



## Europass Curriculum Vitae

### Personal information

First name(s) / Surname(s)

Address(es)

Telephone(s)

E-mail

Nationality

Date of birth

Gender

**Simone Casadei**

via Galileo Galilei 1, 20097 San Donato Milanese - Milan, Italy

+39 02 51604249

simone.casadei@mi.camcom.it

italian

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### Occupational field

**Automotive emissions research engineer**

#### Work experience

Dates

From May 2009 up to now

Occupation or position held

Research engineer – **Head of the Mobile Sources Sector of the Emissions Laboratory**

Main activities and responsibilities

The activity is mainly related to research and experimentation (institutional or commercial) to evaluate the influence on cars and on light duty vehicles exhaust emissions (regulated and unregulated pollutants, greenhouse gases) of the fuel characteristics (with particular reference to innovative and bio-fuels) and of the application of devices and fuel additives aimed to reduce pollution.

Editor of La Rivista dei Combustibili e dell'Industria Chimica (ISSN 1972-0122)

Name and address of employer

Innovhub – Stazioni Sperimentali per l'Industria, Area Stazione Sperimentale per i Combustibili (fuels research institute), Viale Galileo Galilei, 1 – San Donato Milanese, Milan, Italy  
Tel.: +39 02 51604249 – Fax +39 02 514286 – E-mail [simone.casadei@mi.camcom.it](mailto:simone.casadei@mi.camcom.it)  
Website: <http://www.innovhub-ssi.it/>

Type of business or sector

Transport emissions

Dates

From November 2005 to December 2008

Occupation or position held

Consultant – Air quality and meteorology researcher

Main activities and responsibilities

ECOPASS (Milan Pollution Charge) monitoring: air quality data, meteorological and environmental modeling to produce reporting.

Support to air pollutant dispersion models development and management.

Air quality daily monitoring and reporting, meteorological and climatic analysis.

Name and address of employer

AMAT (Agenzia Mobilità Ambiente e Territorio s.r.l.) Via Grazia Deledda 9/A, Milan, Italy  
Tel.: +39 02 88465981 – Fax +39 02 88467349 – E-mail [info@amat-mi.it](mailto:info@amat-mi.it)  
Website: <http://www.amat-mi.it>

Type of business or sector

Air quality and meteorology

Dates

From September 2004 to September 2005

Occupation or position held

Temporary Research Fellow

Main activities and responsibilities

Research topics: air quality and its correlation with meteorology

Air pollution and environmental engineering lectures, thesis correlator

Name and address of employer

Politecnico di Milano – Dipartimento I.I.A.R. (Dept. of Environmental, Hydraulic, Infrastructures and Surveying Engineering)  
Piazza Leonardo da Vinci, 32 20133 Milan, Italy  
Tel.: +39 02 23996400 – Fax +39 02 23996499 – E-mail [pecdiar@cert.polimi.it](mailto:pecdiar@cert.polimi.it)  
Website: <http://www.diar.polimi.it>

Type of business or sector

Air quality and meteorology

From 2007 up to now

Founder and member of the Scientific Committee of [www.climalteranti.it](http://www.climalteranti.it)  
A website / blog for training and discussion on the topic of climate change, created to allow a debate on climate policies decided (or not decided) in the Italian context.  
The site would also serve as a point of reference for the retrieval of information, documents and news about climate change in general.

