

## EDITO



There can be no mistake, higher education establishments are also in a phase of stiff competition. And this competition can be seen at all levels: attracting and selecting the best candidates, recruiting the best professors, seeking international renown, raising funds from private sources, etc. Companies, on their side, want to attract the best graduates, the quality of their human resources now being vital to their development. They too, also subjected to fierce competition, seek excellence and diversity and encourage competitiveness.

In such a context, IFP School has numerous assets: its past history, its strong foothold within IFP Energies nouvelles, the quality of its staff and the constant support of its industrial partners. It is, however, essential to clearly identify the fundamental values specific to the School, which hold its roots firmly in a solid and dynamic base. These values that we wish to pass on to future generations of IFP School graduates have been defined after collective reflection. They are: *openness, responsibility and solidarity*.

*Openness* to other cultures, to innovative teaching methods, to new technologies – all of these are illustrated by the MOOC (*Massive online open course*) on sustainable mobility which will be launched in November 2014. You can read about it in this newsletter.

The success and impact of this initiative will depend on the *solidarity* we show by spreading the word. In a time when individualistic attitudes are increasingly prevalent, *solidarity* is a value that we wish to promote. Our students have shown that they share this value by organizing, for example, a solidarity run, the proceeds of which were donated to the *Class Gift* to finance Excellence Scholarships.

*Responsibility* can be seen at both a professional and a personal level. For industries facing all kinds of risks (technical, economic, environmental, societal ...), *responsibility* is a challenge that is absolutely crucial and one that we should seek to integrate into our training programs. In my opinion, the active role that our students play in professional organizations such as the Society of Petroleum Engineers (SPE) is an illustration of this *responsibility* and we should encourage them to pursue such initiatives.

I strongly believe that these values, proudly borne, will contribute to reinforcing IFP School's performance.

Happy reading!

Philippe Pinchon  
Dean  
IFP School

## BRIEF

### IFP School catches the MOOC wave

The success of Massive Online Open Courses (MOOCs), known in French as "*Cours en ligne ouverts et massifs*" (CLOM), is indisputable.

In the United States, 80% of higher education establishments offer this new type of course. In France, they are springing up day by day, housed mainly on the platform [FUN](#) (France Université Numérique) created by the Government in October 2013.

IFP School will join the MOOC movement with its first course in November 2014.



#### Sustainable mobility to the fore

This free distance-learning course will be on sustainable mobility. It will address engine design and the related environmental and societal issues at stake.

The aim of this MOOC is to enable participants to discover powertrains, fuel production, the environmental and economic challenges facing the automobile industry and issues concerning the future of transport.

Entitled ***Sustainable mobility: technical and environmental challenges for the automotive sector***, it will be taught entirely in English and will be spread over 4 weeks from **3 to 30 November 2014**.

It will contain a variety of teaching material (videos, interactive quizzes, forums, serious games, etc...) and students will be able to earn badges and a certificate of attendance.

"A MOOC is not just a well-made video lecture", "it is a complete training pack", explains Sébastien Bianchi, Project leader and lecturer at IFP School.

#### Why launch a MOOC?

Digital technology is a new and valuable vehicle for transformation and creation in higher education establishments.

In September 2011, IFP School implemented a new educational model. This initiative, called "New Educational Impetus", is based on the personalization of students' study pathways. It is also part of the School's reflection on its teaching methods. Since then, digital technology has been increasingly introduced into IFP School's industry-oriented programs.

With this first MOOC, the School has fixed the following objectives: increase its visibility, attract new students and encourage the development of new teaching methods.

"Behind this launch lies our ambition to make IFP School's expertise in the field of energy and powertrains better known on the international scene. We also aim to renew our teaching methods and make them more dynamic," explains Philippe Pinchon, Dean of IFP School.

"We hope to enhance the development of our teaching tools and encourage our teaching staff to keep abreast of the digital world", adds Olivier Bernaert, Project leader for the "New Educational Impetus" project and lecturer for the MOOC.

