ParisTech

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President of ParisTech

EDITORIAL

The past year or so has been challenging, but at the same time it has highlighted the strengths of our network, in particular when it comes to teaching.

In this newsletter we have decided to shine a spotlight on the RACINE network, one of ParisTech's flagship projects. The network is made up of six of the ParisTech engineering schools along with CentraleSupélec and Télécom Paris, and is celebrating its 12th anniversary this year. It provides support and training services for academic staff from the participating schools to help them enhance and update their teaching practices.

RACINE successfully brings together engineering schools from different universities, underlining the fact that this kind of cooperation is an excellent way of driving innovation in teaching and learning and promoting the French engineering education system as a model of excellence.

I would like to express my appreciation for the dedication and commitment shown by the RACINE trainers and instructors, some of whom have been with the network for 12 years. The hard work they put into helping lecturers and tutors transform their teaching methods plays a key role in maintaining the good reputation of the schools.

FEATURED

RACINE ParisTech: still going strong after 12 years


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VALÉRIE CAMEL & GENEVIÈVE DAVID
Co-leaders of RACINE ParisTech and lecturers at AgroParisTech

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Vice President for Education & Student Services at Arts et Métiers

What is RACINE ParisTech?

VC: RACINE is a network that organises activities to support and train teaching staff and help them further develop their teaching practices. It is led by ParisTech, with CentraleSupélec and Télécom Paris as partners.

GD: We organise continuing professional development on teaching and learning, in the form of short workshops. The workshop topics are chosen based on feedback obtained through staff surveys. Last year, in light of the health crisis, we ran online workshops and offered sessions on remote teaching.

XK: RACINE covers the three key elements of any class or course: planning, delivery, and evaluation.

How does RACINE ParisTech differ from other training programmes?

VC: First and foremost in terms of our audience – everyone who takes part in our workshops teaches in one of the engineering schools in the network. Between them, the schools cover the entire spectrum of scientific disciplines, and the teaching methods and practices we cover have to be suited to students in these different disciplines. This means we are catering to a much wider audience than some organisations. Also, in terms of teaching philosophy, there is a strong emphasis on interdisciplinarity, group work, and project-based and experience-based learning. The schools in the network share some common ground, but one of the things that makes our workshops so valuable is that we have staff from different schools, with different backgrounds and subject specialisms. This creates a melting pot where people can come together and exchange ideas and knowledge, irrespective of which engineering school they teach in and what they teach. Finally, another factor that sets RACINE apart is its long history and extensive expertise.

GD: Our team of instructors is very diverse as it includes learning designers, educational advisors and teachers trained in curriculum design. Every workshop is led by two instructors, each with a different background, meaning

that participants benefit from a broad range of approaches. The RACINE member schools belong to different groups and universities, which has expanded both our own network and the individual networks of our recruiters, providing them with fresh sources of inspiration and new perspectives.

XK: The RACINE instructors all know each other and have been working together for a long time. Having this core team allows us to guarantee a high level of quality and consistency. All our sessions are very much geared towards practical skills and their application. Participants find it especially helpful to talk to colleagues from other engineering schools who are facing the same kind of challenges.

What type of training do academic staff in the network require?

VC: The needs of our academic staff are reflected in the three broad sections of our training catalogue: how to design courses and materials, how to deliver content and organise activities, and how to assess students' learning. And of course each person has different requirements – some of our most regular participants are highly experienced professionals, but we also work with early-career staff and lecturers on temporary contracts who are looking for training in all three areas. Recently, due to the Covid-19 crisis, there's been a lot of interest in remote teaching as many staff have had to rethink and adapt their teaching practices.

GD: In response, we organised a new workshop on how to design courses that would be delivered either completely online or in a hybrid format, i.e. partly online and partly face-to-face.

XK: Training requirements are fairly predictable, and this is reflected in the sessions we offer. The questions staff want answered are things like: How do I link classroom learning to the real world? How do I maintain the same level of quality and student interaction when teaching remotely? What can I do to keep students motivated when it's getting harder and harder to retain their attention? How do I set clear goals so my students know what I expect of them?

