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#### CHRISTIAN LERMINIAUX President of ParisTech

## EDITORIAL

ParisTech – 32 years and still going strong! In 2022, the member schools formed a non-profit organisation (association loi 1901), but this in no way alters our mission and the schools are proud to continue offering both French and international students high-quality research-based engineering programmes that will prepare them to address global challenges such as climate change.

Engineers undoubtedly have a vital role to play in building a sustainable future, and our schools are conscious of their duty to equip students to tackle all manner of scientific and technological challenges with intelligence and integrity. This is why the courses on offer encompass not just engineering, science, and technology, but also management and soft skills.

As a network we are ready to welcome engineering schools who offer similar programmes, share our vision and values (excellence, international openness, social diversity, innovation, and solidarity), and want to join us in seeking to enrich and enhance the French engineering education system and uphold it as a model of excellence.

## FEATURE

# The Pan-European Seal programme: the Erasmus of intellectual property



In 2021, ParisTech signed an agreement with the <u>European Patent Office (EPO)</u> and the <u>European Union Intellectual Property Office (EUIPO)</u> to enable students and graduates from the ParisTech schools to do a traineeship under the Pan-European Seal programme. For trainees this represents a unique opportunity to work in an international, intercultural environment and acquire skills and knowledge in the fields of patents and intellectual property.

#### We spoke to BAPTISTE BOROWCZAK & LÉANDRE LALLEMAND

(Chimie ParisTech – PSL) who are now on the Young Professionals programme at the European Patent Office.

#### How did you find out about the Pan-European Seal programme at the European Patent Office?

**BB**: In an email from the Office of International Relations at <u>Chimie</u> <u>ParisTech – PSL</u>. It sounded like an interesting opportunity – a chance to find out more about the world of intellectual property and work in a multicultural environment. LL: An information email was sent out to students in November, and I started looking into the programme then.

# What did the application process involve?

**BB**: I had to fill in an application form online and write a letter of motivation in English. After that, I was invited to attend an interview with one of the people in charge of the programme. The interview was in English and lasted 30 minutes. The person interviewing me asked what I'd studied, why I was interested in the traineeship and what I hoped to get out of it, whether I wanted to learn German, what sector I was most interested in, and whether I thought I'd miss doing lab work. To prepare, I watched videos of previous trainees on the EPO website and got in touch with a Spanish trainee via a former Chimie ParisTech student who was working at EPO. Two weeks after my interview I got the good news. I signed my training contract and sent off the various documents required. You also have to do two MOOCs (24 hours in total) before you start the traineeship.

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LL: Before applying I read a lot of reports from previous trainees. I looked at the profiles of trainees on LinkedIn to see what they'd studied and published, and I talked to a patent engineer I knew. I submitted my application online, and got a message saying somebody would contact me. The Human Resources department sends applicants' CVs to all the units interested in hosting a trainee, so quite often candidates are invited to an interview with several different units. I had an interview with the Membranes Unit and another with the Cosmetics & Galenic Formulation Unit, and I now work in the Gas Processing & Distillation Unit.

#### What did you hope to get out of the programme? Was it what you expected?

BB: After my internships, I didn't particularly want to go into research, but I liked being immersed in science. I'm not keen on lab work, so the field of patents appealed to me, as I thought it would give me chance to be involved in the latest scientific developments without actually doing development work myself.

LL: I did my final-year internship in Brussels in an international space engineering firm and I really enjoyed the intercultural environment. More than 40 countries have signed the European Patent Convention, so doing a traineeship at EPO is

a bit like Erasmus for graduates! Moreover, all companies value experience in patents, so it's a good thing to have. The programme is very good. The only problem is accommodation. Munich is an expensive city. The staff at EPO are keen to foster a sense of team spirit among each cohort of Young Professionals. They organise lunches and city tours for example. The initial part of the training lasts one and a half months and is very comprehensive. There's a lot of support. We have a tutor who supervises us and shares experience. I find it verv easy to talk to him and to my other colleagues. Working as a patent examiner is quite a solitary job, but we see all kinds of technologies and innovations. It's interesting to see so many new inventions.

