

## **VISIT to BRAZIL Austrian Delegation**

MUL/DPE

Montanuniversität Leoben - Austria  
Department Petroleum Engineering

09-15<sup>th</sup> June 2019

(Rio de Janeiro-RJ, Vitória-ES and São Mateus-ES)



### **Main Drivers:**

#### **Prof. Dr. Andreas Nascimento (Brazil, UFES)**

Federal University of Espirito Santo / *Universidade Federal do Espírito Santo* – UFES  
Department of Engineering and Technology (DETEC)

#### **Prof. Dr. Holger Ott and Prof. Dr. Riyaz Kharrat (Austria, MUL)**

Mining University of Leoben / *Montanuniversität Leoben* – MUL  
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## 1. Visit Summary

The purpose of the Visit of the Austrian Delegation (Prof. Dr. Holger Ott and Riyaz Kharrat) to Brazil was to strengthen the academic and scientific collaboration between the 02 (two) Partner Institutions (MUL and UFES), as well as to improve the relation to the Brazilian Oil & Gas (O&G) industrial sector.

Considering that in Brazil, through the Brazilian National Agency of Petroleum, Natural Gas and Biofuels (ANP), there is an Obligation from the O&G Operators side to invest part of the income in Research/Development/Innovation (RD&I), it has been seen by the parties an interesting opportunity to acquire industrial support and fundraise seeking for development of bilateral and multilateral joint projects in the petroleum discipline. It is to be considered also the encouragement of Brazilian Universities in establishing international cooperation with Universities and Enterprises, detailed within the Law n. 10.973 (from 02.12.2004), Law n. 13.243 (from 11.01.2016).

UFES has already a valid accreditation at the ANP (Process n. 48610.011833/2018-81, Registration n. 0849/2019, DOU 25.1.2019), through the Research Group in Petroleum/Natural Gas Engineering, Energy and Environment (GPEPEM-UFES) (CNPq n. 4183286225687862) as well has MUL a valid Cooperating Agreement with UFES since May 2018 (coordinated from UFES side by Prof. Nascimento).

On top of joint project development fundraised by the O&G Operators in Brazil, it is aimed a support for developing a Research Center (International Research Center of Excellence in Petroleum Technology and Energy), in which a DPE/MUL International Laboratory is expected to be located.

## 2. Visit Report: general activities along the week and specific activities at UFES

Table 1 details the general activities performed along the week in Brazil until Tuesday, and Table 2 details general activities developed at UFES in Campus Sao Mateus and Campus Vitoria.

Table 1 - general activities breakdown along the week in visit to Brazil until Tuesday.

	Sunday (09.06.19)	Monday (10.06.19)	Tuesday (11.06.19)
Morning	<u>Arrival</u> : Brazil.	<u>Visit to O&amp;G Operator</u> : Total E&P Brasil.  <u>Meeting with</u> : Isabel Waclawek, Achref Achich and Ricardo marquini (R&D Team Brazil)	<u>Visit to O&amp;G Operator</u> : Repsol Sinopec . <u>Meeting with</u> : Rapahel Valladares (R&D Technology Brazil - IOR & EOR), and Fernando Munerato Perin (R&D Reservoir Engineering).
Afternoon		<u>Visit to O&amp;G Operator</u> : Petrobras/CENPES.  <u>Meeting with</u> : Thomas David Serafini de Oliveira (R&D Reservoir Engineering Brazil).	<u>Visit to O&amp;G Operator</u> : SHELL do Brasil.  Meeting with: Frances Vivien Abbotts (R&D Manager Brazil), Claudia Amorim (R&D Principal Reservoir Engineer) and Felipe Villela (Reservoir Engineering).
Evening	<u>Dinner</u> : Local BR dish at Centro da Lapa.		

Table 2 - general activities developed at UFES in Campus Sao Mateus and Vitoria.

	Wednesday (12.06.19)	Thursday (13.06.19)	Friday (14.06.19)
<b>Morning</b>	<u>Visit to City:</u> Sao Mateus/ Guriri Beach.	<u>Visit to City:</u> Vitoria/ Jardim Penha Beach.	<u>Visit to City:</u> Vitoria/ Historical Center.
<b>Afternoon</b>	<u>Meeting with:</u> <ul style="list-style-type: none"> <li>- Director of UFES Campus Sao Mateus.</li> <li>- Discussion cooperation, exchange and shortly about Int. Research Center of Excellence for Petr. Tech.</li> </ul> <u>Visit to facilities:</u> <ul style="list-style-type: none"> <li>- UFES Campus Sao Mateus.</li> <li>- Post-graduation in Energy.</li> <li>- Dep. of Engineering and Technology.</li> <li>- Technical Laboratories.</li> </ul> <u>Presentations:</u> <ul style="list-style-type: none"> <li>- DPE/MUL and exchange possibilities.</li> <li>- EOR Opportunities and Facts - Brazil.</li> <li>- UFES SPE Student Chapter.</li> <li>- Energy Jr. Association.</li> <li>- Student Group Portal do Petroleiro.</li> </ul>	<u>Meeting with:</u> <ul style="list-style-type: none"> <li>- Rector of UFES.</li> <li>- Representative of International Office.</li> <li>- Discussion about cooperation, exchange and extensive details for MUL International Laboratory and Int. Research Center of Excellence for Petr. Tech.</li> </ul> <u>Visit to facilities:</u> <ul style="list-style-type: none"> <li>- UFES Campus Vitoria.</li> <li>- Administrative Office.</li> <li>- International Office.</li> <li>- Nucleus of Competences in Petrochemical Chemistry.</li> </ul>	<u>Lunch:</u>  Churrascaria at Canto Beach region.
<b>Evening</b>	<u>Meeting with:</u> <ul style="list-style-type: none"> <li>- Professors related to Petroleum Eng. (Profs. Ana Paula, Joel Romero and Daniel Cunha).</li> </ul> <u>Presentations:</u> <ul style="list-style-type: none"> <li>- Petroleum Engineering related Programs.</li> <li>- UFES projects: EOR/Reservoir Eng./ Flow assurance.</li> </ul>	<u>Dinner:</u> <ul style="list-style-type: none"> <li>- Regional dish from Espirito Santo.</li> <li>- Dish: Moqueca do Espirito Santo.</li> <li>- Local: Canto da Jurema.</li> </ul>	