What type of training do you provide?

VC: Our workshops run for 3–4 hours, or sometimes for a whole day. This format gives participants plenty of time to engage and get to grips with the content. We design sessions based on the axiom that "teachers teach the way they were taught", meaning that we apply whatever method we're teaching ourselves, so that participants experience it from the learner's point of view. This helps them understand the method and see the kind of difficulties that their students might encounter. This process of experiential learning and reflection is what makes our workshops so effective. Another highlight for participants is the chance to share ideas with colleagues. Even when we had to run workshops remotely, we set up small groups to facilitate this kind of discussion. We put staff from different schools together to encourage interaction and creativity and bring people into contact with new ideas and practices.

GD: Staff realise that they are not alone, which reassures them. They come to understand that developing skills is an ongoing process and that they will continue to learn throughout their career.

RACINE was set up 12 years ago. How would you sum up the journey so far? What changes do you foresee?

VC: It's been very positive! We're especially proud to have such a strong team of instructors, some of whom have been with us since the beginning. The popularity of our workshops also gives us reason to celebrate – we've trained around 100 members of staff each year, and that number is increasing all the time, especially since the Covid outbreak and thanks to the new sessions we've added to our catalogue. As for the road ahead, we're developing webinars and are planning to make more use of hybrid formats with mixed in-person and online attendance, so that staff at campuses outside of Paris can benefit too. We're also planning Level 2 workshops based on feedback from staff who attended our Level 1 sessions. And we're using a dedicated training platform that offers various materials and resources, which may be extended to include a discussion forum in the near future.

XK: The RACINE training workshops now occupy the bulk of the Arts et Métiers teacher training catalogue, offering high-quality training on a wide range of topics. This must be maintained, but to reflect the schools' current needs, we'd also like to see new sessions on topics such as how to promote the value of the French engineering education system, welcoming international students, multiculturalism and diversity, and so on.

ZOOM

Alumni evening at Villa Basset – Shanghai

A gala evening was held in Shanghai on Thursday 20th May 2021 to celebrate the 30th anniversary of the ParisTech network. Organised by the China branch of ParisTech Alumni with extensive support from the ParisTech Asia Office, the two-hour event took place at the magnificent Villa Basset, the residence of the French Consul in Shanghai, which is celebrating its centenary this year. More than 100 guests attended, including alumni, representatives from partner universities, institutions and companies, and guests of honour Mr Laurent Bili, French Ambassador to China, and Mr Benoît Guidée, French Consul General in Shanghai.

The evening opened with speeches from Ambassador Bili, Mr Christian Lerminiaux (President of ParisTech), Mrs Laura Villette (Director of the ParisTech Office in Shanghai), members of the China branch of ParisTech Alumni, and representatives from the evening's sponsors, Aden and LincolnGroup.

Ambassador Laurent Bili, who was technical advisor to the presidential diplomatic office of Jacques Chirac from 2002 to 2007, looked back on the long history of ParisTech in China, recalling that ParisTech had often been "taken along in the suitcases of French delegations visiting China". Mr Lerminiaux too noted ParisTech's long-established presence in China, while also pointing out that 2021 marks the beginning of a new chapter, with the expansion of ParisTech's international recruitment campaign to 12 new countries or regions in Asia, and Arts et Métiers joining the programme.

Finally, Mr Philippe Obry from Aden and Mr Antoine Lamy from Lincoln underlined how important it is for French companies in China to be able to work with the alumni networks of top French institutions.

Guests then had plenty of time to catch up with friends and former classmates over a cocktail reception, with wine kindly provided by the Baron Philippe de Rothschild and Gérard Bertrand wineries.

As well as marking the 30th anniversary of ParisTech, the event was also the perfect opportunity to introduce the China branch of ParisTech Alumni, which was set up at the end of 2020. No doubt there will be lots more events to look forward to in the future!