EPO made some changes in 2022. As well as the original **Professional Traineeship** Programme, it now runs a Young Professionals Programme. You joined EPO in 2021 on the traineeship programme,

#### and you're now on the Young Professionals Programme. Can you tell us more about that?

BB: My first year, as a trainee, was mainly about acquiring skills in the field of intellectual property. Now that I'm in my second year I have chance to strengthen and develop those skills. I'm still part of the "Natural Polymers" Unit. The employment conditions on the Young Professionals Programme are better than on the traineeship programme. The administrative aspects are simpler too, especially regarding tax. On this programme. we can spend up to six months working at a national intellectual property organisation, and we can apply for positions at EPO itself - even before finishing our programme.

#### What career prospects are there?

BB: I've been recruited to work as a patent examiner at EPO in Munich for five years, starting in February. This will give me the opportunity to discover new aspects of the field,

because as a Young Professional, I'm not authorised to perform certain tasks - highly regulated activities like patent opposition for example.

LL: I'm going to apply to do another two years on the programme. I really like working in such an international environment.



Click here to read an account from Brice Tayama (AgroParisTech), who did a traineeship in 2021-2022.

Applications for the 2023/2024 programme are now open. Students interested in applying should contact the Office of International Relations at their school by 24 February.





**FLORIAN SONTHONNAX** Coordinator of the ParisTech/ **ENCPB "Ambition Sciences"** programme and biotechnology teacher for the preparatory classes at the Lycée Pierre-Gilles de Gennes - ENCPB, and

#### **MARIE-SÉGOLÈNE NAUDIN Delegate for Diversity at ParisTech**

The "Ambition Sciences" partnership between ParisTech and ENCPB (part of the Cordées de la réussite scheme) is entering its third year. What do you hope to achieve?

FS: Through the partnership we aim to empower secondary and prépa students to aim higher and believe in themselves so they can move beyond perceived barriers and

understand the true value of science. The scheme creates links that extend right through the academic community - from secondary schools, to the Lycée Pierre-Gilles de Gennes - ENCPB, through to the ParisTech schools. And lastly, it opens up study routes and encourages students - girls especially to pursue careers in STEM subjects.

MSN: Firstly, we want to continue strengthening the links between the four ParisTech schools (AgroParisTech, Arts et Métiers, Chimie ParisTech - PSL, ESPCI Paris - PSL) and the Lycée Pierre-Gilles de Gennes - ENCPB by increasing the level of investment of everyone involved. We'd also like to give mentees even more opportunities to see what it's like to study at a Grande École, for example by arranging tours of the ParisTech schools and organising other events and meet-ups with current students.

#### How did the first two years go?

FS: Very well. We've had more secondary schools get involved, and seen an increase in motivation among secondary pupils and a lot more interest from prépa students too. The secondary pupils who go on to study at ENCPB are doing really well, and the first cohort of prépa students are now studying at one of the ParisTech schools.

MSN: All the students we mentor are eager to find out more about life at graduate school, but they need our support in this because it's not necessarily the first thing they think of. There's a lot of self-censorship and perceived barriers - the students can't always see the opportunities available to them. Our tutors and mentors are always happy to share their

experience, encourage the younger students to persevere with their studies, and provide support and guidance where necessary. It really is a valuable life experience. Some of our tutees even decide to pursue a career in teaching themselves. The human dimension is very rewarding, both for the mentors and the mentees! Every student who has gotten involved has been delighted and inspired by their experience, and learned a lot on a personal level too.

#### Would you say that the Cordées partnerships help diversify the student community across the ParisTech network?

FS: Yes – many of the prépa students didn't think they had what it took to get into the ParisTech schools, but they dared to try and succeeded. Diversity is a key challenge for the ParisTech schools. The majority of students have done preparatory classes at one of the prestigious Paris schools. Through the Cordées scheme, students from establishments that don't have the same perceived level of prestige are able to join a ParisTech school, and go on to serve as role models for younger students, including those on financial support bursaries and those from less privileged backgrounds or areas.

