

"JRC: Career opportunities at the heart of the science and technical support to European policy making"

Plovdiv

15-16 June 2011



Joint Research Centre (JRC)

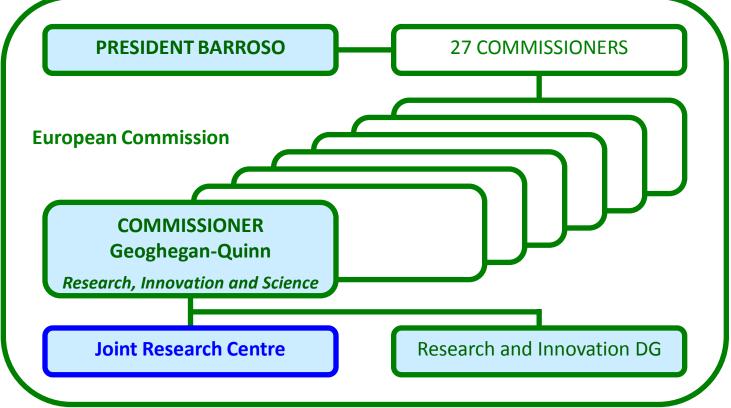




The European Commission and where the JRC (as a DG) fits in...



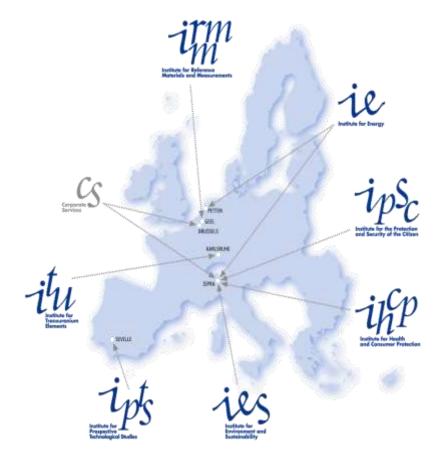






Structure of the JRC

Joint Research Centre



7 scientific Institutes

IRMM – Geel, Belgium
Institute for Reference Materials and Measurements

ITU – Karlsruhe, Germany and Ispra, Italy Institute for Transuranium Elements

IE – *Petten, the Netherlands and Ispra, Italy* Institute for Energy

IPSC – *Ispra, Italy*Institute for the Protection and Security of the Citizen

IES – *Ispra, Italy*Institute for Environment and Sustainability

IHCP – *Ispra, Italy*Institute for Health and Consumer Protection

IPTS – Seville, Spain
Institute for Prospective Technological Studies

CS – *Brussels, Ispra, Geel and Petten*Corporate Services (including Ispra Site Management)



EUROPE 2020 Strategy and the JRC



Barroso: Very strong commitment to research and innovation agenda



Geoghegan-Quinn: Promoting the "innovation union" - dependent on a strong science base



JRC: Integrating robust science for policy-making



Our Mission

... is to provide customer-driven scientific and technical support for the conception, development, implementation and monitoring of EU policies.

Our Vision driven by the Europe 2020 Strategy

... is to be a trusted provider of science-based policy options to EU policy-makers to address key challenges facing our society, underpinned by internationally-recognised research.

Our Impacts for the EU citizen

... supporting general well-being via harmonised research on energy, environment, transport, climate change, safety of food and consumer products, crisis management, and nuclear safety and security, that have important positive impacts on the daily life of the citizen.



Implementing the JRC Mission in the EU Policy Cycle

Policy evaluation

• Effectiveness and impact assessment

Ad-hoc policy support

Crisis response

Policy anticipation

- Agenda-setting
- Horizon scanning & identifying emerging issues

JRC

Policy implementation

- Compliance checks
- Independent verification
 - Anti-fraud measures

Policy formulation

Expert advice based on science

Policy adoption

- Decision-making process
- Selection of programme options



Towards an open and competitive economy





Reference materials and measurements







Security and crisis management







Nuclear safety and security

2010-2020





Providing tangible results for the citizen



- Promoting an open and competitive economy
- Supporting Europe's information society
- Monitoring companies' R&D spending
- Developing a low carbon society
- Fuelling the hydrogen economy
- Meeting the highest levels of nuclear safety
- Preventing nuclear trafficking
- Improving testing for safer food
- Reducing the risk from dangerous chemicals
- Detecting Genetically Modified Organisms
- Predicting floods and forest fires
- Promoting safer building standards
- Ensuring reliable reference materials and measurements
- Providing quality assurance tools





Supporting EU policies



Making the EU's electricity grids smarter

The JRC has identified and analysed the vulnerabilities of Member States' electricity transmission systems for the implementation of a Directive on Critical European Infrastructures.