THE LATEST FROM PARISTECH

COMMUNICATION

ParisTech reinforces its social media presence with a new Facebook page.

ParisTech now has a Facebook account alongside its existing accounts on Twitter, LinkedIn, YouTube, Bilibili, Weibo and WeChat. The page will be used to provide information to potential international candidates to encourage them to apply, in particular students in countries in Asia where ParisTech is recruiting for the first time. The page is public and features posts in both French and English about engineering degrees, the latest news from the ParisTech schools, and the activities of the ParisTech network, with a focus on the international recruitment process.

Remember to follow the new ParisTech Facebook page for all the latest news from the network!

TEACHING

On 16th June, a number of staff and students from the ParisTech schools attended a Soft Skills workshop organised by the Teaching Commission to discuss soft skills and related teaching methodologies. Three guest speakers were invited to share their expertise in the area: Yves Richez, Jean-Marc Meunier and Laure Bertrand. Participants also had the opportunity to engage in small-group discussions, covering topics such as the benefits of internships, managing group work, extra-curricular activities, and career planning. The numerous insights and ideas shared will feed into teaching practices across the schools to help students develop the soft skills that are becoming increasingly important to employers.

PARISTECH ALUMNI

In 2020 ParisTech Alumni created a new coordination committee to support its activities in China. There are currently four members – Thibaut Legrand, Nicolas Cheng-Baron, Quentin Peyrani and Paul Herard, all graduates of either Arts et Métiers or MINES ParisTech – PSL. The committee's goals are to bring the ParisTech alumni community together thanks to an exciting calendar of events, to support alumni in their careers, and to highlight the relevance and value of the ParisTech schools and their qualifications in the uncertain world in which we live. The committee is always happy to welcome new volunteers. Get in touch here.

DIVERSITY

Positive feedback all round for the ParisTech/ENCPB *"Ambitions Sciences"* partnership.

On 15th April, ParisTech and the Lycée Pierre-Gilles de Gennes (ENCPB) looked back on the first year of their "*Ambition Sciences*" partnership, launched under the "*Cordées de la réussite*" scheme. The 28 tutors, who represent three of the ParisTech schools (AgroParisTech, Arts et Métiers, Chimie ParisTech – PSL), all found the experience very rewarding. The *prépa* students received support in STEM subjects and methods and gained insights into the ParisTech engineering schools and STEM careers in general. This year's secondary school tutees (34 students aged 14–15, from 7 different Paris schools) presented the scheme's outcomes to their parents and teachers at the start of June. All in all, everyone agrees that the partnership is a success, and the scheme will run again in the 2021–2022 academic year.

INTERNATIONAL

France/Ghana science workshops

A series of online science workshops are being organised as part of the ADESFA French-African Cooperation for Engineering in Africa project (FACEA), which partners several of the ParisTech schools (AgroParisTech, Chimie ParisTech – PSL, École des Ponts ParisTech, MINES ParisTech – PSL) with universities in Ghana (the Kwame Nkrumah University of Science and Technology (KNUST) in Kumasi, and the University of Mines and Technology (UMaT) in Tarkwa). The workshops will focus on water, geoscience and transport, and will give researchers an opportunity to discuss their projects and how they can work together. The first session is on 26th May 2021 and will be led by UMaT and MINES ParisTech – PSL. Click here to see the programme.

INTERNATIONAL AGREEMENTS

Agreements
Signature of an agreement with the European Patent Office (EPO) and the European Union Intellectual Property Office (EUIPO) regarding the Pan-European Seal Professional Traineeship Programme
Renewal of the Academic Cooperation Agreement with the Federal University of Minas Gerais (UFMG; Brazil)
Signature of an Academic Cooperation Agreement with the National Autonomous University of Mexico (UNAM)

NEWS FROM THE SCHOOLS

AgroParisTech

Food'InnLab: call for applications. The AgroParisTech Food'InnLab supports innovative start-ups that are looking to develop sustainable foods and food systems. If you need lab facilities and equipment and scientific and technical support to get your project off the ground, apply now!

