

CURRICULUM VITAE ABREVIADO (CVA)

IMPORTANT – The Curriculum Vitae **cannot exceed 4 pages**. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

First name	José Andrés		
Family name	Alastuey Urós		
Gender (*)	Male	Birth date (dd/mm/yyyy)	15/12/1966
Social Security, Passport, ID number	18164195Z		
e-mail	andres.alastuey@idaea.csic.es	URL Web	
Open Researcher and Contributor ID (ORCID) (*)	0000-0002-5453-5495		

(*) Mandatory

A.1. Current position

Position	Profesor de Investigación / Research Professor		
Initial date	16/07/2012		
Institution	Consejo Superior de Investigaciones Científicas		
Department/Center	Dep.Geosciences	Institute of Environmental Assessment and Water Research (IDAEA)	
Country	Spain	Teleph. number	(+34)934006124 (*34)607224681
Key words	Air pollution; Atmospheric aerosols; Geochemistry		

A.2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
2007-2012	Investigador Científico / CSIC / Spain / Promotion
2000-2007	Científico Titular / CSIC / Spain / Promotion

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD Geology	Universidad de Barcelona / Spain	1994
CC Geology	Universidad de Zaragoza / Spain	1989

(Include all the necessary rows)

Part B. CV SUMMARY (max. 5000 characters, including spaces)

Bachelor in Geology from the University of Zaragoza (1989) and Doctor in Geology from the University of Barcelona (1994), I am currently a Research Professor at IDAEA –CSIC. I was Deputy Director of IDAEA from 2012 until May 2018. I have more than 25 years of experience on environmental geochemistry, namely on atmospheric pollution. My research career has been developed on the lines of environmental geochemistry and natural resources and recycling of industrial waste. In recent years, it has focused on the geochemistry of atmospheric aerosols, aerosols in urban, regional and remote environments, because of its impact on air quality, human and health radiative balance. In 1994 I started my research in this line of work during my postdoctoral stay at the Laboratory of Stable Isotopes (NIGL-NERC, Keyworth, UK), where I applied isotopic techniques for the study of atmospheric samples. Currently, I am Research Professor in the Institute of Environmental Assessment and Water research (IDAEA) form CSIC, and I'm co-leading, together with Professor Xavier Querol, the Environmental Geochemistry and Atmospheric Research group (EGAR, www.idaea.csic.es/egar). EGAR, consisting of some 50 people, including technicians and researchers, is a reference internationally in the application of geochemical methods to the characterization of atmospheric particulate material. We have developed an analytical



methodology that allows the total characterization of atmospheric aerosols, and that allows to make models for identification of sources and the study of physical-chemical reactions between pollutants.

I acted as advisor for air quality of several important city councils, regional governments, the Spanish Ministry of Environment. I actively participate at the EMEP (program for monitoring and evaluation of the long-range transmission of air pollutants in Europe) Task Force on Measurements and Modelling.

I have participated/coordinated more than 50 research projects and contracts sponsored by the EU, other Spanish or international research bodies, the Ministry of the Environment and other private companies. The results obtained in the framework of these projects have been published in almost 400 scientific publications, with more than 29400 citations and an h-index = 92 (Scopus), and in a large number of presentations at congresses and meetings, including more than 60 invited conferences (more than 20 as a speaker).

I am the scientist responsible of the EGAR network of monitoring stations for long term and intensive measurements (online/offline) of atmospheric aerosols and gaseous precursors. This network is composed of urban background stations (Barcelona), regional background (Montseny) and remote background (Montsec). These sites integrating the network are equipped with a similar set of instruments, varying in accordance to the research objectives at each site. I led de participation of IDAEA CSIC in the ACTRIS RI (Aerosols, Clouds, and Trace gases Research InfraStructure) network).

Four research periods recognized (Sexenios); last year 2016. I have directed 13 Doctoral Theses, already defended, and I am directing 3.

