

## EDF DAP CHINA DIVISION

### Job Description (2017)

As a global leader in low-carbon energy, the EDF Group covers every sector of expertise, from electricity generation to trading and transmission grids. EDF builds on the expertise of its people, its R&D and engineering skills, its experience as a leading industry operator and the attentive support of its customers to deliver competitive solutions that successfully reconcile economic growth with climate protection.

With 3 sites in France and 7 abroad, EDF R&D conducts research both at national and international level. More specifically, the Beijing R&D center focuses on networks, nuclear and renewable energies and sustainable towns and cities. It is an asset for participating in large-scale Chinese demonstrators that involve smart grids, sustainable towns and cities and CO2 capture and sequestration.

The EDF R&D China center is currently seeking a recently graduated research engineer in the fields of mechanical and materials (master or PhD level) to perform finite element calculations using Code\_Aster, an open-source Finite Element code developed by EDF R&D in order to support EDF's engineering and research activities world-wide ([www.code-aster.org](http://www.code-aster.org)). This technical work is aimed at providing solutions to other EDF engineering centers in the world as well as external Chinese partners. The second main role of the position includes developing and maintaining Code\_Aster user's academic and industrial networks in China in order to promote the use of the code.

Department	R&D	Work Place	Beijing	
Job Title	Mechanical/Material research engineer 结构/材料力学研发工程师	Report To	Nuclear Power Generation team manager	
Job Level	P1.1 / P2.1 depending on education background	Contract type	CDD for 3 year	Then CDI
Job holder		Filling Date	May 2017	

#### Main missions

- Provide technical solutions and analyses in the fields of mechanics/materials to industrial problems encountered by EDF ;
- Develop and maintain local (Tsinghua, Centrale Pékin) and international partnership network in China and with main EDF R&D centers in France in the related field.

#### Main Responsibilities

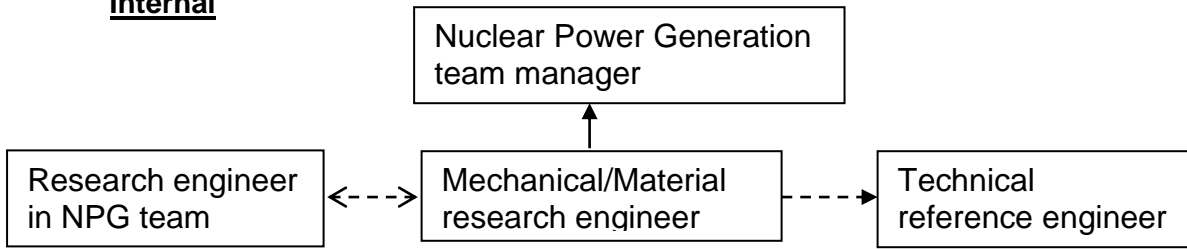
- Perform numerical simulation with Code\_Aster for mechanical and material studies in fields of nuclear, renewable and thermal plant, or other applications; Research project follow-up, development and pilot;
- Technical interlocutor in related mechanics/material field;
- Main contributor on Code\_Aster utilization for EDF software valorization.

## Ideal candidate profile

Requirements:	
Basic requirements: (Education/Qualification/ Language/Computer etc.)	<ul style="list-style-type: none"><li>• Generalist Engineer School degree / University Degree in science (PhD preferred) specialized in the fields of mechanics/material;</li><li>• Chinese, Good level in English, French is a plus.</li></ul>
Professional experience and skills / Technical Knowledge	<ul style="list-style-type: none"><li>• Knowledge on mechanics and material field, in particular in fluid-structure interaction, structural mechanics for civil engineering, fracture mechanics for main components and equipments;</li><li>• Knowledge on Finite Element Analysis tool, such as Code_Aster, ANSYS, ABAQUS;</li><li>• Knowledge on computer languages in Fortran, C++, Python, and Linux system.</li></ul>
Capabilities required	<ul style="list-style-type: none"><li>• Good interpersonal and communication skills;</li><li>• Self-motivated, self-organized and independent;</li><li>• Capacity in scientific report writing and presentation (deliverable, paper, publication);</li><li>• Good autonomy in scientific research work.</li></ul>
Additional	

## Work Relationship

### Internal



- > : refers to direct reporting relationship  
-----> : refers to technical supervision  
<-----> : refers to project based cooperation relationship

### External

Working in link with EDF R&D in France: AMA, MMC department, MAI

Working in link with Chinese partners: CGN, CNNC, Universities

Other information about the job:	
<b>Dept. Director:</b>	<b>China Division Director:</b>
<b>Guofei CHEN</b>	<b>SONG Xudan</b>

### Main contact for applications:

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