Controlling emissions from heavy duty vehicles

The JRC made significant technical contributions to the procedure to check the *inuse* emissions of heavy duty vehicles. This supports the new Euro VI Regulation on motor vehicles and engines, moving the new emission standards one step closer to final approval.





Calculating greenhouse gas emissions from biofuel crops

The JRC developed a new methodology to estimate changes in global greenhouse gas (GHG) emissions due to biofuel crops. This work underpinned the Commission Report required for the implementation of the Renewable Energy Directive.





Sustaining European Soil

The JRC has developed robust databases supporting the European Soil Thematic Strategy and as a result created three soil atlases, unique collections of maps illustrating the varying patterns of different soil types occurring across Europe. One of the resulting outputs is the first ever European Atlas of Soil Biodiversity.

Supporting sustainable fishing in the Mediterranean

The JRC provides the necessary scientific data and advice on fish stocks, fishing effort and landings to the European Commission's Scientific, Technical and Economic Committee for Fisheries (STECF) to promote a more sustainable exploitation of marine resources.





INSPIRE: Harmonising environmental data worldwide

The JRC is the technical and scientific coordinator of INSPIRE, the Infrastructure for Spatial Information in Europe, which provides the knowledge needed for mitigating natural and manmade hazards to make more efficient use of natural resources, to better protect the environment and to adapt to climate change.





Plasma proteins in human blood testing

The JRC developed reference materials for the concentration of 14 plasma proteins regularly controlled in human blood testing for the detection of many conditions including infection, liver/kidney disorders, iron deficiency, malnutrition and the monitoring of autoimmune diseases. These reference materials are now used worldwide as the standards for achieving comparable diagnostic data.

Twenty-four new reference materials

24 new reference materials were made available by the JRC in 2010. These targeted areas such as food safety and quality (including GMO), environmental monitoring, engineered materials and clinical testing. Three new certified reference materials are now available for water-quality testing set out in the Water Framework Directive.





New developments on nanotechnology

The JRC has been working on the preparation of reference nanomaterials for testing in the harmonisation of industrial goods. The JRC also hosts the largest repository of nano reference materials and has developed an internationally-available database containing test and measurement results used by the OECD, Member States and industry.





Detecting GMOs in food and feed

The JRC provided the "Compendium of Reference Methods for GMO analysis", a reference report listing 79 GMO detection methods validated according to international standards in support of the Regulation on official food and feed controls.

Reducing experiments on animals

The JRC's European Centre for the Validation of Alternative Methods (ECVAM) was established as the EU Reference Laboratory for the validation of alternative methods which could reduce, refine or replace the use of laboratory animals as required in the revised Directive on the protection of animals used for scientific purposes.





Eurocodes for building

Pre-normative research at ELSA (European Laboratory for Structural Assessment) contributed to the development of the common European Standards for Construction (Eurocodes). From 2010, all new public buildings and other civil engineering structures in the EU should be constructed with similar levels of structural safety and energy efficiency in line with the Eurocodes.



Vital information for R&D and Innovation policy

The PREDICT project analyses R&D investments in the EU Information and Communication Technology sector. This is a unique source of information for investment on ICT R&D investments in the EU and its main global competitors, and directly supports R&D and Innovation policy.





More resilient banking sector

The JRC contributed to the development of the directive proposal which amends existing European rules on deposit protection through an impact assessment of the proposed changes and of possible criteria to determine individual banks' contributions based on their risk profiles.

Control of major accident hazards

The JRC published a report on the hazard potential of dangerous substances and activities for the Directive on the control of major accident hazards. This work also requires a formal review of past accidents in the JRC's Major Accident Reporting System to help prevent similar accidents in the future.







Responding to crises

GDACS (the Global Disaster Alert and Coordination System) provides near real-time alerts about natural disasters around the world. In addition, the JRC provided support to rescue operations by carrying out a rapid damage assessment based on the analysis of very high resolution satellite imagery.