## Education and Training

Dates	San Donato Milanese, Milan (Italy), September 21st, 2015
Title of qualification awarded	Certificate of participation
Principal subjects/occupational skills covered	Norma UNI EN ISO17043: requisiti generali competenza degli organizzatori di circuiti interlaboratorio
Name and type of organisation providing education and training	Innovhub-SSi, Special Agency of the Milan Chamber of Commerce
Dates	Milan (Italy), November 17th, 2014
Title of qualification awarded	Certificate of participation
Principal subjects/occupational skills covered	"HORIZON 2020 il nuovo programma quadro di finanziamento per la ricerca e l'innovazione: come scrivere una proposta di successo"
Name and type of organisation providing education and training	National Contact Point APRE. Innovhub-SSi, Special Agency of the Milan Chamber of Commerce
Dates	Milan (Italy), October 30th, 2014
Title of qualification awarded	Certificate of participation
Principal subjects/occupational skills covered	"Greenovate! Europe Training Academy session: 'Leading Exploitation in European Projects: A Step-by-Step Approach'"
Name and type of organisation providing education and training	Renewable Energy House, Brussels.
Dates	Milan, July 5th, 12th, 19th, 2013
Title of qualification awarded	Certificate of participation
Principal subjects/occupational skills covered	Business English - International Meetings & Negotiations
Name and type of organisation providing education and training	Promos, Special Agency of the Milan Chamber of Commerce
Dates	Leeds, May 17-18, 2011
Title of qualification awarded	Certificate of participation
Principal subjects/occupational skills covered	Diesel Particulates and NOx emission – Automotive engineering short courses
Name and type of organisation providing education and training	University of Leeds, UK, and the Centre for Diesel Research, University of Minnesota, U.S.A.
Dates	Milan, October 11-13, 2006
Title of qualification awarded	Certificate of participation
Principal subjects/occupational skills covered	60° Updating Course in Environmental Engineering "The Particulate matter in the atmosphere"
Name and type of organisation providing education and training	Politecnico di Milano, Italy

Dates Milan, May, 2004  
 Title of qualification awarded Qualification  
 Principal subjects/occupational skills covered Qualified to practice as an Environmental Engineer  
 Name and type of organisation providing education and training Politecnico di Milano, Italy

Dates Milan, April 20, 2004  
 Title of qualification awarded University degree. Environmental Engineering M.E. (89/100)  
 Principal subjects/occupational skills covered Final Thesis: "Fine particles, correlated meteorological and air quality parameters in the Milan urban area"  
 Name and type of organisation providing education and training Politecnico di Milano, Italy

Dates Milan, 1993 - 1998  
 Title of qualification awarded Diploma (60/60)  
 Principal subjects/occupational skills covered High school, Scientific studies  
 Name and type of organisation providing education and training Liceo Scientifico Vittorio Veneto

**Personal skills and competences**

Mother tongue(s)

**Italian**

Other language(s)

**English, French, Spanish**

Self-assessment

*European level (\*)*

**English**

**French**

**Spanish**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient user	C2	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user
B1	Independent user	B1	Independent user	A2	Basic user	A1	Basic user	A1	Basic user
B1	Independent user	B1	Independent user	A2	Basic user	A1	Basic user	A1	Basic user

(\*) [Common European Framework of Reference for Languages](http://www.cedefop.europa.eu/en/files/questdocument/1481/1481_en.pdf)

