




Overview of French-Czech Cooperation in Science and Higher Education

May 12th, 2016

60 Let Pro Jadernou Energetiku, Plzen

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- ✓ Programs and support mechanisms
 - ✓ Focus on FR – CZ cooperation in higher education in nuclear engineering
 - ✓ Joint Participation in H2020

Programs and support mechanisms

Mobility of Students between France and Czech Republic :

- Erasmus : \approx 800 French students in CZ and the same number of Czech in FR
- France second destination for Czech students after Germany
- French students : 2nd nationality represented in CZ after Spanish
- About 500 Erasmus agreements between FR-CZ Universities

➤ **3 Programs taught in French (or partly) in Czech Republic :**

- ❑ **MBA – Master of Business Management (1990)**
University of Economy of Prague (IFTG)/IAE - University Lyon 3
(600 alumni)
- ❑ **Master of Public Administration (1999)**
Masaryk University of Brno / University of Rennes 1 (IPAG)
(200 alumni)
- ❑ **Master of Automobile Engineering (2005)**
Technical University of Prague(ČVUT) /l'ENSTA, Brest.

➤ **7 Joint Master Degrees taught in English**

➤ French Government Grants :

Joint PHD Degree (Cotutelle de thèse)

- ❑ 8 – 9 new/year : support during 3 years
- ❑ all domains : selection based on excellency of projects and partners
- ❑ ≈ 30 PHD in 2016

Scholarships for PHD and Post-Docs

- ❑ 40 months/year
- ❑ all domains
- ❑ 1 to 3 months

➤ Support for mobility of researchers :

PHC Barrande : Bilateral research program (1996)

- ❑ about 25 projects/year
- ❑ all fields of research
- ❑ 2500 euros/year for mobility (no equipment)
- ❑ Criteria : excellency, young researchers, european perspective
- ❑ Success rate (2014) : 18%

« Vltava » seminars

- ❑ New cooperation, non-senior researchers (< 40 years)
- ❑ 30 – 40 French and Czech, alternatively in France and Czech Republic
- ❑ **Chemistry** : 7th Edition (Orléans, August 2016)
- ❑ **Biosciences** : 3rd Edition (Liblice, September 2016)

➤ **French Embassy Scientific Prices :**

- **5 Prices :**
 - Medecine** (Pierre Fabre Medicament),
 - Pharmacy** (Sanofi),
 - Chemistry** (Rhodia/Slovay)
 - Computational science** (Bull-Atos)
 - Humanities** (Galerie Kodl)
- **Scholarship for winners** : 1 month for the 1st and 2nd

Focus on Cooperation in Nuclear Engineering

Summer and Winter Schools : dedicated to students (cooperation with CENEN, University of West Bohemia Plzen, ČVUT, STU) :

- ✓ May 2012 : "**Nuclear Safety**" (Prague)
- ✓ September 2015 : "**Advanced Materials for Nuclear Engineering**" Kočovce (Slovakia)
- ✓ February 2016 : "**Nuclear Fuel Cycle**" (Železná Ruda)



➤ Scholarships :

- ❑ Master "Energie Nucléaire" : 2 Grants for 2 students (University West Bohemia)
- ❑ 5 Joint PHD :
 - ✓ CEA-Cadrache, University of Strasbourg and Charles University
 - ✓ Paris VII and Institute of Nuclear Research in Řež
 - ✓ Paris XIII and ČVUT
 - ✓ University Joseph Fourier Grenoble and Institute of Nuclear Research in Řež
 - ✓ Celia Bordeaux, INRIA and ČVUT

Joint Projets in H2020

01/2014 – 02/2016

H2020_Division	H2020 Division name	CZ teams	joint projects (FR-CZ)	FR teams
CROSST	Cross-theme	1	1	1
FET	Future and Emerging Technologies	3	3	15
MSCA	Marie Skłodowska-Curie actions	18	16	21
INFRA	Research infrastructures	31	26	55
ICT	Information and Communication Technologies	16	11	39
NMP	Nanotechnologies, Advanced Materials and Production	3	2	7
ADVMAT	Advanced materials	2	2	2
ADVMANU	Advanced manufacturing and processing	5	5	9
SPACE	Space	13	7	18
HEALTH	Health, demographic change and wellbeing	13	12	31
FOOD	Food security, sustainable agriculture and forestry, marine and maritime and inland water research	16	15	24
ENERGY	Secure, clean and efficient energy	17	13	18
TPT	Smart, green and integrated transport	9	9	40
ENV	Climate action, environment, resource efficiency and raw materials	10	9	12
SOCIETY	Europe in a changing world - inclusive, innovative and reflective Societies	4	4	4
SECURITY	Secure societies - Protecting freedom and security of Europe and its citizens	2	2	2
TWINING	Twinning of research institutions	3	3	3
CAREER	Make scientific and technological careers attractive for young people	1	1	1
GENDEREQ	Promote gender equality in research and innovation	1	1	1
INEGSOC	Integrate society in science and innovation	1	1	1
GOV	Develop the governance for the advancement of responsible research and innovation	1	1	1
EURATOM	Euratom	22	15	54
		192	159	359