Nuclear forensics support to Member States

The JRC supports safeguard authorities by providing environmental sampling and measurements techniques that are essential in the detection of non-declared nuclear activities. The JRC 'clean lab' is used for the measurement of uranium enrichment in particles founded in 'swipes' taken by IAEA or Euratom inspectors across the globe.





Training in nuclear security

The JRC operates a European Nuclear Security Training Centre (EUSECTRA). This provides specific training in nuclear security to address the threats of illicit incidents involving nuclear or other radioactive materials.



A Recruiter and Global Player

The JRC works with over 1 000 public and private organisations, institutions and expert groups in more than 250 major networks worldwide:

- Cooperation and partnerships with key organisations
- Support to enlargement
- Training and mobility of researchers
- Access to scientific infrastructures
- Support to European Research Area policies
- Support to standardisation







www.jrc.ec.europa.eu/jobs



Innovation Union and the JRC









Delivering highstandard training to researchers

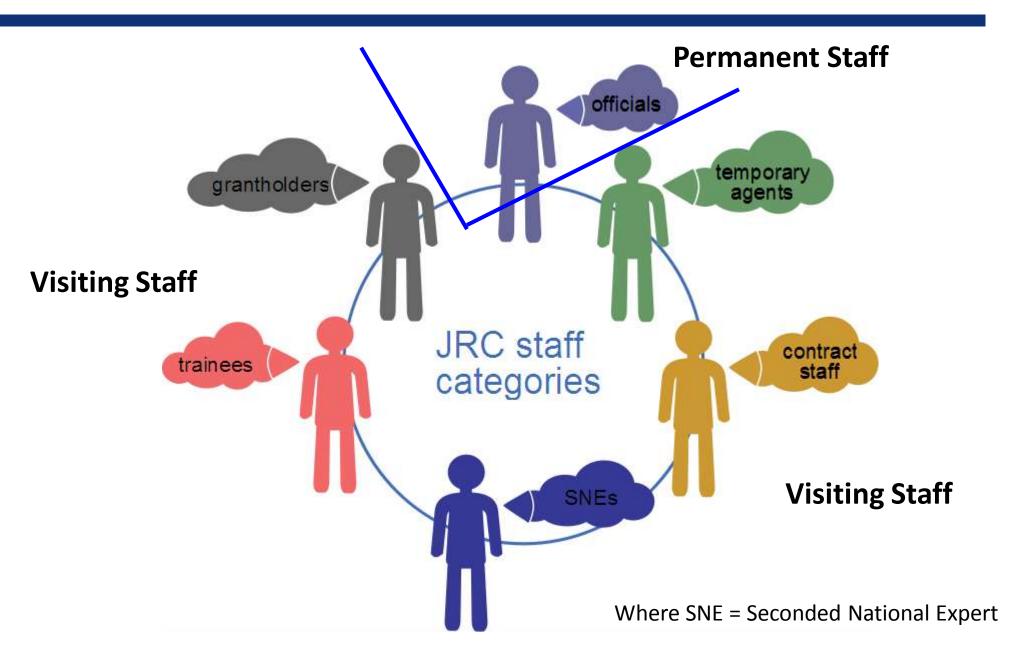
Training
Career
Mobility

Creating attractive careers for researchers

Aiding mobility of researchers



JRC Staff Categories



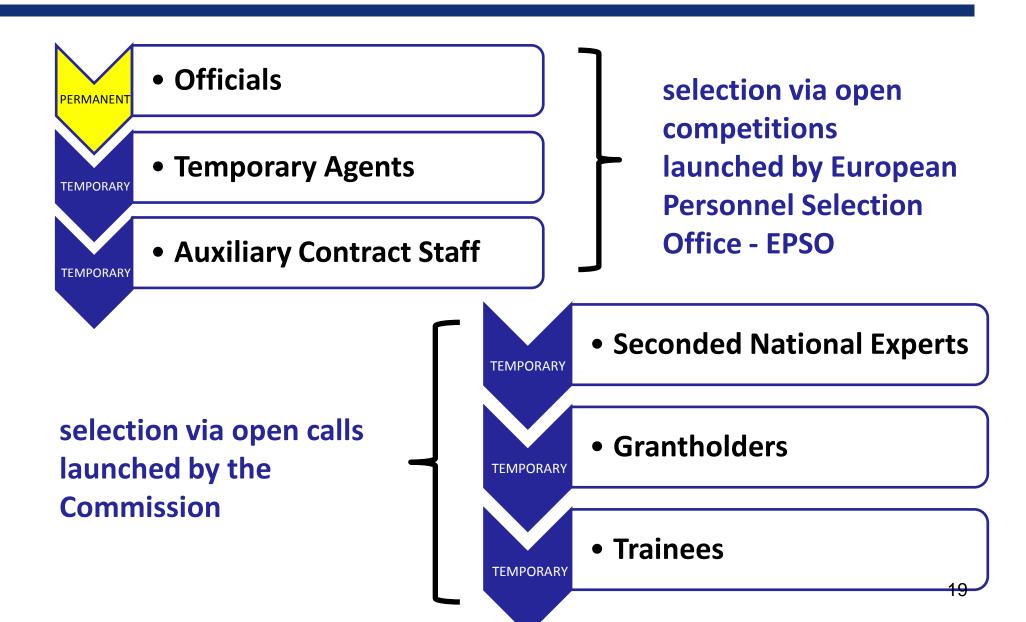


JRC Staff Figures





Selection Procedures





TRAINING



Where EPSO = European Personnel Selection Office

Officials

EU nationals
Permanent position