MSN: Yes, definitely. Thanks to this type of partnership, prépa students who would never have dreamed of applying to such prestigious schools dare to put themselves forward and believe they can succeed. It's a winwin situation, because at the same time the ParisTech schools value diversity highly and are keen to attract students from a wider range of backgrounds.

#### THE LATEST FROM PARISTECH

#### COMMUNICATION



Have you seen the new ParisTech websites? Both the main site (<u>paristech.fr/en</u>) and the portal for prospective international students (<u>studywithus.paristech.fr/en</u>) have been given a fresh new look. The sites are key communication tools for ParisTech, showcasing the schools as centres of excellence in engineering both within France and further afield, but were in need of modernising. In partnership with a web agency, we have migrated the sites to Drupal 9 and redesigned them to make them more appealing and easier to navigate.

#### DIVERSITY



Annual ParisTech Cordées de la réussite event

The annual ParisTech Cordées de la réussite day was held on 21 January on the Arts et Métiers campus in Paris. Over the course of the morning, more than sixty high school pupils took part in a lively series of interactive sessions led by lecturers and researchers from the ParisTech schools. Topics included food formulation, material fatigue, carbon-14 dating, and an introduction to solid materials. Later, the pupils were free to explore stands set up by the ParisTech schools and the Institut Villebon-Georges Charpak, where they could chat with current students about study options, student clubs and associations, and graduate career prospects. An inspiring event for everyone involved!

#### TEACHING



Skills-based learning at the ParisTech schools

To support the schools in their ongoing efforts to offer students the best possible education, at the start of the year, the Teaching Commission and members of staff involved in learning design organised a workshop on the skills-based approach to teaching and learning. Skills-based learning places greater value on the skills students develop during their course of study and is something the ParisTech schools are keen to implement. Participants had the opportunity to talk to Jean-Louis Allard, Vice-President of the CTI\*, plus the members of the RACINE network. The topics discussed included: identifying skills for a particular programme of study, drafting an RNCP\*\* sheet, defining skills acquisition targets, and how to foster acceptance of skillsbased approaches among staff and students.

\*CTI: French national committee responsible for accrediting engineering schools \*\*RNCP: French national directory of professional certifications

#### **INTERNATIONAL**



The 2022 edition of the <u>ParisTech International</u> <u>Admission Programme</u> drew to a close with the final meeting of the admission board on 25 November. Once again, the schools were delighted to offer places to several dozen candidates. As in previous years, the majority of applicants were from Latin America, but we also saw an increase in the number of applications from students in China. For the first time since expanding the programme across Asia in 2021 and opening it up to students anywhere in the world in 2022, the schools selected two independent candidates (students not enrolled at a partner university): a young woman from Venezuela, and a Bangladeshi student who did his Bachelor's degree in Malaysia. Well done to them! The next recruitment campaign opens on 1 June 2023. Find out more here.

### INTERNATIONAL ACTIONS

#### International Framework Agreements

Renewal of the MoU with Seoul National University (SNU) (South Korea)

Signature of a MoU with Institut Teknologi Bandung (ITB) (Indonesia)

Renewal of the MoU with Wuhan University (China)

Signature of a MoU with National Tsing Hua University (NTHU) (Taïwan)

Renewal of the MoU with Nanjing University (Chine)

Signature of a MoU with the Birla Institute of Technology & Science, Pilani (BITS Pilani) (India)

#### Foreign delegations

Institut Teknologi Bandung (ITB) (Indonesia)	13/10/2022
Fulbright Commission France	18/10/2022
UNAL Manizales (Colombia)	11/2022
ATHENS week	12-19/11/2022
Nanjing University	12/12/2022

#### **NEWS FROM THE SCHOOLS**



#### AgroParisTech

# Promoting open science across the research community

AgroParisTech firmly believes in sharing its research results and processes and making scientific research available to all. Over the past ten years, the school has taken multiple steps to promote open science. These include setting up a HAL portal (2011), signing the Jussieu Call for Open Science and Bibliodiversity (2017), and introducing its own open science policy (2019) and research data access and management policy (2021). The school's long-term ambition is to see open science become the default for all research conducted at AgroParisTech.