### **Support for educational experimentation and innovation**

To manage such a large scale project, the School has chosen to work with the company *Unow*.

Seven faculty members from the Center for Economics and Management, the Center for IC Engines and Hydrocarbon Utilizations and the Center for Refining, Petrochemicals and Gas are working on the project, building teaching units using a creative digital approach.

For this MOOC, IFP School has the financial backing of the Tuck Foundation. It has called upon the generosity of former students to finance this innovative project, through an active fund-raising campaign.

If you wish to help finance this MOOC, you can make a donation to the Alumni Fund [by check, bank transfer or by credit card on line.](#)

To make a donation, just log onto [Alumni](#), using your IFP School lifetime e-mail address which is written: [firstname.familyname.classyear@ifp-school.com](mailto:firstname.familyname.classyear@ifp-school.com). Donations should be made payable to the Tuck Foundation.

Follow the launch of our MOOC, step by step, on our [website](#) (MOOC section).

## FOCUS

### A solidarity run

The Students' Association (BDE) and a team from the *Processes and Polymers* (POLY) program set a challenge for fellow students by inviting the 2014 Class to take part in a run in aid of the Class Gift.

The aim of this initiative is to finance an Excellence Scholarship to enable an international student to join the School next September.

The [solidarity run](#) took place on 22 May 2014 at the start of the [Pétrofolies](#) at the *Stade du Parc* in Rueil-Malmaison.

### A colorful race

Participants of this solidarity run ran or walked a 3,5 kilometer circuit. After each lap, they were showered with colored powder (made of corn-flour). This was a practical way of seeing who was in the lead but also a joyful homage to the Hindu celebration, Holi.

To win, students had to get together the greatest number of participants from their program. The first ten to cross the finish line also won points for their team.

Around one hundred students took up the challenge. One of them, Raif Saifutdinov from Kazakhstan, a student on the Petroleum Geosciences (GOP) program explains, "I decided to take part in this crazy race to give an opportunity to talented students who want to study at IFP School". "We had great fun and above we all pulled together in one big team!" he continues.



*Students from the 2014 Class organized a solidarity run for the first time. It consisted of running a 3,5 kilometer circuit and being showered with colored powder after each lap. Funds raised from registration fees for the race were donated to the Class Gift of the 2014 Class. This initiative aims to finance an Excellence Scholarship for an international student who will join the School in September.*

Students from the Energy and Processes (ENEP) program won the race. Philippe Pinchon, Dean of IFP School, awarded each of them a certificate congratulating them on their exemplary solidarity.

Thanks to the students' efforts, over 700 Euros was raised. These funds, essentially the registration fees for the race, were donated to the Alumni Fund, an annual fund created by IFP School and the Tuck Foundation to finance projects for the School's development.

In this way students from the 2014 Class joined the IFP School Alumni who have participated in fund-raising over the past three years.

Today, over 17 000 Euros has been raised, which is the amount needed to finance an Excellence Scholarship for one international student next year!

## LIVE

### Young professionals from the SPE France celebrate the 30<sup>th</sup> anniversary of their chapter

On the occasion of the 30<sup>th</sup> anniversary of the French Chapter of the [Society of Petroleum Engineers \(SPE\)](#), four young graduates from IFP School organized and hosted a round-table on 20 May 2014 on technological scenarios and the future professions of the oil and gas industry.

Pierre-Emmanuel d'Huart (DEG, 2008), Anaïs Mathieu (DEG, 2009), François Raout (ENM, 2010) and Benjamin Testard (DEG, 2009) are all members of the [Young Professionals committee of the SPE France](#).

The aim of this committee is to enable young engineers, who are already in employment, to broaden their horizons, by taking part in scientific conferences and by meeting the major players in the oil and gas world.

"The oil and gas industry is on the brink of a maturation cycle, just as other sectors have been in the past. Faced with uncertainties and future challenges, innovation, both technical and human, will bring concrete solutions", says Benjamin Testard, President of the committee.

