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International Atomic Energy Agency

Agence internationale de l'énergie atomique

Международное агентство по атомной энергии

Organismo Internacional de Energía Atómica

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2016-07-05

**Subject:** Invitation to a Regional Training Course on Advanced Methods for Air Pollution Source Apportionment, Athens, Greece, from 17-21 October 2016

Dear National Liaison Officer,

I am pleased to invite you to send nominations of suitable candidates to participate in the above-mentioned training course under the framework of TC Project RER/1/015 – Apportioning Air Pollution Sources on a Regional Scale. The purpose of the training course and related information are outlined in the attached Prospectus.

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

Please submit nominations to the IAEA online through the Technical Cooperation Department's InTouch system (<http://intouch.iaea.org>). Only if this is not possible, nominations may be submitted on the Nomination Form for Training Course available on the IAEA website: <http://www.iaea.org/technicalcooperation/How-to-take-part/train-course/index.html>. Completed forms should be endorsed by relevant national authorities and sent to the Programme Management Officer for this project, Mr Asif Salahuddin (IAEA Official Fax: +43-1-26007 or E-Mail [Official.Mail@iaea.org](mailto:Official.Mail@iaea.org)), through the official channels, i.e. the designated National Liaison Office for IAEA matters, not later than **5 August 2016**.

Yours sincerely,

Martin Krause

Director

Division for Europe

Department of Technical Cooperation

Enclosure: Prospectus

# International Atomic Energy Agency

## Regional Training Course on Advanced Methods for Air Pollution Source Apportionment

### PROSPECTUS

- Project Number & Title:** RER/1/015 - Apportioning Air Pollution Sources on a Regional Scale
- Place:** Athens, Greece
- Date:** 17 - 21 October 2016
- Deadline for nominations:** 5 August 2016
- Organizers:** The International Atomic Energy Agency (IAEA) in collaboration with the Government of Greece through the National Center for Scientific Research "Demokritos", Greece and JRC European Centre, Italy
- Host Country Organizer:** Mr Konstantinos Eleftheriadis  
National Center for Scientific Research "Demokritos"  
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EMail: [elefther@ipta.demokritos.gr](mailto:elefther@ipta.demokritos.gr)
- Language:** The language of instruction will be English.
- Purpose:** The purpose of the regional training course is to provide solid and comprehensive knowledge on advanced statistical tools for air pollution source apportionment. It aims to build and establish baseline capacity for all counterparts in order to be able to process and interpret independently the national datasets on particulate matter analyses.
- Expected Output(s):**
- Scope and Nature:** The training course will include theoretical lectures to introduce the participants to the methodology of basic source apportionment tools. Emphasis will be given during the course on practical aspects related to the application of the source apportionment tools to develop hands on expertise to the participants. For this purpose, the participants will be trained in the following topics: assessment of PM data quality, calculation of the uncertainties, preparation of database, identification of outliers, run of the source apportionment model, to identify the tracers of sources and the pollution sources. The course will be organized in cooperation with Joint Research Centre in the framework of the FAIRMODE (Forum for Air quality Modelling) project.
- Background Information:** Environmental pollution monitoring is performed by Environmental Agencies. National regulations and European Directives require lowering pollution level and a good air quality. Since, there is unequivocal association between atmospheric particles and human health, European and national regulations are requiring lower PM limit concentrations and, besides the measurement of PM10,

they are imposing the control of new parameters such as PM<sub>2.5</sub> and some element concentrations in particles. In addition, there is still lack of information about the atmospheric aerosol physical and chemical characteristics principally in the Central Europe; longer database on atmospheric pollutants, namely on air particles and their constituents, are needed in order to support air quality management and research work. On the other hand, air pollution is an issue not limited to a particular location but common to all of Europe. A regional approach is needed in order to standardize and harmonize analytical procedures to study local and regional pollution, because a variety of sources with different contributions may be active at each region. Moreover, due to trans-boundary air mass transport, air pollution is a regional (or even global) problem and requires coordinated efforts and involvement of many countries. Therefore, it is crucial that the analysis and characterization of air pollution essential for monitoring and regulating of air pollution, is performed at a regional scale.

In conclusion, the RER/1/015 aims to generate systematic high quality data on APM elemental contents to be further utilised in support of identification and apportionment of major sources of air pollution at regional scale. More specifically, it is expected to identify source profiles and determine source contributions, whereas the air quality dependence on meteorological conditions will be studied in participating Member States.

**Participation:**

The training course is open to 30 participants from European Member States participating in the project RER/1/015.

Member of the National Project Team in the NPC's absence. Each Member State may submit one (1) nomination only. Additional nominees will be accepted at no cost basis for the IAEA in the framework of JRC-FAIRMODE project.

**Participants' Qualifications:**

Candidates should be members of the National teams who are beginners or without high expertise in source apportionment methods. It is highly recommended that the candidates would acquire an academic background at least equivalent to a Bachelor's degree in Physics, Chemistry and Engineering or higher (MSc, PhD) with experience in particulate data (PM) analysis and evaluation. The candidates should be also capable of freely expressing themselves in English and following discussions and should bring together their own laptop for use during hands on practical sessions.

**Nomination Procedure**

Please submit nominations to the IAEA online through the Technical Cooperation Department's InTouch system (<http://intouch.iaea.org>). Only if this is not possible, nominations may be submitted on the Nomination Form for Training Course available on the IAEA website: <http://www.iaea.org/technicalcooperation/How-to-take-part/train-course/index.html>.

Completed forms should be endorsed by relevant national authorities and sent to the Programme Management Officer for this project, Mr Asif Salahuddin (IAEA Official Fax: +43-1-26007 or E-Mail [Official.Mail@iaea.org](mailto:Official.Mail@iaea.org)), through the official channels, i.e. the designated National Liaison Office for IAEA matters, not later than **5 August 2016**

**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 participants 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 training course materials to the participants' home countries is not the responsibility of the IAEA.

The organizers of the training course 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 participant while he/she is travelling to and from or attending the training course, and it is clearly understood that each Government, in nominating participants, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.