Scientific/Administrative staff
EPSO call

Temporary Agents

EU nationals
Max. 4+2 years
Scientific staff ONLY
EPSO call

Contract Auxiliary Staff

EU nationals
Max. 3 years
Scientific/Administrative staff
EPSO call

EU nationals
Can be indefinite
Scientific/Administrative staff
EPSO call

Contract Staff (FG I)

Delivering high standard training...

EU and non-EU nationals
Max. 4 years (exceptionally 6)
Scientific/Administrative staff
Via DG HR (if need exists)

Seconded National Experts

EU and non-EU nationals Max. 2-3 years Scientific researchers Open JRC call

Grantholders

EU and non-EU nationals Max. 1 year Scientific researchers Open JRC call

Trainees



Delivering high-standard training to researchers

In existence:

JRC code of practice for research student management, supervision and administration

for trainees and doctorate students (category 20)

Covers:

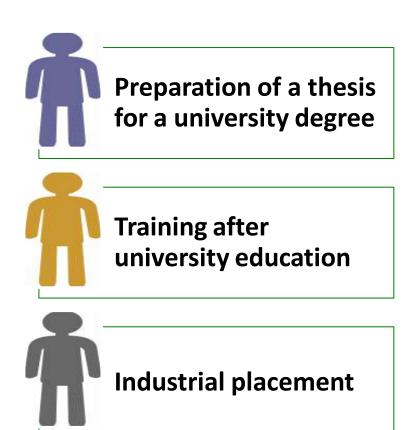
behaviour and ethics

roles and responsibilities of supervisors, managers and research students research training environment supervision research project approval reporting, evaluation and review feedback mechanisms dissemination of research results



Trainees

Contracts provide an opportunity to acquire practical experience and knowledge of the day-to-day workings of the JRC

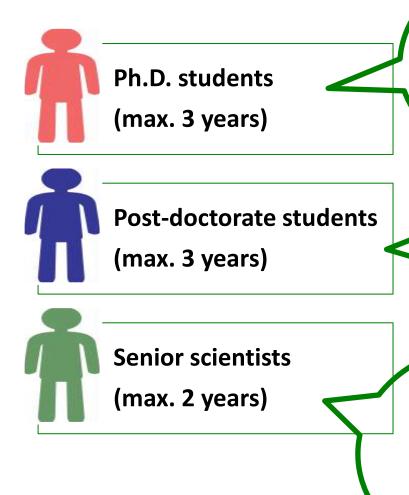


MIN: 3 months and MAX: 12 months



Grantholders

Contracts
aimed at
developing
training, career
development
and mobility
opportunities
for researchers



Requirements: Submission of a proposal for a Ph.D.