To debate on this subject, the Young Professionals handed over to three experts: Alain Goulois, R&D Manager for Exploration-Production at Total, Jean-Claude Heidmann, Director of the Exploration-Production Center at IFP School and Claude Valenchon, Head of Technology Development at Saipem.

The three speakers emphasized the importance of innovation as the key link in the chain of values in the context of heightened international competition.

They stressed the evolution of innovative methods and the need to develop breakthrough technologies for the oil and gas sector.

Finally, they reminded the audience that the innovation process should answer a triple issue: technical, to identify and safely produce increasingly complex reserves, economic, to control costs but also human, by maintaining high level training for future engineers.



*(Photo courtesy of SPE France) On 20 May 2014, four IFP School graduates, members of the Young Professionals committee of the SPE France, invited Alain Goulois, R&D Manager for Exploration-Production at Total, Jean-Claude Heidmann, Director of the Center for Exploration-Production at IFP School and Claude Valenchon, Head of Technology Development at Saipem, to debate on the future of the oil and gas industry on the occasion of the 30<sup>th</sup> anniversary of the SPE France.*

The round-table gathered together around 200 participants. It took place in the "La Coupole" auditorium at Total's head office as part of a series of conferences and debates organized by the SPE France to celebrate its 30<sup>th</sup> anniversary.

The event was followed by a reception at the museum of the Arts & Métiers in Paris. On this occasion, Pierre-Emmanuel d'Huart, Anaïs Mathieu, François Raout and Benjamin Testard were awarded the Young Professionals Prize for their dynamism and commitment.

The IFP School SPE Student Chapter also won an award. Seven of its members, Pauline Bourguet, Cyril de Masfrand, Quentin Garlès, Gaspard Hocquet, Thomas Pouchou, Emmanuel Ramia and Laura Vigier, won the Student Chapter Prize in recognition of their work in organizing the first *Social Event*.

On 1<sup>st</sup> March 2014, this event gathered together, in Rueil-Malmaison, the four French SPE Student Chapters (IFP School, Mines ParisTech, the Université de Lorraine and the Université de Pau et des Pays de l'Adour) for an engineering competition. (See the "Live" section of [Newsletter no.21](#)).

The competition, on the development and production of a field in Kenya, was based on a data set and 11 reservoir models created by Gabriel Dubrule and Florian Drif, students from the Reservoir Geoscience and Engineering (RGE) program at IFP School. Gabriel and Florian were awarded the Creativity Prize for this game which they have called the "*Tupperware Oilfield Game*".

Alain Miny, former President of the IFP School SPE Student Chapter Class 2013, who initiated this competition, also received a distinction from the SPE France.

"The dynamism of the members of the SPE Student Chapter and of our graduates involved in the Young Professionals committee is a true illustration of the quality of the training given at IFP School", says Jean-Pierre Deflandre, former President of the SPE France and a professor in the Exploration-Production center at IFP School.

"We train young professionals who are the drivers of their profession – they are skilled and committed engineers", he adds.



## ASSOCIATION

### Drinks & Network

On 27 May 2014, around twenty IFP School students took part in a Drinks & Network evening organized by the IFP School Alumni Association at the Dada Bar in the 17<sup>th</sup> arrondissement of Paris.

These friendly gatherings are the opportunity for students and alumni to activate and reinforce their network.

The next Drinks & Network will take place on **Wednesday 17 September** in the presence of Jean-Baptiste Renard, President of the Alumni Association. The venue will be fixed later.



### *L'Hydrocarbure* gets a new look

With issue No. 258, published in June 2014, *L'Hydrocarbure* takes on a new look, with a lighter layout and more graphics.

The new design gives more space to illustrations and a clearer indication of the different sections.

The main objective of *L'Hydrocarbure*, which is published three times a year, is to provide a link and a platform for exchange between members of the Association.