Application process:

Step 1: Apply online before 19th June 2021.

Step 2: If eligible, you will be invited to present your project to the Selection Committee on 1st July 2021.
Contact: foodinnlab@agroparistech.fr

Supported by the French Investments for the Future Programme (PIA), BPIfrance, and the Île-de-France region.

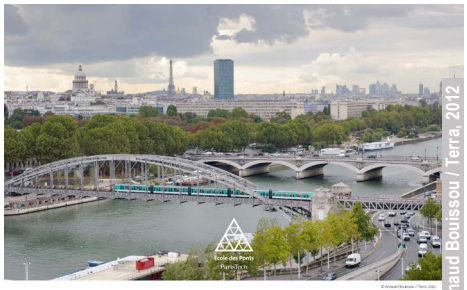
Arts et Métiers

Arts et Métiers has set up a fully-fledged ecosystem to support entrepreneurs and promote the development of innovative technological solutions. More than 200 start-ups have been created by Arts et Métiers alumni in the past 5 years, and in 10 years, the school's incubator has backed almost 120 companies, with 89% still in business after 3 years. Click here for more information.

Chimie ParisTech – PSL

2020 ERC Advanced Grant awarded to Philippe Goldner

Philippe Goldner, of the *Institut de Recherche Chimie Paris* (Chimie ParisTech – Université PSL/CNRS), has been awarded an ERC grant for his RareDiamond project. The aim of the project is to develop high-quality materials that combine rare-earth ions and colour centres in diamond crystals. Each of these two systems has exceptional properties, which have been used and studied separately for numerous applications in photonics. By creating hybrid materials in which these two centres can interact at the nanoscale level, RareDiamond will pave the way for innovative functionalities in quantum communications, sensors and processors.

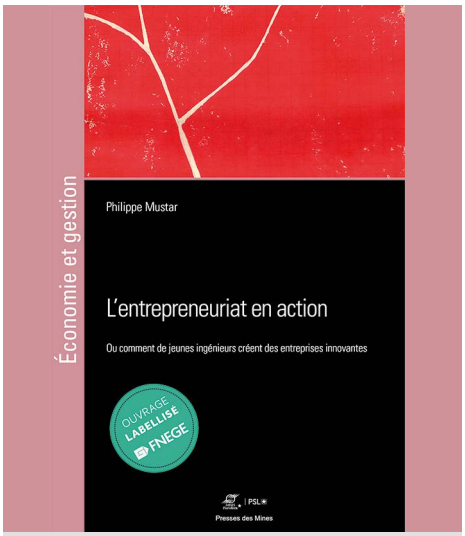


Carte blanche à Daniel Schertzer (HM&Co, École des Ponts ParisTech)

École des Ponts ParisTech

Issue No. 4 of the *Cahier des Ponts* magazine has just been published. This issue addresses the topic of urban resilience, with contributions from academics, professionals, students and doctoral researchers. The experts outline various initiatives and current thinking on topics such as flooding, heatwaves and other consequences of global warming and their impact on urban environments.

Download the magazine
or subscribe.



MINES ParisTech – PSL

Philippe Mustar, Head of the Innovation and Entrepreneurship stream at MINES ParisTech – PSL has published a new book that takes a deep dive into the creation of innovative start-ups, from the first "vague ideas" through to the emergence of radical innovations.

"*L'entrepreneuriat en action*" (Entrepreneurship in action) tells the story of three start-ups launched by engineering students from the school: DNA Script with its DNA printer, Expliseat with its ultra-light aircraft seat, and Criteo with its behavioural retargeting algorithms. The students' passion, motivation and ambition is evident throughout.

The book is intended as an educational tool to guide students who want to start their own technology company or learn more about the topic.

Published by Presses des Mines

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.

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