



Atoms for Peace

الوكالة الدولية للطاقة الذرية
国际原子能机构
International Atomic Energy Agency
Agence Internationale de l'énergie atomique
Международное агентство по атомной энергии
Organismo Internacional de Energía Atómica

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National Liaison Officer

In reply please refer to: RER/1/008
Dial directly to extension: (+43 1) 2600 22329

2013-06-20

Subject: Invitation to a Regional Group Fellowship on Atmospheric Aerosol Measurement and Characterization by Nuclear Analytical Techniques, Athens, Greece, 16 September 2013 - 4 October 2013

Dear National Liaison Officer,

I am pleased to invite you to send nominations of suitable candidates to participate in the above-mentioned group fellowship under the framework of TC Project RER/1/008 – Supporting Air Quality Management. The purpose of the group fellowship and related information are outlined in the attached Prospectus.

For candidates who are selected by the IAEA, the Agency will cover the cost of return international travel from the home country to Athens, Greece, and provide a stipend for the duration of the group fellowship in line with Agency rules and procedures.

Please send duly completed Nomination Form for Fellowships by the latest 5 July 2013. Please note that nominations received after the closing date will not be considered.

The completed nomination forms should be submitted to the IAEA online through the Technical Cooperation Department's InTouch system (<http://intouch.iaea.org>). Should this not be possible, forms may be sent to the Programme Management Officer for this project, Ms Alessia Rodriguez y Baena, through IAEA Official Fax (+43-1-26007) or E-Mail (Official.Mail@iaea.org).

Yours sincerely,

Manase Peter Salema
Director
Division for Europe
Department of Technical Cooperation

Enclosures: Prospectus
Nomination Form

International Atomic Energy Agency

Regional Group Fellowship on Atmospheric Aerosol Measurement and Characterization by Nuclear Analytical Techniques

PROSPECTUS

Project Number & Title:	RER/1/008 - Supporting Air Quality Management
Place (City, Country):	Athens, Greece
Dates:	16 September 2013 – 4 October 2013
Deadline for Nominations:	5 July 2013
Organizers:	The International Atomic Energy Agency (IAEA) in collaboration with the Government of Greece through the Institute of Nuclear Technology - Radiation Protection (INT-RP) of the National Centre of Scientific Research (N.C.S.R.) "Demokritos".
Host Country Organizer:	Mr Kostas Eleftheriadis Environmental Radioactivity Laboratory Institute of Nuclear Technology - Radiation Protection N.C.S.R. "Demokritos" Ag. Paraskevi Athens, Attiki 15310 Greece phone +30 2106503008 fax +30 2106503050 email: elefther@ipta.demokritos.gr
Language:	English
Purpose:	The purpose of the group fellowship training is to provide fellows with on-the job experience, advanced knowledge and practical exercises in atmospheric aerosol measurement and characterization by Nuclear Analytical Techniques (NATs), as well on techniques for data interpretation (identification of sources of emission and transport of pollutants).
Expected Output(s):	The expected outputs of the group fellowship are: <ul style="list-style-type: none">• Improved on-the-job experience to measure and characterise atmospheric aerosol using Nuclear Analytical Techniques NATs in support air quality management.

- Increased technical skills to perform sampling of Air Particulate Matter for atmospheric aerosol measurements;
- Increased knowledge in quality assurance and quality control (QA/QC) procedures, including the measurements of calibration samples and certified Reference Materials, as well as blank filters.
- Increased ability to handle and interpret data, using modern, specialized software for source identification and transport of pollutants.

Scope and Nature:

The group fellowship will have an on-the-job training nature and will include presentations, lectures and practical demonstrations covering topics related to methods and tools used for the measurement and characterisation of atmospheric aerosol using NATs. Analytic techniques will cover X-ray fluorescence (XRF) spectroscopy and Ion Beam Analysis (IBA) based techniques, including Proton Induced X-ray Emission (PIXE), Proton Induced Gamma Emission (PIGE) and Rutherford Backscattering (RBS). Special emphasis will be placed on QA/QC procedures and data validation, as well as *in situ* sampling exercises. Some interpretation methods for source apportionment and pollutants transport will be also presented.

It is expected that the fellows will present their own experience (*ca.* 5 min each) on atmospheric aerosol measurement and its characterization using of NATs.

Background Information:

Previous TC projects (RER/8/009 “Air Pollution Monitoring in the Mediterranean Region”, 2005-2008, and RER/2/005 “Characterizing Seasonal Variations in Elemental Particulate Matter Concentrations in European Urban and Rural Areas under Different Climatic Conditions, 2009-2011) focused on characterization of PM10 fraction in air particulate matter collected at different sites.

The main achievements of these projects thus far are: i) establishment of a network for air monitoring and design of remedial strategies with up-to- date data analyses and proficiency tests where monitoring showed poor air quality and ii) sampling and meteorological stations for the quantitative and qualitative monitoring of Atmospheric Particulate Matter (APM) established in some ten TCEU Member States. Building on such results, project RER/1/008 was designed to increase knowledge about the status of atmospheric pollution in the TC Europe Region by broadening access to nuclear analytical techniques and extend their applicability range to cover also PM 2.5, in line with recent requirements of the European Standards for Air Quality.

To this end, this group fellowship will mark a step forward towards improving regional capabilities to measure atmospheric aerosol and characterize by NATs.

Participation:

The group fellowship is open to 10 fellows.

The target countries are those having expressed interest in this activity during the 2012 RER/1/008 Workshop in Sofia, Bulgaria: Albania, Bosnia and Herzegovina, Croatia, Portugal, Republic of Moldova, Serbia, and The former Yugoslav Republic of Macedonia.

Participants' Qualifications: The fellows should be specialists in chemistry, physics, or engineering working in nuclear research institutions actively involved in projects related to the applications of nuclear analytical techniques (NATs), and associated instrumentation, for the measurement and characterization of Atmospheric Aerosol. Applications from qualified *Junior Professionals* are encouraged.

Nomination Procedure: Nominations should be submitted to the IAEA online through the Technical Cooperation Department's InTouch system (<http://intouch.iaea.org>). Should this not be possible, nominations may be submitted on the standard IAEA Application Form for Fellowship (available on the IAEA website: <http://www.iaea.org/>). Completed forms should be endorsed by relevant national authorities and returned to the Agency through the official channels, i.e. the designated National Liaison Office for IAEA Matters.

The completed nomination forms should be sent to the Programme Management Officer for this project, Ms Alessia Rodriguez y Baena, through IAEA Official Fax (+43-1-26007) or E-Mail (Official.Mail@iaea.org), not later than 5 July 2013. Nominations received after this date or which have not been routed through the established official channels cannot be considered.

Administrative and Financial Arrangements: Nominating Governments will be informed in due course of the names of the candidates who have been selected and will, at that time, be given full details of the procedures to be followed with regard to administrative and financial matters.

Selected fellows from countries eligible to receive technical assistance will be provided with a round trip economy class air ticket from their home countries to Athens, Greece, and a stipend sufficient to cover the cost of their accommodation, food, and minor incidentals. Shipment of accumulated group fellowship materials to the fellows' home countries is not the responsibility of the IAEA.

The organizers of the group fellowship do not accept liability for the payment of any cost or compensation that may arise from damage to or loss of personal property, or from illness, injury, disability or death of a fellow while he/she is travelling to and from or attending the group fellowship, and it is clearly understood that each Government, in nominating fellows, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.