## Publications/Conference presentations

- 'Smart, Green and Integrated Transport'. EC Transport Infoday Brokerage Event: Oral Presentation. European Commission, 13<sup>th</sup> December, 2017, Brussels.
- "Normative e tecnologie per la riduzione delle emissioni in atmosfera del particolato da traffico autoveicolare". Aria e salute. Il futuro della ricerca e l'innovazione sostenibile. Presentazione orale a Convegno Internazionale, 29, 30 Novembre 2017. Università di Milano Bicocca.
- "Mobilità sostenibile, combustibili e dispositivi innovativi per autoveicoli e beneficio per l'ambiente". Workshop "Dall'idea all'impresa". Climathon competition, 27<sup>th</sup> October 2017, Milan.
- "Nuove procedure di omologazione per i veicoli ICE M1 e N1 e sistemi per ridurre le emissioni". Conferenza Nazionale della Mobilità Elettrica. 18,19,20 Maggio 2017, Castello Sforzesco, Milano.
- "Performance Testing of a Locomotive Engine Aftertreatment Pre-prototype in a Passenger Cars Chassis Dynamometer Laboratory" (Simone Casadei, Angela Maggioni). Transportation Research Procedia, 2016, 14, 605–614.
- "Physico-chemical properties and biological effects of diesel and biomass particles" (Eleonora Longhin, Maurizio Gualtieri, Laura Capasso, Rossella Bengalli, Steen Mollerup, Jørn A. Holme, Johan Øvreivik, Simone Casadei, Cristiano Di Benedetto, Paolo Parenti, Marina Camatini). Environmental Pollution Volume 215, August 2016, Pages 366–375.
- "Verso l'Euro 6c: le novità tecniche della rivoluzione sulle emissioni" (Simone Casadei). Riunione Commissione CUNA "Combustibili, Lubrificanti e Affini". Torino, 30 giugno 2016.
- "Emissioni autoveicolari: mutamenti in corso" (Simone Casadei). VII edizione Convegno MUTAMENTI IN CORSO – Federmetano. Savoia Hotel Regency, Bologna, 15 giugno 2016.
- "Performance Testing of a Locomotive Engine Aftertreatment Pre-prototype in a Passenger Cars Chassis Dynamometer Laboratory". (Simone Casadei, Angela Maggioni). Poster at the 6th Transport Research Arena Conference – TRA2016. Warsaw, 18-21 April 2016.
- "Biometano e... Divisione Combustibili di Innovhub SSI" (Simone Casadei). Convegno Biometano e dintorni – Milano, 15 settembre 2015.
- "Application of a validation method for remote sensing vehicle exhaust emissions: high emitter determination on soot, PM, and PN basis" (Angela Maggioni, Simone Casadei, Luca Ferrero, Francesco Riccobono). EAC2015 European Aerosol Conference. Milan (Italy), September 6-11, 2015.
- "Progetto BIAGIO: effetti sulle emissioni inquinanti derivati dall'impiego di B10 e B30 non convenzionali" (Simone Casadei). Riunione Commissione CUNA "Combustibili, Lubrificanti e Affini". Torino, 23 giugno 2015.
- "Sampling of ultrafine particles from combustion sources for biological studies" (Simone Casadei, Angela Maggioni, Maurizio Gualtieri). P4TA-CERTAM International WORKSHOP: Characterization of Complex Nanoaerosol Emissions: metrology, health and environmental issues. 24-25 March 2015, Rouen, France.
- "A Laboratory Validation Method for Remote Sensing Vehicle Exhaust Emissions" (Simone Casadei, Angela Maggioni). Stazione Sperimentale per i Combustibili. La Rivista dei Combustibili e dell'Industria Chimica, 2014 – volume 68 – n.1-2.
- "Progetto BIAGIO: effetti sulle emissioni inquinanti derivati dall'impiego di BX e B100 non convenzionali" (Simone Casadei). Riunione Commissione UNICHIM "Prodotti Petroliferi e Lubrificanti". Milano, 19 novembre 2014.
- "Emissioni di particolato, frazione soot e particelle ultrafini allo scarico di autoveicoli alimentati tramite miscele con biodiesel di seconda generazione" (Simone Casadei, Angela Maggioni, Davide Faedo). PM2014, 6° Convegno Nazionale sul Particolato Atmosferico. Genova, 20-23 maggio, 2014.
- "A Laboratory Validation Method Proposal for Remote Sensing Vehicle Exhaust Emissions" (Simone Casadei, Angela Maggioni, Davide Faedo). Poster at the 5th Transport research Arena Conference – TRA2014. Paris, 14-17 April 2014. **Winner of the Best Poster Award of the Outreach marketplace session.**
- "Nanoparticle size distribution, soot and ammonia emissions from a NGVs fleet" (Simone Casadei, Davide Faedo, Francesco Avella). Poster at the 17th ETH Conference on Combustion Generated Nanoparticles. Zurich, 23-26 June 2013. **Winner of the Best Poster Award of the Conference.**

“Fattori di emissione a confronto nella stima del contributo delle sorgenti” (Gabriele Migliavacca, Simone Casadei, Davide Faedo). Presentation at the Conference “Un’aria pulita è possibile: una strategia condivisa per combattere l’inquinamento”. Camera di Commercio di Milano, Palazzo Turati, 8 ottobre 2012.

“Innovhub – Stazioni Sperimentali per l’Industria. Stazione Sperimentale per i Combustibili Division. Automotive Emission Laboratori (LEA) activities”. ERMES plenary meeting (European Research on Mobile Emission Sources Group). European Commission, Bruxelles 27-28 September 2012 (presentation).

“Effects of ethanol/gasoline blends on passenger cars performance and unregulated exhaust emissions” (Simone Casadei, Davide Faedo, Francesco Avella). EU BC&E 2012, 20th European Biomass Conference and Exhibition. Milano, 18-22 June 2012.

“Emissione di nanoparticolato da autovetture diesel in fase di rigenerazione del DPF” (Simone Casadei, Davide Faedo, Francesco Avella). PM2012, 5° Convegno Nazionale sul Particolato Atmosferico. Perugia, 16-18 maggio, 2012.

