

Physique Chimie Avenir

ESPCI's Junior-Enter-
prise



Juniors
ParisTech

Physique-Chimie Avenir

Created in 1978, Physique-Chimie Avenir (PCA) is an association managed by the students of ESPCI ParisTech (École Supérieure de Physique et de Chimie Industrielles de la Ville de Paris)



Self-healing rubber, designed at the soft-matter and chemistry laboratories, at ESPCI ParisTech

WHAT IS A JUNIOR-ENTERPRISE?

Junior Enterprises (JE) are non-profit organisations,

They allow students to put into practice their learning, carrying projects matching their fields of studies.

The clients benefits from the innovation capacities of the students, their dynamism and their ability to manage complex projects, with many workers involved. Besides, the students can always count on the the pedagogical support of the professors and researchers working at ESPCI.

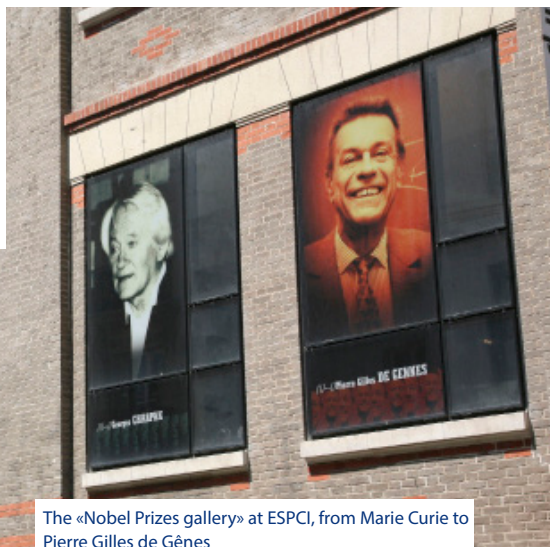
ESPCI's Junior-Enterprise

Since, 1882, ESPCI ParisTech is an engineering school and a world class research and innovation center for the industry.



Our Junior-Enterprise benefits from the variety of ESPCI's teaching, and from its 17 research laboratories, run by 300 world class scientists.

Students are selected on their qualifications, their dynamism, and their motivation.



The «Nobel Prizes gallery» at ESPCI, from Marie Curie to Pierre Gilles de Gènes

Our References

PCA works in collaboration with famous partners, and under a label guarantying the quality of our involvement.

OUR PARTNERS



BNP PARIBAS

BNP Paribas, France's first bank, advises us in all our transactions.

ACADOMIA

Academia supports PCA for the high pedagogical value our Junior-Enterprise gives to the students.

Juniors
ParisTech

The 12 JE of the ParisTech network gathers in a network covering very diverse fields of studies, and answer every expectations.

Awards

THE «JUNIOR-ENTERPRISE» LABEL, A GUARANTEE OF QUALITY

PCA is an active member of the Confédération Nationale des Junior Entreprises (CNJE). It delivers the «Junior Enterprise» label, and performs annual checkings, via auditing, to assure that this label is respected. It is today recognised in the professional environment.

JuniorEntreprises
Révélateurs d'esprit d'entreprise

CNJE is supported by EY and Alten



PCA is part of the French Junior-Enterprises' Top 30

They trusted our expertise

QUELQUES MISSIONS ACCOMPLIES

- For a leader of the concrete market, PCA solved a concrete's thermodynamic problem, mixing chemistry and informatics.
- For the world's first energy producer, PCA conducted a bibliographic study, in order to circle a problem present in some thermal power plants. A data mining sequence in scientific literacy allow us to find similar phenomenas, and propose counter measures.

« Les différentes études soumises à PCA ont été très fructueuses. Les résultats, présentés de façon professionnelle ont toujours été convaincants. Les intervenants ont fait preuve d'une grande motivation, sur des sujets très divers, et d'une grande réactivité, qu'il s'agisse des étudiants réalisant les études ou du bureau. Je ferai de nouveau appel à PCA dans le futur. »

Faustine Vanhulle
Innovation Group – FagorBrandt

L'ORÉAL



LAFARGE

SENSIENT

FAGOR



SONY

PHILIPS

AIR LIQUIDE

EDF

GEA

Nos domaines de compétence

We work in the following scientific and technological fields:

PHYSICS

- Acoustics
- Electronics –Electricity • Electro-magnetism
- Nuclear engineering
- Fluid mechanisms
- Material Mechanics
- Microfluidics
- Optics
- Quantum Physics
- Thermodynamics
- Rheology
- Telecommunications
- Statistical Physics

I.T.

- Programming (C++, Matlab, Labview)
- Numerical Simulations
- Signal Processing
- Machine Learning

CHEMISTRY

- Analytical Chemistry
IR, UV, Fluo, Raman spectroscopies, CP/GM, RMN, RPE, Microscopies
- Colloidal Chemistry
- Pharmaceutical Chemistry
- Polymer's Chemistry
- Solid's Chemistry
- Environmental Chemistry
- Soft Matter
- Surface's Physico-Chemistry
- Science of separation
- Synthesis

BIOLOGY

- Protein's Chemistry
- Genetic Engineering
- Process Engineering
- Nanobiotechnologies
- Neurobiology
- Pharmacology
- Physiology
- ADN Chipset

INTELLECTUAL PROPERTY

- Patent's analysis and watch
- Patent's translation
- Market studies

SCIENTIFIC TRANSLATIONS

BIBLIOGRAPHIC STUDIES

PCA IN NUMBERS

- Founded in 1978, more than 30 years of experience
- 167 Jours Études Homme (Days of Work) performed in 2013 by ESPCI's students;
- 19 permanent members on 88 students: ESPCI's biggest association
- 35000 € turnover: +120% in 2013



CONTACT

Physique-Chimie Avenir

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