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (see instructions)

1. Yus-Díez, J., Via, M., Alastuey, A., et al., & Pandolfi, M. **(3/11)**. 2022. Absorption enhancement of black carbon particles in a Mediterranean city and countryside: effect of particulate matter chemistry, ageing and trend analysis, *Atmos. Chem. Phys.*, 22, 8439–8456.
2. Via, M., Minguillón, M. C., Reche, C., Querol, X., and Alastuey, A. 2021. Increase in secondary organic aerosol in an urban environment, *Atmos. Chem. Phys.*, 21, 8323–8339.
3. Rivas I, Vicens L, Basagaña X, et al., & Kelly FJ. **(8/14)**. 2021. Associations between sources of particle number and mortality in four European cities, *Environment International*, Vol. 155, 106662, <https://doi.org/10.1016/j.envint.2021.106662>.
4. in 't Veld, M., Alastuey, A., Pandolfi, M., et al. & Querol, X. **(2/10)**. 2021. Compositional changes of PM_{2.5} in NE Spain during 2009–2018: A trend analysis of the chemical composition and source apportionment. *Science of the Total Environment*, 795, art. no. 148728, DOI: 10.1016/j.scitotenv.2021.148728.
5. Karanasiou, A., Alastuey, A., Amato, F., et al, & Querol, X. **(2/11)**. 2021. Short-term health effects from outdoor exposure to biomass burning emissions: A review. *Science of The Total Environment*, 781, 146739.
6. Yus-Díez, J., Ealo, M., Pandolfi, M., Perez, N., Titos, G., Močnik, G., Querol, X., and Alastuey, A. 2021. Aircraft vertical profiles during summertime regional and Saharan dust scenarios over the north-western Mediterranean basin: aerosol optical and physical properties, *Atmos. Chem. Phys.*, 21, 431–455.
7. Carnerero, C., Rivas, I., Reche, C., Pérez, N., Alastuey, A., Querol, X. 2021. Trends in primary and secondary particle number concentrations in urban and regional environments in NE Spain. *Atmospheric Environment*, 244, 1 January 2021, Article number 117982.
8. Karanasiou A, Panteliadis P, Perez N, et al., & Alastuey A. 10/10. 2020. Evaluation of the Semi-Continuous OCEC analyzer performance with the EUSAAR2 protocol. *Science of the Total Environment*, 747 pp: 141266.
9. Tobías A, Carnerero C, Reche C, Massagué J, Via M, Minguillón MC, Alastuey A, Querol X. 2020. Changes in air quality during the lockdown in Barcelona (Spain) one month into the SARS-CoV-2 epidemic. *Science of The Total Environment*, 726, 138540, ISSN 0048-9697.
10. Alastuey, A., Querol, X., Aas, W., et al., & Yttri, K. E. **(1/29)** 2016. Geochemistry of PM₁₀ over Europe during the EMEP intensive measurement periods in summer 2012 and winter 2013, *Atmos. Chem. Phys.*, 16(10), 6107–6129, doi:doi:10.5194/acp-16-6107-2016.



C.2. Congress, indicating the modality of their participation (invited conference, oral presentation, poster)

1. Alastuey, Andrés. Repercusión medioambiental de las granjas industriales. El impacto de nuestra vida en el medio ambiente y la calidad del aire. 29 Reunión de Invierno Conjunta Áreas SEPAR. Tarragona del 4 al 5 de noviembre de 2022. Invited talk.
2. Alastuey, Andrés. Mediciones de nuevos contaminantes de calidad del aire, Conferencia en Gestion de calidad del aire en Castellon Seminario sobre la calidad del aire en España. 1-2 de junio de 2022. Benicàssim, Castellón. Invited talk.
3. Alastuey, Andrés. Contaminación atmosférica y gestión de la calidad del aire: medida de nuevos contaminantes. Inauguración del del curso 2022-2023 del Máster Universitario de geofísica y meteorología de la Universidad de Granada. Charla Invitada II. 3 de octubre de 2022. Invited talk.
4. Alastuey, A., Petäjä, T., Querol, X., Moreno, T., D'onofrio, C., Saltiko, E. AUL (ICOS Cities) and RI-UR BANS connecting ICOS and ACTRIS in the urban environments. ff. 1st ACTRIS Science Conference 2022. Invited talk.
5. Alastuey A. Long Term measurements of aerosols in the Mediterranean. Izaña: Cien años observando la atmosfera. Centro de Investigacion Atmosferica de Izaña, AEMET. Santa Cruz de Tenerife. 07/04/2016. Invited talk.
6. Alastuey A, Querol X, Lucarelli F., et al. **(1/20)**. 2013. EMEP intensive measurements on mineral dust in PM10: preliminary results in summer 2012. EMEP Convention on Long-Range Transboundary Air Pollution. EMEP Task Force on Measurements and Modelling. 14th meeting. Zagreb (Croatia). 6/05/2013. Invited talk.
7. Alastuey A. Geochemistry of atmospheric particulate matter: from remote to urban environments. 14th EuCheMS International Conference on Chemistry and the Environment. ICCE. Barcelona. Junio 2013. Keynote.
8. Alastuey A., Querol X., Viana M.M., et al. **(1/14)**. Trace metals in PM: Spain. EMEP Convention on Long-Range Transboundary Air Pollution. EMEP Task Force on Measurements and Modelling. 12th meeting. Zurich. 11-13/05/2011. Invited Talk.

