Khadidja GALOUL

**P65-Subsurface Structures of the 2016 M'ziraa Earthquake sequence using Local Earthquake Tomography**

Mr. Kheireddine KAMECHE

**P66-Digital Filters for noise Mitigation in Magnetotelluric Data**

Mr. Ahmed Seddik KASDI

**P67-Integration of elastic properties to identify low resistivity reservoirs**

Mr. Mohamed DEHDOUH

**P68- Combining field observation, geotechnical and geophysical data for landslide assessment around the south Bejaia region (Algeria)**

Mr. Nassim HALLAL

**P69-Study of the groundwater quality of the intercalary continental nappe in the eastern basin of the Algerian northern Sahara**

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Mr. Abdelkamel MEZZAR

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Mrs. Saadia YSBAA

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