### The Alumni Association's Gala Dinner: save the date!



The IFP School Alumni Association was created on 24 July 1924 under the name of "Association amicale des anciens élèves diplômés de l'École nationale supérieure du pétrole et des combustibles liquides".

At the time, the School had just 14 graduates! Today, the IFP School Alumni Association has 13 000 graduates working all over the world.

To celebrate its 90<sup>th</sup> anniversary, the Association is organizing a Gala Dinner on **Friday 5 December 2014**. Don't miss this event – watch out for more details!

### Cultural Conference on Frida Kahlo and Diego Rivera

For the first time, the Association is organizing a cultural conference at IFP School. It will take place on Thursday 9 October 2014 at 5:15 pm.

Annick Doutriaux, an art historian and international lecturer, will present the life and works of Frida Kahlo and Diego Rivera. Registrations for this event will begin in September.



## NEWS

### 8<sup>th</sup> Partner Companies Event

On 19 and 20 March 2014, IFP School organized its 8<sup>th</sup> Partner Companies Event.

The aim of this event, for students on IFP School Master's programs and PhD students in their final year, is to facilitate meetings between students and professionals from the oil, gas and transport sectors.

Students had the opportunity to discuss career openings with experts from the industry. The event was also the opportunity for companies to present their activities and to seek out students for potential recruitment.



This year, 17 companies were present, amongst which were some of our long-standing partners: Axens, Beicip-Franlab, Bosch, Cepsa, CGG, ExxonMobil, GDF Suez, IFP Energies nouvelles, Lukoil, Perenco, Schlumberger, Shell, Spie Oil & Gas Services, Statoil, Technip, Total and Valeo.

### Helge Lund, CEO of Statoil, patron of the 2014 Class

Each year, the new IFP School Class has the honor of having a prestigious personality as its patron. Such patronage helps to consolidate the close ties that students may wish to build with our partner companies.

This year, the 321 students following the IFP School Master's programs had the privilege of exchanging views with Helge Lund, CEO of Statoil, during a ceremony held on 27 March 2014.

On this occasion, M. Lund presented the challenges the industry will have to face in the future, insisting on societal expectations.

After his presentation, he invited students to exchange views with him and, along with Olivier Appert, CEO of IFP Energies nouvelles and Philippe Pinchon, Dean of IFP School, replied to their numerous questions.



M. Lund also talked with the first 8 students to be sponsored by Statoil within the framework of the partnership agreement signed in 2013.

## Arnaud Desrentes is awarded the *La Tribune* Young entrepreneur Prize 2014



On 2 June 2014, 33 year-old Arnaud Desrentes, a graduate of IFP School (MOT 2005), was awarded the *La Tribune* Young entrepreneur Prize 2014 in the industry category.

Arnaud has created a company called Exoès, whose innovative technology EVE (Energy Via Exhaust) recovers the energy lost in the exhaust gas of trucks and cars.

"Only two-thirds of the fuel in your tank is used to propel your vehicle. In other words, when you spend 100 Euros to fill your tank, 33 Euros are wasted in the exhaust gases. Our system recovers the exhaust heat, saving 5 to 10% of the energy," he explained.

This event, organized by the weekly newspaper *La Tribune* since 2013, aims to reward young French professionals for their entrepreneurship.

This year, the event was organized under the patronage of François Hollande, President of the French Republic. The award-giving ceremony took place at the Grand Rex in Paris in the presence of ministers, members of parliament, representatives of employer organizations and heads of industry.

Arnaud and five other talented young entrepreneurs have earned themselves 30 000 Euros worth of advertising space in *La Tribune's* weekly newspaper.

## A special event for the alumni of the Center for Economics and Management: mark the date on your agenda!



On **Thursday 11 September 2014**, IFP School is organizing a special event for Alumni graduated from the Economics and Management programs in a beautiful setting in Rueil-Malmaison.

Make sure you don't miss this event – update your contact details today on the [Alumni site](#).

We will be sending you program details and the venue shortly by email to your IFP School lifetime address.

For further information, contact [Annick Ranaivoarivony](#).