### 3. Figures and Photos of the Visit

#### 3.1 Photos while visiting Brazilian O&G Operators

Visit to O&G Operator: Total E&P (Monday morning, 10.06.19).



a)



b)



c)

- Figure (a): from left to right - Prof. Ott (MUL), Prof. Nascimento (UFES) and Prof. Kharrat (MUL).
- Figure (b): from left to right - Bruno (TOTAL), Isabel Waclawek (TOTAL), Prof. Ott (MUL), Prof. Kharrat (MUL), and Prof. Nascimento (UFES).
- Figure (c): from left to right - Isabel Waclawek (TOTAL), Achref Achich (TOTAL), Prof. Ott (MUL), Prof. Kharrat (MUL), and Prof. Nascimento (UFES).

Visit to O&G Operator: Petrobras/CENPES (Monday afternoon, 10.06.19).



a)

- Figure (a): from left to right - Prof. Nascimento (UFES), Prof. Kharrat (MUL), Dr. Thomas David Serafini (Petrobras/CENPES), and Prof. Ott (MUL).

Visit to O&G Operator: Repsol Sinopec (Tuesday morning, 11.06.19).



a)



b)

- Figure (a): from left to right - Rapahel Valladares (REPSOL), Prof. Ott (MUL), Prof. Kharrat (MUL), and Prof. Nascimento (UFES).
- Figure (b): from left to right - Rapahel Valladares (REPSOL), Prof. Ott (MUL), Prof. Kharrat (MUL), and Fernando Perin (REPSOL).



### 3.2 Photos while visiting UFES Campus Sao Mateus and Campus Vitoria

Visit to UFES: Campus Sao Mateus (Wednesday afternoon and evening, 12.06.19).



a)



b)

- Figure (a): from left to right - Prof. Ott (MUL), Prof. Kharrat (MUL), Prof. Luiz Favero (Director UFES Campus Sao Mateus), and Prof. Nascimento (UFES). Photo taken at the Director's Office.
- Figure (b): from left to right - Prof. Daniel Cunha (UFES), Prof. Kharrat (MUL), Prof. Ana P. Meneguelo (UFES), Prof. Ott (MUL), Prof. Joel Romero (UFES), and on the back, Prof. Nascimento (UFES). Photo taken at the Laboratory of Simulation of the Department of Engineering and Technology (DETEC).



c)

- Figure (c): magazine news detailing proffered seminars at UFES Campus Sao Mateus with presence of representatives from SPE UFES Student Chapter - from left to right: Prof. Ott (MUL), Renan Herculano (UFES SPE Student Chapter trainee), Anna Paula (UFES SPE Student Chapter President), Ana Clara (UFES SPE

Student Chapter Director), Prof. Kharrat (MUL) and Prof. Nascimento (UFES). Photo taken on a common classroom.

Visit to UFES: Campus Vitoria (Thursday afternoon, 13.06.19).



a)



b)

- Figure (a) and (b): from left to right - Prof. Nascimento (UFES), Prof. Kharrat (MUL), Prof. Reinaldo Centoducatte (Rector of UFES), Prof. Ott (MUL), and Prof. Yuri Leite (UFES International Office).
- Figure (b): magazine news detailing meeting with the Rector, intention of an International HUB of MUL/DPE at UFES, exchange/cooperation and the UFES Int. Research Center of Excellence in Petr. Tech. and Energy.





c)



d)



e)

- Figure (c) and (d): from left to right - Prof. Kharrat (MUL), Prof. Paulo Roberto (UFES), Prof. Ott (MUL), Prof. Cleocir Dalmaschio (UFES) and Prof. Nascimento (UFES). Photo taken on the front of the Nucleus of Competences in Petrochemical Chemistry building, sponsored by O&G Operators ANP related funds.
- Figure (e): from left to right - Prof. Paulo Roberto (UFES), Prof. Kharrat (MUL), Francine Dalapicola (PhD Candidate), and Prof. Ott (MUL). Photo taken in the Laboratory for Petrochemistry Researches.

3.3 General project overview of UFES Int. Research Center of Excellence in Petr. Tech. and Energy



### 3.4 Photos while visiting surrounding Beach and Restaurant



a)



b)



c)

- Figure (a) and (b): overview of the Jardim da Penha Beach at the City Vitoria, with coconuts refreshment.
- Figure (c): dinner at the Curva da Jurema with Regional dish, Moqueca do Espírito Santo.