

DE LA RECHERCHE À L'INDUSTRIE



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The National Institute for Nuclear Science and Technology



FOR A GROWING WORKFORCE IN THE NUCLEAR SECTOR

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WHAT IS INSTN?

The National Institute for Nuclear Science and Technology (INSTN) created by the French Government in 1956

- Strong links with French nuclear research laboratories and expertise (CEA in particular).
- To disseminate nuclear and industrial knowledge and know-how
- To provide a comprehensive academic offer from a technician up to a post-graduate level (PhD, degree in engineering)

60 years anniversary!

114 staff members on 5 sites in France

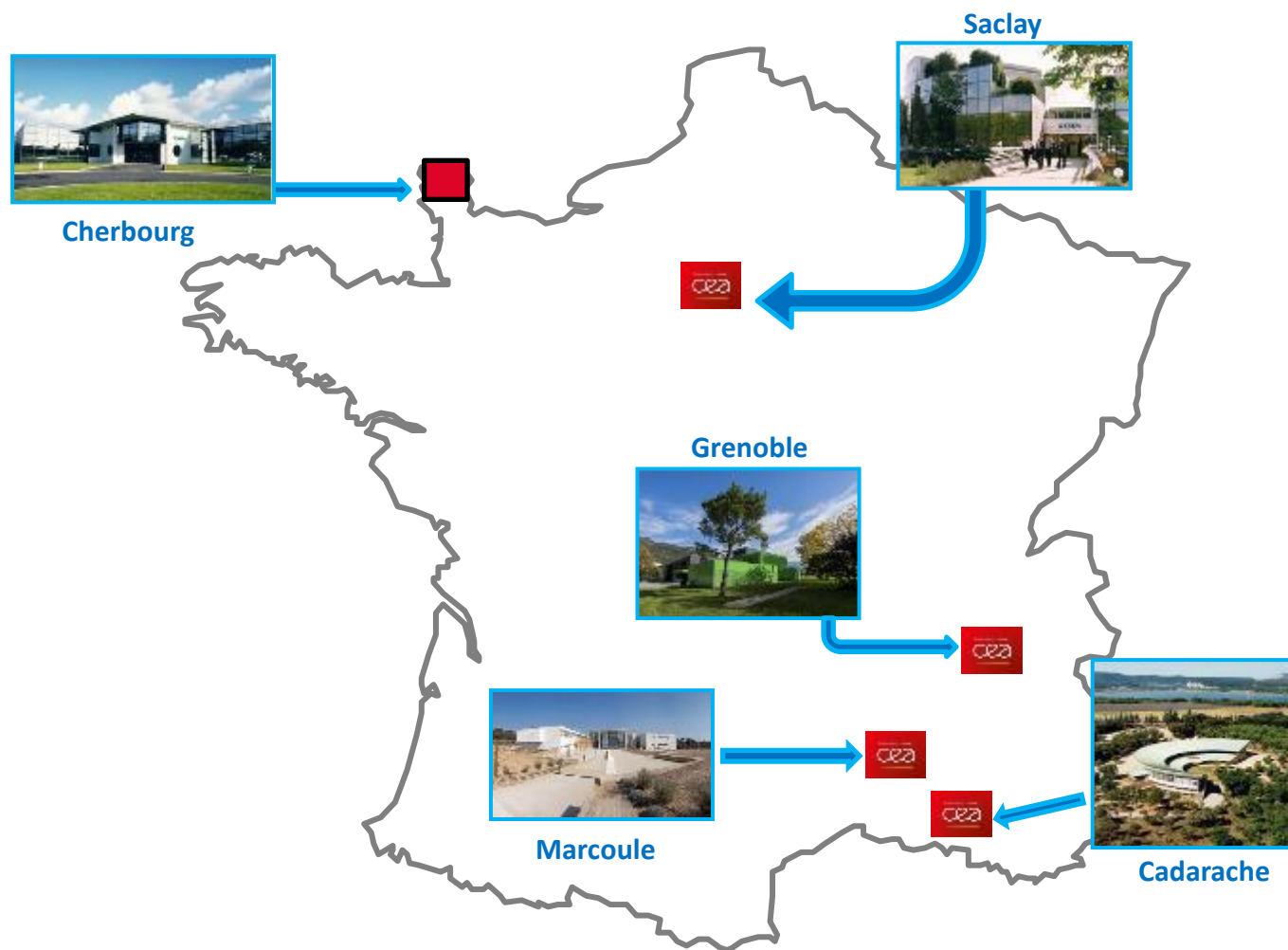
1,400 highly experienced teachers,
lecturers and trainers