Requirements:

Ph.D. or 5 years of research experience

Requirements:

Ph.D. and 10 years of research experience or 15 years of research experience post-degree

Scenario above applies to Geel/Petten/Ispra

For Seville, possibility to extend until project terminated, but Director-General approval required For Karlsruhe, for cat. 20, possibility to extend to 4 years in exceptional situations



Auxiliary Contract Staff (researchers)

Open calls through EPSO

2 researcher function groups (IV, III)



Duration:

-- function groups

(IV, III): 3 years

Function group IV

Administrative, advisory, linguistic and equivalent technical tasks

Function group III

Executive tasks, drafting, accountancy and other equivalent

technical tasks



CAREERS

Function Group IV, III, II

Career in the Commission

Officials

EU nationals

Permanent position

Scientific/Administrative staff EPSO call

Temporary Agents

EU nationals
Max. 4+2 years
Scientific staff ONLY
EPSO call

Contract Auxiliary Staff

EU nationals Max. 3 years Scientific/Administrative staff EPSO call

EU nationals
Can be indefinite
Scientific/Administrative staff
EPSO call

Contract Staff (FG I)

Creating attractive careers...

EU and non-EU nationals
Max. 4 years (exceptionally 6)
Scientific/Administrative staff
Via DG HR (if need exists)

Seconded National Experts

Career contributors

EU and non-EU nationals Max. 2-3 years Scientific researchers Open JRC call

Grantholders

EU and non-EU nationals Max. 1 year Scientific researchers Open JRC call

Trainees



OFFICIALS



Open calls through EPSO

Levels
AD and AST



Research positions

Permanent (upon successful completion of the probationary period)

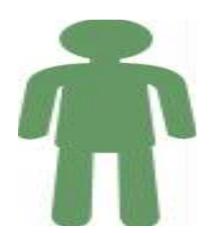


TEMPORARY AGENTS

Open calls through EPSO



Levels
AD and AST



Duration

Max: 4 +2 years

For researchers with expertise that cannot be found either in-house or on the EPSO reserve lists



SECONDED NATIONAL EXPERTS

Calls through Permanent Representations/Diplomatic Missions

National or international civil servants who will work temporarily for the Commission



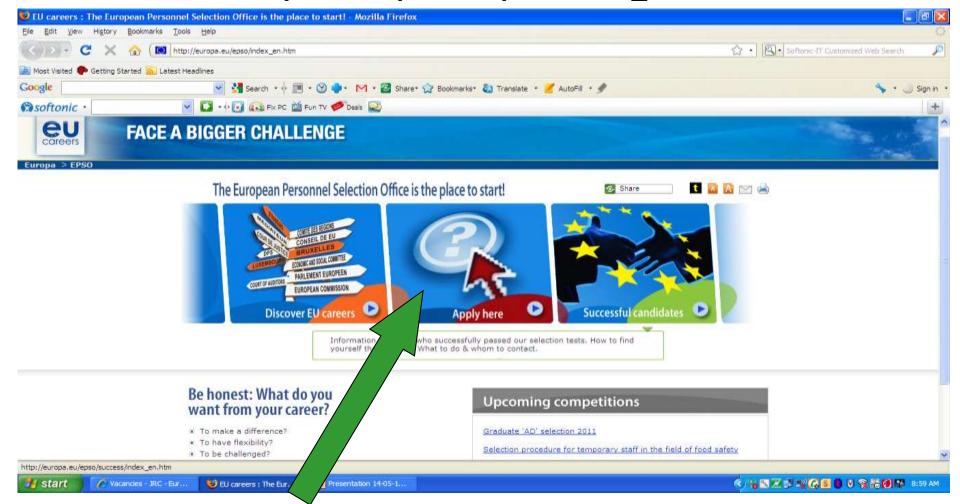
Duration: Not fewer than 6 months and not more than 4 years (exceptionally 6 years)

National of an EU or EFTA Member State or a country undergoing accession negotiations that has a specific agreement with the Commission on staff secondments