C.3. Research projects, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

1. FOCI Non-CO2 Forcers and their Climate, Weather, Air Quality and Health Impacts, H2020- HORIZON-CL5-2021-D1-01 (Climate sciences and responses). Coordinator: Charles Univesrity, PI CSIC: Marco Pandolfi. Total budget 8.000.000 €, budget CSIC 430.000 €. Duration October 2022-September 2026. **Researcher**.
2. WeBaSOOP “Research Reinforcing in the Western Balkans in Offline and Online Monitoring and Source Identification of Atmospheric Particles”, HORIZON-WIDERA-2021-ACCESS-02, (Twinning Western Balkans) Project 101060170. Coordinator: VINCA, **PI CSIC:** Andrés Alastuey. Total budget 1.492.000 €, budget CSIC 222.000 €. Dates: 07/2022-06/ 2025.
3. FIRE-RES “Innovative technologies and socio-ecological-economic solutions for fire resilient territories in Europe”, H2020-LC-GD-2020-3, LC-GD-1-1-2020: LC-GD-1-1-2020-1. Coordinator: CTFC, PI CSIC: Mar Viana. Total budget 19.896.390€, budget CSIC 573.750€. Duration December 2021-November 2025. **Researcher**.
4. RI-URBANS - Research Infrastructures Services Reinforcing Air Quality Monitoring Capacities in European Urban & Industrial AreaS (RI-URBANS). H2020-LC-GD-2020. LC-GD-9-1-2020— RIA Project: 101036245. Coordinator: Xavier Querol (CSIC). Budget total: 8.000.000 euros; Budget CSIC: 1.042.000 euros. Dates: 01/10/2021 -30/09/2025. **WP1 PI**.
5. Nanoparticle emissions from the transport sector: health and policy impacts (nPETS). H2020, Research and Innovation. Coordinator: KTH, Sweden, PI CSIC: Fulvio Amato. Budget total: 5.351.000 €. Budget CSIC: 874.811 €. Dates: 01/06/2021 – 30/05/2024. **Researcher**.
6. Cambios en la composición de los aerosoles y sus implicaciones en calidad del aire y clima en el NE de España (CAIAC). PID2019-108990RB-I00. MICIN. Programa estatal de investigación, desarrollo e innovación orientada a los retos de la sociedad. PIs: Xavier Querol, Marco Pandolfi (IDÆA-CSIC). Dates: 2020 - 2023. Amount: 284.350,00 €. **Researcher**.
7. ATMO-ACCESS - Solutions for Sustainable Access to Atmospheric Research Facilities. H2020-INFRADEV-2018-2020 (Development and long-term sustainability of new pan-European research infrastructures). INFRAIA-03-2020 — RIA Project: 101008004.



Coordinator: Paolo Laj CNRS. Dates: 01/04/2021 - 31/03/2025. TOTAL amount: 14.999.948 euros; Amount CSIC: 63988 euros. **PI CSIC: Andrés Alastuey**.

8. ACTRIS IMP Aerosols, Clouds, and Trace gases Research Implementation project - contract 87115. Funding: European Commission. H2020-INFRADEV-2018-2020 (Development and long-term sustainability of new pan-European research infrastructures). Topic: INFRADEV-03-2018-2019. Coordinator: ILMATIETEEEN LAITOS. Dates: 01/01/2020-31/12/2023. Amount: **PI CSIC: Andrés Alastuey**.