1,100 students (30% from abroad)

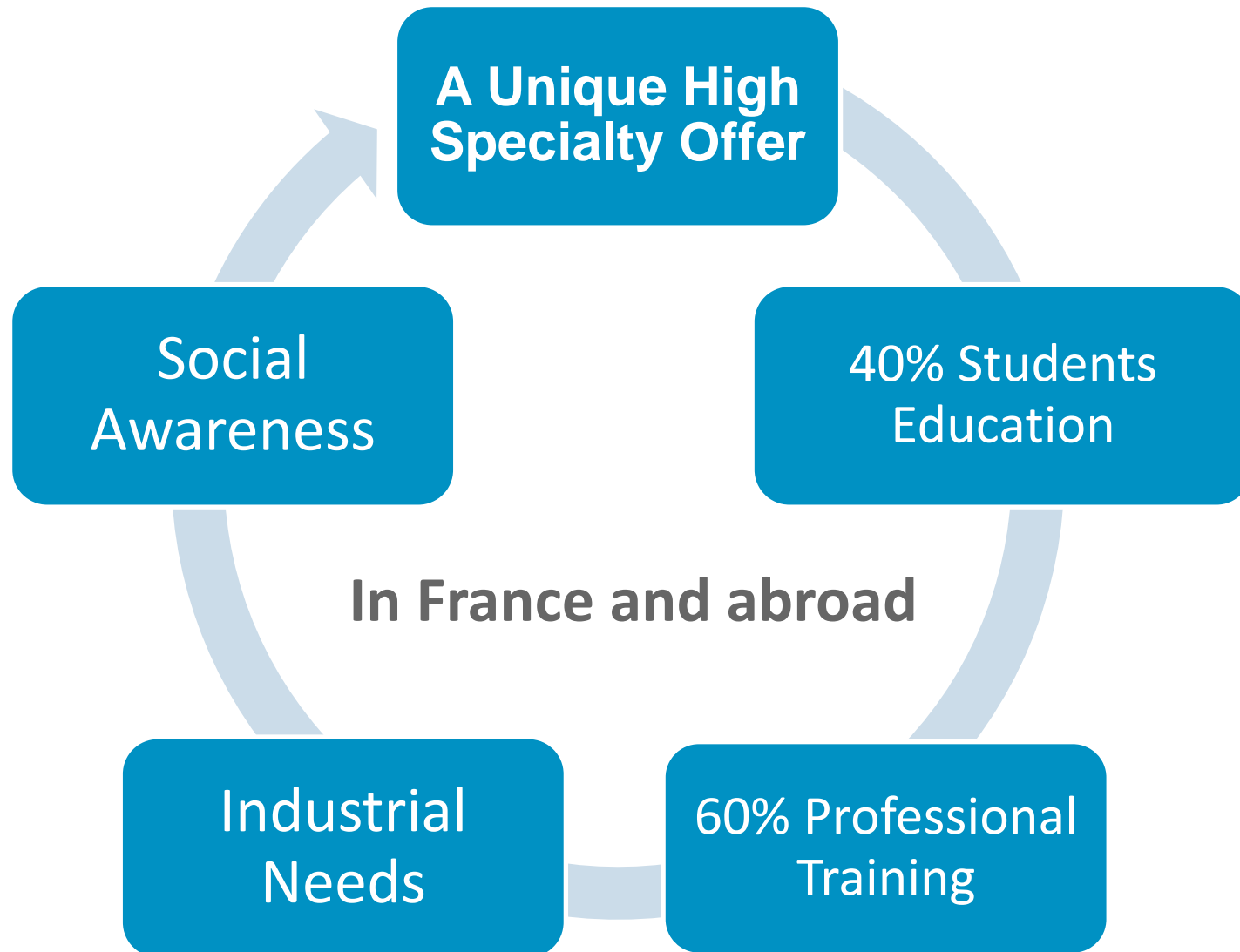
7,000 trainees per year

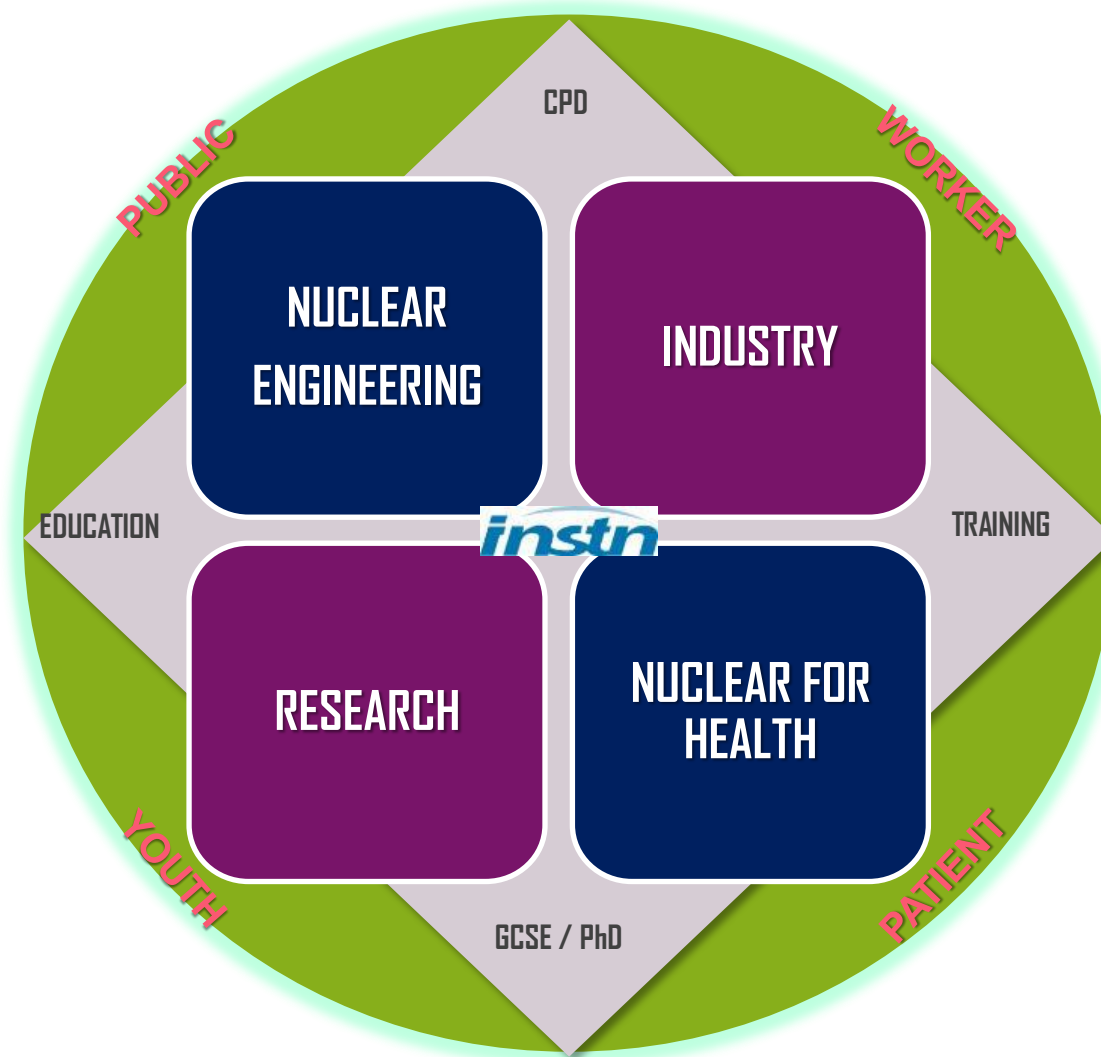


THE INSTN: 5 SITES IN FRANCE



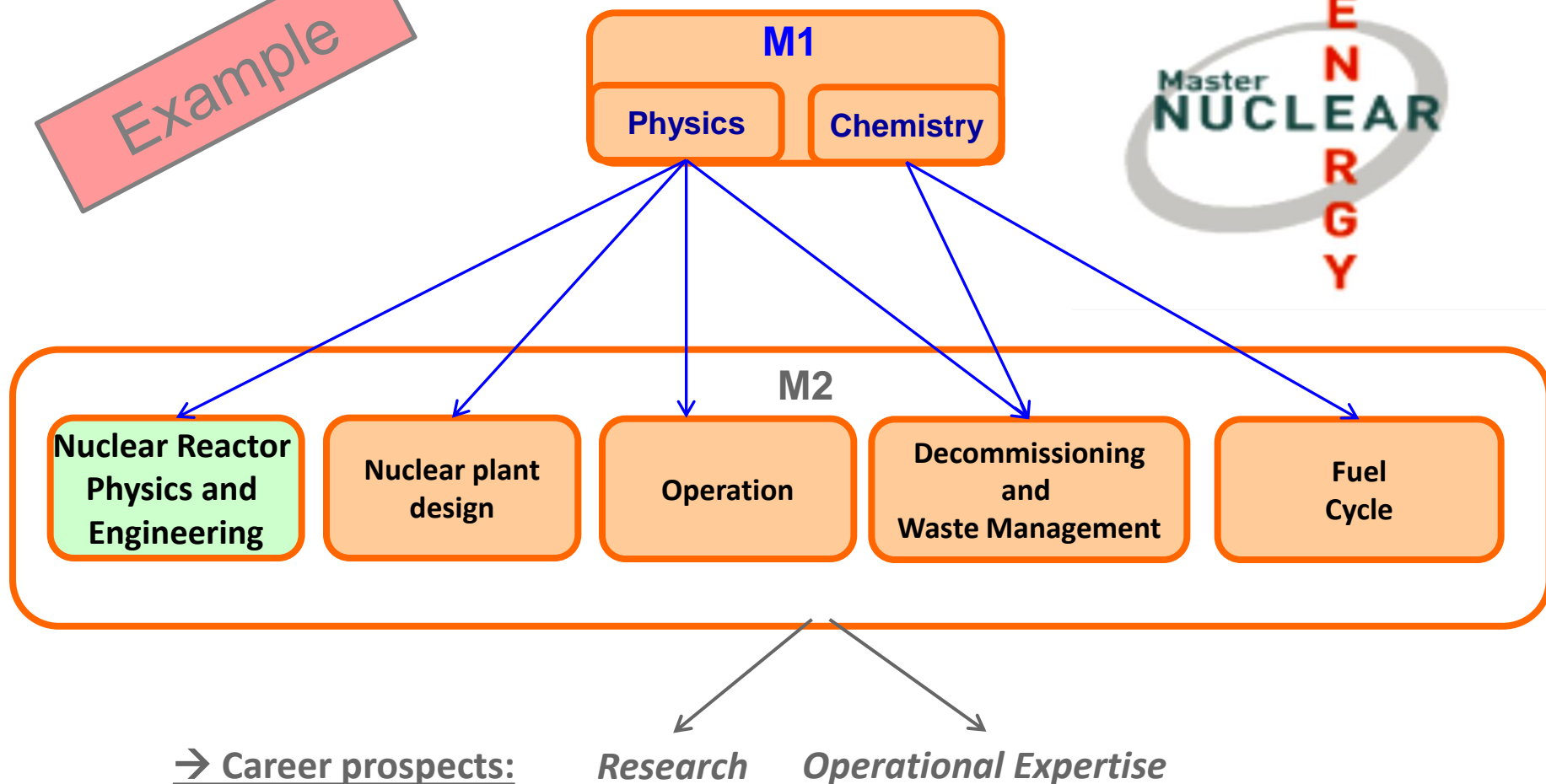
OUR MISSIONS





AN ACADEMIC OFFER IN PARTNERSHIP WITH UNIVERSITIES AND SCHOOLS OF ENGINEERING

Example



INSTN LEARNING FACILITIES

Worksite Schools for industrial training

- *decontamination*
- *radiation protection*



Laboratories for hands-on training

- *radiochemistry*
- *radiation protection, detection & measurement*



Information & Communication Technologies

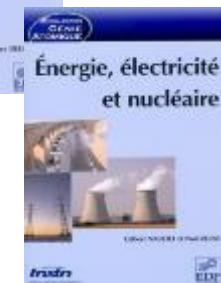
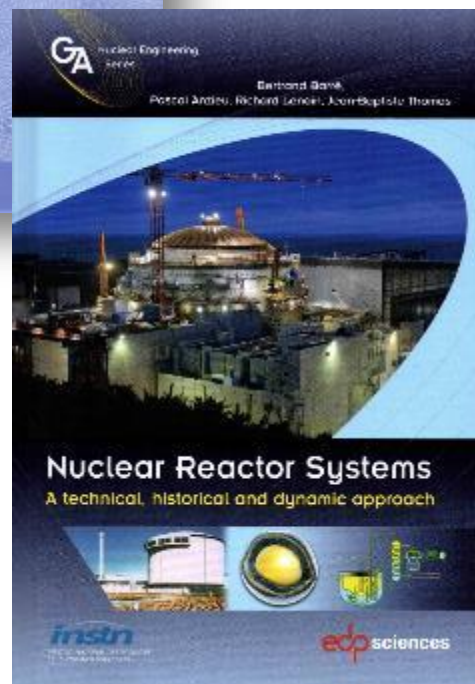
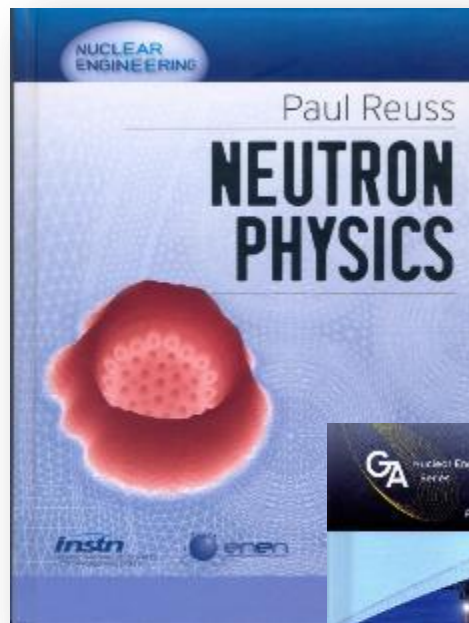
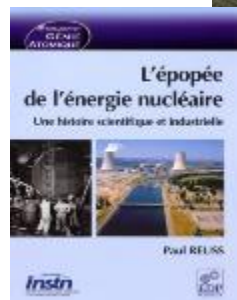
- *reactor numerical simulators*
- *research and industry computer codes*