To embark on a scientific career: first stop EPSO

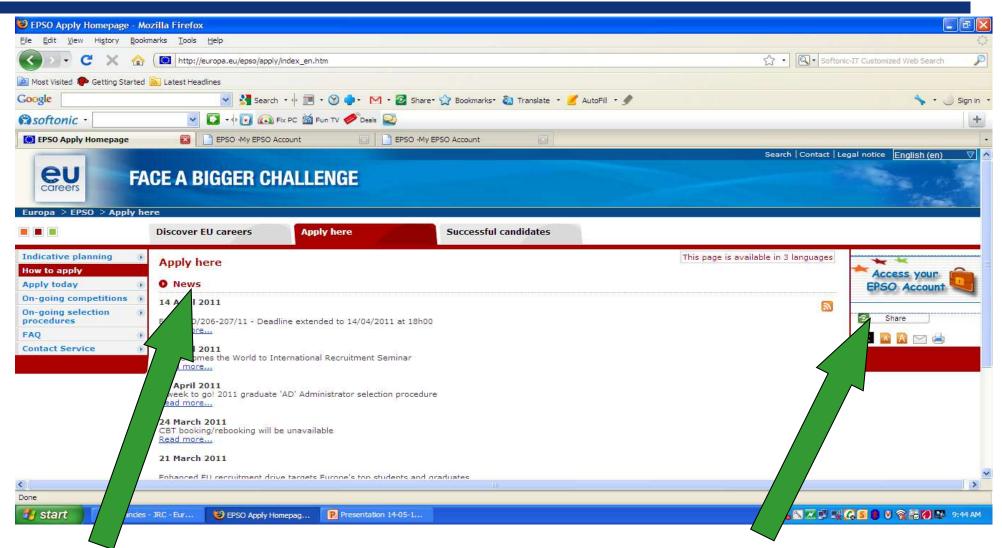
http://europa.eu/epso/index_en.htm







European Personnel Selection Office (EPSO)



2. Apply here

1. Create your EPSO account





How to access 'Vacancies' on the JRC website...

http://ec.europa.eu/dgs/jrc/index.cfm
http://ec.europa.eu/dgs/jrc/index.cfm?id=2030





Jobs - Vacancies at the JRC

http://ec.europa.eu/dgs/jrc/index.cfm?id=2030





Aiding mobility of JRC researchers...

- 1. Effective training: scientific writing techniques, communication skills, language skills...
- 2. IPR awareness entrepreneurship training, spin-offs, patenting...)
- 3. Training supervision for trainees and doctoral students
- 4. Staff exchanges with academia/other Commission DGs
- 5. Possibility of teaching/lecturing (100 hrs./yr.)...
- 6. Possibility of leave from JRC (and reinstatement) intersectoral mobility possible
- 7. Transparency in recruitment procedures (EPSO, JRC and publications on EURAXESS...); presence at job fairs

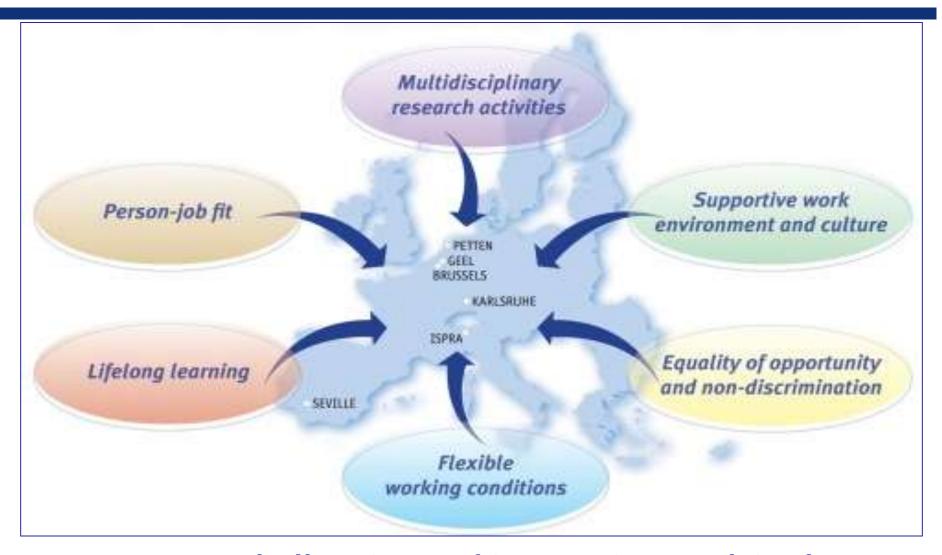


CAREER OPPORTUNITIES





An enriching environment...



to carry out challenging and interesting work in the research field...



LINKS



http://ec.europa.eu/dgs/jrc/index.cfm



http://europa.eu/epso/



http://europa.eu/index_en.htm





http://ec.europa.eu/civil_service/index_en.htm