“Le statistiche del particolato atmosferico a Milano e il ruolo delle variabili meteo-climatiche” (Silvia Moroni, Simone Casadei, Giuseppina Tosti, Marco Bedogni, Bruno Villavecchia). PM2012, 5° Convegno Nazionale sul Particolato Atmosferico. Perugia, 16-18 maggio, 2012.

“Effetto di miscele etanolo/benzina sulle emissioni inquinanti non regolamentate di autovetture” (Francesco Avella, Simone Casadei). Stazione Sperimentale per i Combustibili. La Rivista dei Combustibili e dell’Industria Chimica, 2011 – volume 65 – n.1.

“Emissioni di gas serra da trasporto autoveicolare, la situazione italiana e le prospettive sulle nuove tecnologie motoristiche” (Simone Casadei, Silvia Bertagna). Presentazione svolta presso IIS “Enrico Mattei” di San Donato Milanese nell’ambito del Progetto “Scuola 21” – Cambiamenti climatici, Fondazione Cariplo. San Donato Milanese, Milano, 3 marzo 2011.

“Cambiamenti climatici: la Conferenza di Cancun e gli scenari emissivi per l’Unione Europea” (Simone Casadei). Stazione Sperimentale per i Combustibili. La Rivista dei Combustibili e dell’Industria Chimica, 2010 – volume 64 – n.4.

“Emissioni di GHG da trasporto autoveicolare: proiezioni globali, situazione italiana” (Simone Casadei, Silvia Bertagna). Stazione Sperimentale per i Combustibili. La Rivista dei Combustibili e dell’Industria Chimica, 2010 – volume 64 – n.3.

“Accordi internazionali per il contenimento delle emissioni di gas serra” (Simone Casadei). Presentazione ad invito e atti del Convegno “Energia ed ecologia: un peso o un’opportunità per l’economia?” Organizzato ed ospitato dall’Accademia Nazionale dei Lincei in occasione della XXVIII giornata dell’ambiente. Roma, 15 ottobre 2010.

“Effetto di una miscela gasolio/biodiesel al 30% (B30) sull’emissione di particolato fine di autoveicoli diesel” (Avella, Casadei, Faedo, Macor). PM2010, 4° Convegno Nazionale sul Particolato Atmosferico. Venezia, 18-20 maggio, 2010.

“Influenza del livello tecnologico di autovetture a benzina e diesel e delle condizioni di guida sull’emissione di particolato fine, ammoniaca e protossido di azoto” (Avella, Casadei, Faedo). PM2010, 4° Convegno Nazionale sul Particolato Atmosferico. Venezia, 18-20 maggio, 2010.

“Emissione di inquinanti non convenzionali di autovetture a benzina e diesel”. (Avella, Faedo, Casadei). XV Expert Panel Trasporti Stradali, ENEA - Roma, 29 aprile 2010.

“Ranking and evaluating emission reduction scenarios in the Milan area on the basis of source apportionment results” (Pirovano, Bedogni, Casadei). 7th international Conference on Air Quality – Science and Application (Air Quality 2009). Istanbul, 24-27 March, 2009.

“Utilizzo di algoritmi innovativi di ripartizione delle sorgenti per la definizione di scenari di riduzione delle emissioni sull’area di Milano” (Bedogni, Casadei, Pirovano, Riva). Controllo ambientale degli Agenti Fisici: nuove prospettive e problematiche emergenti. 4° Convegno Nazionale. 24-27 marzo, 2009.

“Road pricing in the city of Milan: impacts assessment on air quality” (Moroni, Casadei, Bedogni). 7th international Conference on Air Quality – Science and Application (Air Quality 2009). Istanbul, 24-27 March, 2009.

“Emission Inventory of the city of Milan: assessing main emission sources with the bottom-up approach” (Moroni, Casadei, Bedogni, Colombo, Papetti, Lavecchia, Pirovano). 7th international Conference on Air Quality – Science and Application (Air Quality 2009). Istanbul, 24-27 March, 2009.

“Assessing the contribution of the main emission sources to particulate matter concentrations in the Milan area” (Pirovano, Bedogni, Casadei). 12th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes. Cavtat, Croatia, October 6-9, 2008.

“Stima del contributo delle principali sorgenti emissive alle concentrazioni di particolato nell’area di Milano” (Pirovano, Bedogni, Casadei). PM2008, 3° Convegno Nazionale sul Particolato Atmosferico. Bari, 6-8 ottobre, 2008.