A UNIQUE SET OF ATTRACTIVE TOOLS

- Tools as the core of pedagogy
- Tools and facilities unique in France
- A system that meets the high regulatory requirements and market access





A sufficient capacity in current Education & Training infrastructure in France

Many industrial needs with growing demand for competencies and skills

But not enough candidates

- lack of attractiveness of scientific and technical fields

INSTN takes into account industrial needs for competencies and skills through an effective entrepreneurial network

- Consistent localisation to implement an effective national E&T policy
- Students or trainees may have access to nuclear Industry and find jobs



FROM INSTN MISSION TO INSTN OFFER

INSTN missions:

Integrate industry needs and social contexts;

- Cover all the jobs required for the construction, operation and maintenance of a nuclear reactor;
- Help the medical nuclear sector to increase competences and skills

Guarantee knowledge transfers through 'train-the-trainers schemes' and academic involvement.



INSTN Offer:

Education and training to all levels of staff

- From first level technicians to engineers, researchers, senior managers and Doctors.

Grants to take account of personal situations

Cooperation based on respect, preservation of national sovereignty and mutual profit.

- Joint educational programmes;
- Academic exchanges;
- Professional training exchanges;
- A twinning with a local 'Nuclear Academy' ?



and a comprehensive human capacity building

- Evaluation and certification of competences;
- The development of a local supply chain



IAEA designated ICERR

International Centre based on Research Reactor, for Education and Training



INSTN OFFER FOR A GROWING NUCLEAR WORKFORCE

- A unique, integrated, problem solving and attractive offer in nuclear E&T, for energy and medical sectors
 - From high school to PhD/MD.
- High-quality offer, world-class facilities, recognised degrees, certificates and continuous improvement
 
- Integration of science and industry needs, partnerships in France and abroad

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AREVA

IRSN
INSTITUT
DE RADIOPROTECTION
ET DE SÉCURITÉ NUCLÉAIRE

ANDRA
Agence nationale de l'écologie industrielle et des territoires

om
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apave
- International excellence
 
- Social awareness and Support to economic growth
 - through the development of a 'nuclear economy'

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