Cz = 300 Projects
FR = 1885 Projects

192 teams from Czech Republic cooperate with 359 French teams in **159 H2020 projects.**

Czech Institutions

Name_EN	Sector	City	joint projects with FR
Czech Technical University in Prague	HES	PRAGUE	12
Masaryk University	HES	BRNO	12
Technology Centre ASCR	REC	PRAGUE	9
Charles University in Prague	HES	PRAGUE	9
Research Centre Rez	REC	HUSINEC-REZ	8
Cesnet	REC	PRAGUE	7
Nuclear Research Institute Rez plc	PRC	HUSINEC REZ	6
Institute of Physics of the ASCR, v.v.i.	REC	PRAGUE	4
VSB-Technical University of Ostrava	HES	OSTRAVA	4
Brno University of Technology	HES	BRNO	4
AMIRES s.r.o.	PRC	PRAGUE	3
		CESKE	
Biology Centre of the ASCR, v.v.i.	REC	BUDEJOVICE	3
Czech Geological Survey	REC	PRAGUE	3
Enviros, s.r.o.	PRC	PRAGUE	3
Motol University Hospital	HES	PRAGUE	3
FENIX TNT s.r.o.	PRC	BRNO	3
METCENAS, o.p.s.	REC	PLZEN	3
J. Heyrovsky Institute of Physical Chemistry of the ASCR, v.v.i.	REC	PRAGUE	3
Institute of Molecular Genetics of the ASCR, v.v.i.	REC	PRAGUE	3
Institute of Chemical Technology Prague	HES	PRAGUE	3

French Institutions

Name	Sector	City	joint projets with CZ
COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	REC	PARIS 15	28
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	REC	PARIS	27
INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	REC	PARIS CEDEX 07	13
INSTITUT DE RADIOPROTECTION ET DE SURETE NUCLEAIRE	REC	FONTENAY AUX ROSES	10
ELECTRICITE DE FRANCE	PRC	PARIS 08	6
INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (INSERM)	REC	PARIS	5
ECRIN EUROPEAN CLINICAL RESEARCH INFRASTRUCTURE NETWORK	REC	PARIS	5
BUREAU DE RECHERCHES GEOLOGIQUES ET MINIERES	PUB	PARIS	5
INSTITUT NATIONAL DE L ENVIRONNEMENT ET DES RISQUES INERIS	REC	VERNEUIL EN HALATTE	4
THALES COMMUNICATIONS & SECURITY SAS	PRC	GENNEVILLIERS	4
AGENCE DE L'ENVIRONNEMENT ET DE LA MAITRISE DE L'ENERGIE	PUB	ANGERS	4
UNIVERSITE DE LORRAINE	HES	NANCY CEDEX	4
INSTITUT NATIONAL DE RECHERCHE EN INFORMATIQUE ET EN AUTOMATIQUE	REC	LE CHESNAY CEDEX	3
CENTRE DE COOPERATION INTERNATIONAL EN RECHERCHE AGRONOMIQUE POUR LE DEVELOPPEMENT	REC	PARIS	3
RENAULT SAS	PRC	BOULOGNE BILLANCOURT	3
UNIVERSITE JOSEPH FOURIER GRENOBLE 1	HES	GRENOBLE	3
ARTTIC	PRC	PARIS	3
THALES SA	PRC	NEUILLY SUR SEINE	3
INSTITUT PASTEUR	REC	PARIS CEDEX 15	3
AREVA NP SAS	PRC	COURBEVOIE	3
SOCIETE NATIONALE DES CHEMINS DE FER FRANCAIS	PUB	ST DENIS	3
AEROSPACE VALLEY	OTH	TOULOUSE	3
UNIVERSITE DES SCIENCES ET TECHNOLOGIES DE LILLE - LILLE I	HES	VILLENEUVE D'ASCQ	3

In TOP 5 - 3 in the Field of Energy (Nuclear)



Thank you for your attention !

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