“Analisi dei dati meteorologici e parametrizzazione dello strato limite terrestre nell’area urbana milanese” (Biemmi, Gaviglio, Salizzoni, Boffadossi, Casadei, Bedogni). Pubblicazione sulla rivista Nimbus, n.° 49-50, 27/12/2008

Relazione sullo Stato dell’Ambiente del Comune di Milano – 2007: “Rapporto Qualità dell’Aria, Energia e Agenti Fisici”.

Agenzia Mobilità e Ambiente - Comune di Milano

Autore del capitolo: “Condizioni meteorologiche”

Collaborazione nella stesura dei capitoli sulla qualità dell’aria.

“The modelling of the photochemical smog at the regional scale for local scale background level concentrations estimations” (Bedogni, Casadei, Pirovano, Villavecchia). Workshop on "Air pollution in urban areas Torino - Milano - Lyon - London", November 7, 2007. Torino.

“Emission inventory of the City of Milan: first steps for the bottom-up approach”, (Moroni, Casadei) 8th Joint Meeting of the EIONET (European Environment Information and Observation Network) and TFEIP (the Convention’s Task Force on Emission Inventories and Projections). October 22-25, 2007. Dublin, Ireland.

“Application of advanced particulate matter source apportionment techniques in the Northern Italy basin” (Bedogni, Casadei, Pirovano, Sghirlanzoni, Zanoni) 29th Nato/Sps International Technical Meeting on Air Pollution Modelling and Its Application, September 24-28, 2007. Aveiro, Portugal.

“Valutazione dell’altezza dello strato rimescolato nell’area urbana di Milano nel biennio 2003-2004” (Casadei, Giugliano, Lonati, Pacifico, Valli, Vecchi). Pubblicazione sulla rivista Ingegneria Ambientale, n.° 4 anno 2006.

“Correlazione fra particolato fine e parametri meteorologici e di qualità dell’aria a Milano nel biennio 2003-2004” (Casadei, Lonati, Giugliano). Pubblicazione sulla rivista Ingegneria Ambientale, n.° 3 anno 2006.

“La presenza di fondo di diossine nell’area dell’impianto di termodistruzione di Cremona giugno 2005” (Giugliano, Caserini, Casadei, Tardivo).

Contratto di ricerca Politecnico di Milano – AMSA. Piano di monitoraggio ambientale area nord-ovest di Milano (In collaborazione con ARPA-Lombardia). Rapporto Finale” (Giugliano, Tardivo, Casadei, Lonati), Dipartimento I.I.A.R. Politecnico di Milano, 2005.

“Controllo ambientale dell’impianto di termodistruzione di rifiuti di Cremona: analisi dei dati di emissione e della qualità dell’aria nell’anno 2003” (Giugliano, Caserini, Casadei, Comi).

“Confronto fra le stime di emissioni in atmosfera in provincia di Milano dall’inventario Provinciale e dall’inventario regionale INEMAR” (Giugliano, Caserini, Lonati, Pastorello, Casadei), Dipartimento I.I.A.R. Politecnico di Milano, 2004.

## Research projects

### **Activity task for air pollutants emissions laboratory measurement by motor vehicles with different engines.**

PROGETTO DI RICERCA “CONVERSE - CONtrollo dinamico dei VEicoli merci e da lavoro con sistema Real time di Segnalazione Ecologica” financed by the Italian Ministry of Environment and aimed to the experimentation of technologies for the tracking of work vehicles, whose activities are coordinated by the Municipality of Milan.

Commitment by Agenzia Mobilità Ambiente e Territorio (AMAT). **Role: Innovhub – SSI project manager.**

### **Biological effects and human impacts of ultrafine particles sources**

Bando con scadenza "Ricerca finalizzata allo studio dell’impatto del particolato ultrafine e delle nanoparticelle ingegnerizzate sulla salute dell’uomo"

Commitment by ENEA and Bicocca University. Scientific head of the ultrafine particles sampling and analyzing from mobile and fixed sources at Innovhub-SSI. **Role: Innovhub – SSI project manager.**

