EUROPEAN COMMISSION
DIRECTORATE-GENERAL HUMAN RESOURCES AND SECURITY
Directorate HR.AMC –Account management Centre
**HR.DDG. AMC 8**

**2018-IPR-G-000-010016** **Tomography**

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| **Position for:**<br><br>Trainee | As the science and knowledge service of the Commission, the mission of Joint Research Centre is to support EU policies with independent evidence throughout the whole policy cycle.<br><br>The JRC is located in 5 Member States (Belgium, Germany, Italy, the Netherlands and Spain). Further information is available at: http://www.jrc.ec.europa.eu<br><br>**Short description of activity:**<br><br>The trainee position is available at the Nuclear Security Unit. The unit focus is on state of the art enabling research, the use of specific technology, development of instruments and methods, delivering technical services and training in the domain of nuclear safeguards, non-proliferation and nuclear security. In this way, the unit supports the verification of international treaties and agreements related to nuclear safeguards and non-proliferation.<br><br>At the center of the unit's activities there are nuclear non-destructive detection methods, process monitoring and containment & surveillance technology and methods.<br><br>These core-activities are complemented with proliferation assessment of new reactor systems, specialist analysis and use of open-source data including satellite imagery analysis, trade data analysis, strategic trade control and monitoring the dual use regulation, and last but not least border monitoring and the design of protocols to be used in the field of detection of nuclear materials outside regulatory control.<br><br>We proposed a temporary position within the GII7 tomography team (GII7 Unit) to support all related activities of tomography from the measurement, projection data acquisition to the image reconstruction passing through projection data acquisition. |

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| | However the candidate should be fully involved in support the image reconstruction modelling using existing codes or new developed codes.<br><br>The candidate will collaborate to the report of the results either via technical reports or via scientific publications in the field of nuclear imaging.<br><br>**Qualifications:**<br><br>**Essential:**<br>• The candidate should be at least a master student (or equivalent) in any scientific field preferably in nuclear or similar.<br><br>• The candidate should be fluent in imaging tomography image reconstruction methods based on analytical methods such as transform based as well as with algebraic method<br><br>**Advantage:**<br><br>In case of several candidates complying with the essential requirements (see above), candidate with nuclear background (radiation detection, no-destructive assay or nuclear fuel cycle) would be preferred<br><br>**For general eligibility requirements, please read the rules governing the traineeship scheme of the JRC:**<br>https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/jrc-trainees |
| **Unit /Directorate** | Unit G.II.7 – Nuclear Security<br>Directorate G – Nuclear Safety and Security<br><br>Further information:<br>https://ec.europa.eu/jrc/en/research-topic/nuclear-safeguards-and-security |
| **Indicative duration**<br><br>**Preferred starting date** | 5 months<br><br>As soon as possible |
| **JRC Site**<br><br>**Country** | Ispra<br><br>Italy |
| **JRC contact details** | **For any technical problems with your application, please contact:**<br>HR-AMC8-RECRUITMENT-TOOLS-SUPPORT@ec.europa.eu |