



Chaire  
ParisTech  
Ingénierie  
Nucléaire

# INDUSTRIAL CHAIR PARISTECH “NUCLEAR ENGINEERING”

*FOR ALL COMPARTMENTS OF  
NUCLEAR INDUSTRY*

ATOMS FOR THE FUTURE 2012  
PARIS

25th October 2012 | Dr Stéphane SARRADE



Chimie Paris

ParisTech



ENSTA

ParisTech

FONDATION  
ParisTech

ParisTech  
INSTITUT DES SCIENCES ET TECHNOLOGIES  
PARIS INSTITUTE OF TECHNOLOGY

Created in 2010 for a period of five years, the industrial Chair ParisTech “Nuclear Engineering” is supported by Areva

## Academic Partners of the Chair:

- Ecole Nationale Supérieure de Chimie Paris (ENSCP ParisTech)
- Ecole Nationale Supérieure de Techniques Avancées (ENSTA ParisTech)

## Main Goals:

⇒ Teaching and Research in the fields of:

- Chemistry,
- Physics,
- Mechanical,
- Process engineering

... in all compartments of the nuclear industry

### Teaching and Research:

=> Chemical Engineering, Reactor Design, fatigue, Damage, Fuel cycle and Waste management

### Specific Topics:

- Concentration of minerals,
- $UF_6$  conversion,
- Fuel fabrication,
- Reactor design and development,
- Neutronic,
- Recycling of fissile materials,
- Reprocessing and waste management.



**The industrial chair ParisTech “Nuclear Engineering” strongly supports the International Master in Nuclear Energy” (MNE).**

Among the 5 options of the Master, 2 are particularly supported by the chair:

- **Nuclear Plant Design (NPD)**
- **Fuel Cycle Engineering (FCE)**

*The Chair deputy Directors are respectively Co-Director of MNE and Head of the MNE option “Fuel Cycle Engineering”*

The chair also supports specialized courses offered in the educational programs of ENSCP ParisTech and ENSTA ParisTech.

**-> More than 300 k€ invested for 5 year**

**Research is supported through regular scientific calls for scientific projects in order to finance, all or part of theses, Ph. D or Postdoctoral contracts, research equipment ...**

**# 600 k€ already invested in 2012,2011 & 2012**

**The chair also supports Professors and Scientists positions in the partner schools.**

**The Research topics cover the following domains: Chemistry, Physics, Mechanical and Process Engineering applied to the Nuclear Industry.**

**# 380 k€ already invested**

12th April 2012 - ENSTA ParisTech Amphithéâtre Armand



Chaire  
Ingénierie nucléaire

## Programme de la journée Annuelle de la Chaire

9:00 Accueil et Introduction du Titulaire de la Chaire AREVA –

- **Stéphane Sarrade**, Chef de département au CEA

9:15-10:00 « AREVA R&D Present & Future »

- **Massimo Morichi**, Senior Vice President R&D

10:00-10:45 Intervention : **Valérie Cabuil**, Directrice ENSCP ParisTech

10:45-11:15 Pause

11:15-12:00 Intervention : **Isabelle Tanchou**, Directrice de la Formation et de la Recherche, ENSTA ParisTech

12:00-13:30 Buffet et échanges, exposition de posters ENSTA ParisTech

13:30-15:00 Présentation / Bilan des actions financées par la chaire

15:00-15:30 Pause

15:30-16:30 Table Ronde: « Fukushima: un an après ... » en présence de :

- **Philippe GARDERET**, *Directeur Scientifique, AREVA*
- **Boris SUPIOT**, *Président de la section Jeune Génération de la SFEN*
- **Sylvestre PIVET**, *Directeur des Activités Nucléaires de Saclay, Direction de l'Énergie Nucléaire du CEA*
- **Thierry CHARLES**, *Directeur général adjoint de l'IRSN, chargé de la sûreté nucléaire*

16:30-17:00 Conclusion et Bilan de la journée





### CONFERENCE PROGRAM 2012 - 2013

**27th march 2012**

**ENSTA**  
Paris

**Luc Van den Durpel**

*Nuclear fuel Cycle: International Safeguards*

**1st october 2012**

**ENSCP**  
Paris

**Bertrand Morel**

*Chemical interest for front-end fuel cycle*

**29th november 2012**

**ENSTA**  
Saclay

**Luigi Catalani**

*Thermohydraulics and nuclear plant*

**5th december 2012**

**ENSCP**  
Paris

**François Poncelet**

*Recycling nuclear wastes: Industry for the future*

**28th january 2013**

**ENSTA**  
Saclay

**Bernard Carluéc**

*Fast breeder reactors*

- Paristech : [www.paristech.fr](http://www.paristech.fr)
- Areva : [www.areva.com](http://www.areva.com)
- Master of Nuclear Energy : [www.master-nuclear-energy.fr](http://www.master-nuclear-energy.fr)
- ENSTA ParisTech: [www.ensta-paristech.fr](http://www.ensta-paristech.fr)
- ENSCP ParisTech: [www.enscp.fr](http://www.enscp.fr)

### Industrial Chair Managers :

**Dr Stéphane SARRADE, Chair Director (CEA):**

[stephane.sarrade@cea.fr](mailto:stephane.sarrade@cea.fr)

**Prof. Gérard COTE, Chair deputy Director (ENSCP ParisTech) :**

[gerard-cote@chimie-paristech.fr](mailto:gerard-cote@chimie-paristech.fr)

**Prof. Bertrand REYNIER, Chair deputy Director (ENSTA ParisTech) :**

[bertrand.reynier@ensta-paristech.fr](mailto:bertrand.reynier@ensta-paristech.fr)



**Thank you for your  
attention...**

CHAIRE PARISTECH – NUCLEAR ENGINEERING - AREVA

Dr Stéphane SARRADE (CEA – Saclay)

[stephane.sarrade@cea.fr](mailto:stephane.sarrade@cea.fr)

T: +33 1 69 08 33 38 – P: +33 6 87 74 84 98