**ENSPIRIT Elimination of NO<sub>x</sub>, SO<sub>x</sub> and Particulates in Rail Transportation** The Enspirit project has a duration of 24 months, funded by the European Commission under Framework Programme 7, the project consortium consists of 4 SMES and 3 research organisations. The Enspirit project is developing an advanced oxidative catalytic technique to enable the development of a nitrogen oxide removal system to work at ambient temperature. The Enspirit project will also create an optimised microwave irradiation technique to enable a method and apparatus for optimised desorption of contaminants from carbon catalysts with minimal damage to the internal porous structure. Ultimately, the catalytic device will be integrated into a system of combined devices for the removal of heat, moisture, sulphur oxides, ultrafine particulate matter and nitrogen oxides. This will provide a complete, cost-effective, energy-efficient way of meeting the EPA's new tier 4 emission rules for new and older diesel trains beginning in 2015. **Role: Innovhub – SSI project manager.**

**BIAGIO Institutional internal project** [miscela di Biodiesel non convenzionati in Gasolio: Impatto sulle emissioni da fonti fisse e mobili (2012-2013) - Unconventional biodiesel/diesel blends: impact on mobile and fixed sources]: the aim is to evaluate new emission factors of regulated and mainly unregulated species (PAH, aldehydes, nanoparticles) fuelling passenger cars and civil heating boilers with biofuels blendings obtained by second generation biofuels as UCO (Used Cooking Oils) or PFAD (Palm Fatty Acid Distillate) (sustainable «double counting» biofuels to reduce the impact of GHG transport emissions and diversify energy sources), comparing them with the emissions determined using conventional biodiesel/diesel blends. **Role: project manager.**

**SMELLER project** [Sistema di Monitoraggio Emissioni di singoli veicoli in tempo Reale (2011-2013) - Remote sensing exhaust emission monitoring system in real time]: the project financed by Lombardy Region involves the Milan Bicocca University, Innovhub – SSI, Joint Research Center – JRC ISPRA. The aim of the project is to develop a real time system able to identify, by the use of optical sensors, high emitters vehicles passing through a detection door. The aim of the task, whose I'm the leader, is the laboratory and on road validation (also using PEMS) of the optical sensors. We implemented some ad hoc short acceleration cycles to check the real remote sensing emissions detected through a door a few meters after an intersection with traffic lights. Regulated and unregulated emissions (PM, soot, particles) will be measured. **Role: Innovhub – SSI project manager.**

**The B10 Institutional internal project** (2008-2013): evaluating the mid and long term behaviour of two DPF euro 4 company cars (well representative of the current Italian fleet) powered only with a 10%vol. biodiesel in gasoline blend. The experimental programme foresees the accumulation of 60.000 km each car, and the pollutants emission testing every 5.000 km cumulated. The impact of the B10 blend on regulated and unregulated exhaust emissions and the mid-long term engine performances is being studied, paying mainly attention to injection systems problems related to B10 blend chemical and physical properties (deposits, bacteria, etc. etc.). We have cumulated 50.000 km for each car and the project term is foreseen for the next year. **Role: project manager.**

**The NGV particle emissions Institutional internal project** (2005-2013): we have tested 7 natural gas/gasoline powered vehicles comparing mainly the emissions of PM, soot and particles for the two different fuelling. Interesting data have come out from the experimental activity, related to the role of lube oil, of combustion and engine parameters and characteristics, of the age and the cumulated kilometres of the different vehicles. The experimental activity has ended, we're now processing data, results and publications (national and international) will early follow. **Role: project manager.**

**Effects of Ethanol/Gasoline blends on PLDV unregulated exhaust emissions** (2009-2010): the experimental work was carried out according to a test protocol, applying conventional procedures for sampling and analysing regulated and unregulated polluting species. Two Euro 4 passenger cars were used, both fuelled with a reference gasoline and with two blends containing 5% (E5) and 10% by volume (E10) of bioethanol, prepared in laboratory starting from the same base stock. No statistically significant emission variation of the regulated species and of the main aldehydes has been observed in the exhaust. A reduction trend of the particulate matter soot fraction for both cars powered with E5 and E10 blends, but no appreciable change in the particle number measured by ELPI instrument was observed. Moreover a statistically significant but weak decrease of carbon dioxide emission and of fuel consumption, with increasing concentration of ethanol in the gasoline, was detected for both cars. The research was approved and funded by the Italian Ministry of Economic Development Managerial Decree of 28 October 2008, registered at the Budget Central Bureau. **Role: research collaborator.**