9. Infraestructura para la observación de aerosoles atmosféricos: equipos para la caracterización química de aerosoles con alta resolución temporal y con resolución granulométrica. Entidad financiadora: MCIU. Ref: EQC2018-004598-P/ Fondos FEDER. Convocatoria de adquisición de equipamiento científico técnico. Dates: 2018-2019. Amount: 179.277,92 euros. **PI: Andrés Alastuey**.

10. High ozone, ultrafine particles and secondary aerosol episodes in urban and regional backgrounds in NE Spain (HOUSE). CGL2016-78594-R. Funding MITECO. Programa estatal de investigación, desarrollo e innovación orientada a los retos de la sociedad- **PIs:** Xavier Querol, **Andrés Alastuey** (IDÆA-CSIC). Dates: 2016 - 2019. Amount: 322.000,00 €.

C.4. Contracts, technological or transfer merits, Include patents and other industrial or intellectual property activities (contracts, licenses, agreements, etc.) in which you have collaborated. Indicate: a) the order of signature of authors; b) reference; c) title; d) priority countries; e) date; f) Entity and companies that exploit the patent or similar information, if any

1. Monitorización de la composición química de los aerosoles atmosféricos en el marco del programa de vigilancia atmosférica global (VAG) para el centro de investigación atmosférica de Izaña. Contrato de servicio con la administración. Agencia Estatal de Meteorología (AEMET). Dates: 01/2023 - 12/2026. **PI: Andrés Alastuey** (CSIC). Amount: 372.360,00 €.

2. "Identificación de fuentes contaminantes atmosféricas en diferentes zonas de Catalunya. PTOP-2021-33 -Type of contract: Contrato con la administración. Apoyo Tecnológico. Funding body / contractor: Direcció General de Qualitat Ambiental i Canvi Climàtic, Generalitat de Catalunya. Dates: 2021- 2022. **PIs:** X. Querol / **A. Alastuey** (CSIC). Amount: 240.000 €.

3. Service contract N° ECMWF/COPERNICUS/2019/CAMS_21a_CNRS-IGE/ Funding body / contractor: Centre National De La Recherche Scientifique (CNRS). Dates: 02/2020 - 12/2021. **PI: Andrés Alastuey** (CSIC). Amount: 20.000 €.

4. Estudio de contribución de las emisiones atmosféricas de la planta de valorización energética de Las Lomas a la contaminación detectada en las proximidades del Parque Tecnológico de Valdemingómez. Contrato: Apoyo Tecnológico. Ayuntamiento de Madrid. Dates: 02/09/2019 - 01/03/2021. **PI: Andrés Alastuey** (CSIC). Amount: 240.427,00 €.

5. Detección de episodios naturales de aportes transfronterizos de partículas y otras fuentes de contaminación de material particulado, y de formación de ozono troposférico. Funding body / Contractor: Ministerio de Agricultura y Pesca, Alimentación y Medio Ambiente (MAPAMA), Type of contract: Encargo del MAPAMA al CSIC. Expediente N°: 17CAES010. Dates: 2018-2021. **PIs:** Xavier Querol / **Andrés Alastuey** (CSIC). Amount: 551.634,27 €.

6. Elemental analysis of PM10 and PM2.5 filter samples by ICP-AES and ICP MS. Funding body / contractor: "Swiss Confederation" represented by Federal Office for the Environment (FOEN) 3003 Berne (Principal). Dates: June 2018-November 2019. **PI: Andrés Alastuey** (CSIC). Total amount: 100.000 €.

7. Analysis of aerosol particles obtained by using instruments provided by the Company". Funding body / contractor: AEROSOL D.O.O. (SI-1000 Ljubljana). Dates: December 2018-July 2020. **PI: Andrés Alastuey** (CSIC). Amount: 83.853 €.

8. Monitorización de la composición química de los aerosoles atmosféricos en el marco del programa de vigilancia atmosférica global (VAG) del Centro de Investigación atmosférica de Izaña. Encomienda de Gestión. Funding body / contractor: Agencia Estatal de Meteorología (AEMET). Dates: 2015- 2018. **PIs:** X. Querol / **A. Alastuey** (CSIC). Amount: 222.222 €.