#### Arts et Métiers

## HONORIS CAUSA: Arts et Métiers honours two international figures

Honorary doctorates have been awarded to Professor Charbel Farhat, Chair of the Department of Aeronautics and Astronautics at Stanford University, and Professor Dimitris Lagoudas, Senior Associate Dean for Research, and Deputy Director of the Texas A&M Engineering Experiment Station at Texas A&M University. Prof. Farhat and Prof. Lagoudas each have strong ties with Arts et Métiers and are widely recognised for their outstanding contributions to research. The honorary degrees symbolise the school's commitment to excellence and international collaboration and help raise its profile and reputation on a global level.



#### Chimie ParisTech – PSL

# CSR event asks what it means to be a responsible engineer

The first-year curriculum at Chimie ParisTech includes a workshop of workshops dedicated to CSR, jointly organised by the Management Training Department and four second-year student volunteers, who are all active members of the school's junior enterprise (*Chimie Perspectives*) and its environmental association (*Écosciences*). The students – tomorrow's engineers – gained a better understanding of what CSR involves, and were encouraged to discuss and debate ethical issues, question their own beliefs and practices, and identify areas where they can take action.



#### École des Ponts ParisTech

#### Ingenius open science platform launched

Keen to help the public better understand the biggest challenges of today and tomorrow, the <u>École des Ponts ParisTech</u> has launched a digital platform called <u>Ingenius</u>. The platform features content in multiple formats (articles, videos, podcasts, etc.) from experts and researchers from across the school's academic and scientific community, and focuses on topics such as climate change and the energy transition.



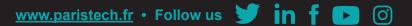
#### **ESPCI** Paris – PSL

#### 2023 Open Day

<u>ESPCI Paris – PSL</u> is holding its Open Day on Saturday 11 March 2023, from 1.30 to 5pm. The event is a chance for secondary school pupils and university students and their parents to find out more about the school. The programme includes information sessions about the

## ParisTech, the major engineering schools network

The complementary nature of the areas of excellence of the various schools provides our students, researchers and partners (academic and corporate) with an exceptional consortium that offers unique transdisciplinary opportunities. ParisTech also has strong international teaching and research links via its many partnership agreements.



ESPCI engineering course, admissions, career prospects, the Joliot scholarships and life on campus, plus live science experiments run by current students and the EPICS science outreach club. More information is available <u>here</u>.



#### Institut d'Optique

# Join us for the 9<sup>th</sup> edition of the Girls Only Supoptique Trophy!

The Girls Only SupOptique Trophy (GOST) is a sports tournament open exclusively to women. Organised by students from the Institut d'Optique, the aim of the event is to promote women's sports. This year's edition will take place on 1 April on the campus of the École polytechnique, with over 800 women from 30 different schools and universities expected to take part. There will be competitions in both team and individual sports, including volleyball, football, cheerleading, climbing and tennis, plus plenty of sideline activities for spectators and supporters to enjoy too. Find out more here.



and Sarah and Christiane DeWitt unveil the plaque in of Cécile DeWitt-Morette at 60 boulevard Saint-Michel

#### Mines Paris – PSL

## Cécile DeWitt-Morette – a remarkable scientist born at the École des Mines

<u>Cécile DeWitt-Morette</u> (1922-2017) was a French physicist and founder of the <u>Les</u> <u>Houches School of Physics</u>, and was one of the people honoured on France's national programme of commemorations in 2022. Cécile DeWitt-Morette has a special connection with <u>Mines Paris – PSL</u>, as she was actually born on the École des Mines campus in Paris, so it was only natural that the school chose to pay tribute to her too. A commemorative plaque was installed on site and unveiled by Cécile DeWitt-Morette's daughter. A birth at the school is not an everyday occurrence! Archivist Ludovic Bouvier tells the <u>astonishing story</u> in full on our website.