**Monitoring the effects of the testing phase of ECOPASS project (2005-2008):** support for data processing activities on air quality, meteorological and environmental modeling aimed at the production of reports. **Role: consultant.**

Support to the activities of the **Planning Air Project (2005-2008)** with particular attention to:

- Implementation of the atmospheric emissions inventory in the City of Milan.
- Analysis of acute episodes of pollution and the effectiveness of measures to limit air emissions.
- Reporting on air quality (daily, annual, etc.). **Role: consultant.**

Support the research project on the **health effects associated with exposure to fine particulate matter for the agents of the Milan Local Police (2006-2007).** **Role: consultant.**

Collaborazione all'esecuzione di un programma di ricerca concernente: "Analisi dell'impatto sulla qualità dell'aria nell'ambito del SIA per il nuovo termovalorizzatore di Corteolona" affidato da ECODECO S.r.l. al Politecnico di Milano Dipartimento I.I.A.R., 2009.

Incarico specifico: realizzazione dell'inquadramento meteo-climatico dell'area di studio.

["Collaboration in the execution of a research program on Analysis of the impact on air quality within the SIA for the new incinerator in Corteolona"]. **Role: consultant.**

"Collaborazione allo studio della qualità dell'aria nell'area del collegamento autostradale Rho-Monza, Strada Provinciale n.46, 2008".

["Collaboration in the study of air quality in the motorway link area Rho-Monza, Provincial Road No 46, 2008"]. **Role: consultant.**

Contratto di collaborazione professionale con Mediglia Servizi Ecologici S.p.a. nell'ambito di un contratto di ricerca con il Politecnico di Milano – DIIAR, avente ad oggetto:

"Uno studio dell'impatto della qualità dell'ambiente per la realizzazione di un impianto per la produzione di energia elettrica mediante la gassificazione della frazione secca residuale proveniente da raccolta differenziata dei rifiuti urbani sito nel comune di Mediglia, Fraz. Bustighera, S.P.39", 2008. Attività realizzata:

- inquadramento climatico e meteorologico generale dell'area di studio;
- elaborazione e analisi di dettaglio dei dati meteorologici rilevati a livello locale nell'anno 2006;

["Contract for professional collaboration with Mediglia Ecological Services Spa under a research contract with the Politecnico di Milano – DIIAR"]. **Role: consultant.**

Contratto di collaborazione professionale con Ambiente Italia S.r.l. nell'ambito delle attività di ricerca che Ambiente Italia realizza per il progetto "Relazione SIA e documentazione AIA per centrale Saline Joniche" per le seguenti attività:

- inquadramento climatico e meteorologico generale del sito;
- elaborazione e analisi dei dati meteorologici rilevati a livello locale nel periodo 2003-2006;
- elaborazione e analisi di dettaglio dei dati meteorologici rilevati a livello locale nell'anno 2004.(2007-2008)

["Contract for professional collaboration with Ambiente Italia Srl within the research activities that Ambiente Italia realizes for the project "SIA Report and AIA documentation for the coal power plant of Saline Ioniche"]. **Role: consultant.**

"La presenza di fondo di diossine nell'area dell'impianto di termodistruzione di Cremona giugno 2005" (Giugliano, Caserini, Casadei, Tardivo).

["The underlying presence of dioxins in the incineration plant area in Cremona in June 2005"]. **Role: research fellow.**

Collaboration to the research program "Environmental impact and emissions of the MSW incineration plant in Cremona". September 2004 - September 2005. Dipartimento I.I.A.R. (Dept. of Environmental, Hydraulic, Infrastructures and Surveying Engineering). Politecnico di Milano. **Role: research fellow.**



“Contratto di ricerca Politecnico di Milano – AMSA. Piano di monitoraggio ambientale area nord-ovest di Milano (In collaborazione con ARPA-Lombardia). Rapporto Finale” (Giugliano, Tardivo, Casadei, Lonati), Dipartimento I.I.A.R. Politecnico di Milano, 2005.

[“Research contract Politecnico di Milano - AMSA. Environmental monitoring plan - Milan north-west area”]. **Role: research fellow.**

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Milan, 12<sup>th</sup> February, 2018



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I authorize my personal data treatment pursuant to Italian Legislative Decree June 30th 2003, N. 196