

Scientific Publications

- L. Ntziachristos et al., (2009), 'A New Sensor for On-Board Diagnosis of Particle Filter Operation – First Results and Development Potential, FAD Conference, Dresden, November 4-5.2009.
- T. Lanki et al., (2011), 'An electrical sensor for long-term monitoring of ultrafine particles in workplaces', *J. Phys.: Conf. Ser.* **304** 012013.
- L. Ntziachristos et al., (2011), 'Exhaust Particle Sensor for OBD Application', SAE Paper 2011-01-0626.
- M. Besch et al., (2011), 'Assessment of novel in-line particulate matter sensor with respect to OBD and emissions control applications', Proceedings of the ASME 2011 Internal Combustion Engine Division Fall Technical Conference, ICEF2011 October 2-5, 2011, Morgantown, West Virginia, USA, ICEF2011-60142.
- L. Ntziachristos et al., (2013), 'Application of the Pegasor Particle Sensor for the Measurement of Mass and Particle Number Emissions', *SAE Int. J. Fuels Lubr.* 6(2):521-531, 2013, doi:10.4271/2013-01-1561.
- Amanatidis, S et al., (2013). 'Applicability of the Pegasor Particle Sensor to Measure Particle Number, Mass and PM Emissions,' SAE Technical Paper 2013-24-0167, 2013, doi:10.4271/2013-24-0167.
- M. Maricq, (2013), 'Monitoring Motor Vehicle PM Emissions: An Evaluation of Three Portable Low-Cost Aerosol Instruments', *Aerosol Science and Technology*, 47:5, 564-573.
- S. Amanatidis et al., (2014). 'Use of a PPS Sensor in Evaluating the Impact of Fuel Efficiency Improvement Technologies on the Particle Emissions of a Euro 5 Diesel Car'. SAE Technical Paper 2014-01-1601.
- Chung, MC et al. "Comparison study on characteristics of nanosized particle number distribution by using condensation particle counter calibrated with spray and soot type particle generation methods". In: *International Journal of Automotive Technology* 15.6 (2014), pp. 877–884.
- Tarabet, L et al. "Experimental investigation of DI diesel engine operating with eucalyptus biodiesel/natural gas under dual fuel mode". In: *Fuel* 133 (2014), pp. 129–138.
- Rostedt, Antti et al. "Characterization and response model of the PPS-M aerosol sensor". In: *Aerosol Science and Technology* 48.10 (2014), pp. 1022–1030.
- Järvinen, A et al. "Monitoring urban air quality with a diffusion charger based electrical particle sensor". In: *Urban Climate* 14 (2015), pp. 441–456.

- Amanatidis, Stavros, Matti Maricq, et al. "Measuring number, mass, and size of exhaust particles with diffusion chargers: The dual Pegasor Particle Sensor". In: *Journal of Aerosol Science* 92 (2016), pp. 1–15.
- Ruzal-Mendelevich, Michal, David Katoshevski, and Eran Sher. "Controlling nanoparticles emission with particle-grouping exhaust-pipe". In: *Fuel* 166 (2016), pp. 116–123.
- J. Ko et al. "Characteristics of on-road particle number (PN) emissions from a GDI vehicle depending on a catalytic stripper (CS) and a metal-foam gasoline particulate filter (GPF)". *Fuel* 238 (2019), pp. 363–374.
- Boveroux, F., Cassiers, S., Buekenhoudt, P., Chavatte, L. et al., "Feasibility Study of a New Test Procedure to Identify High Emitters of Particulate Matter during Periodic Technical Inspection, "SAE Technical Paper 2019-01-1990, 2019, doi:10.4271/2019-01-1990.
- Burtscher, H., Lutz, T., Mayer, A., "A New Periodic Technical Inspection for Particle Emissions of Vehicles". *Emission Control Science and Technology*. <https://doi.org/10.1007/s40825-019-00128-z>.

Conference Presentations

- J. Tikkanen et al., (2011), 'Pegasor Particle Sensor (PPS-M) for Raw Exhaust PM Measurement', 21st CRC Real World Emissions Workshop, March 20-23, 2011, San Diego, USA.
- Marc Besch et al., (2011), 'In-Use NTE PM Measurement Methodology using an In-Line, Real-Time Exhaust PM Emissions Sensor', 15th ETH Conference on Combustion Generated Nanoparticles, June 26-29, 2011, Zürich, Switzerland.
- F. Gensdarmes et al., (2011), 'Evaluation of Pegasor PPS Response Time for Real Time Aerosol Concentration Measurements', EAC 2011, September 4-9, 2011, Manchester, UK.
- L. Ntziachristos et al. (2012), 'Mass Calibration of a Novel PM Sensor', 22nd CRC Real World Emissions Workshop, March 25-28, 2012, San Diego, USA.
- M. Besch et al., (2012), 'On-Road Particle Matter Emissions Assessment from a Compliant HD Diesel Truck While Driving Across the US', 22nd CRC Real World Emissions Workshop, March 25-28, 2012, San Diego, USA.
- J. Karim et al., (2012), 'Preliminary Investigation of the Correlation between In-Use Diesel Engine PM Emission Rates and Opacity', 2012 PEMS Conference and Workshop, March 28-30, 2012, Riverside, USA.
- Beck, H. et al., (2012), 'Correlation between Pegasor Particle Sensor and Particle Number Counter Application of Pegasor Particle Sensor in Heavy Duty Exhaust'. 16th ETH Conference on Combustion Generated Nanoparticles, June 24-27, 2012, Zürich, Switzerland.

- Ntziachristos L., (2012), 'Calibration and performance of a novel particle sensor for automotive application', EAC - 2012, European Aerosol Conference, Granada, 2-7 Sept. 2012, Spain.
- Ntziachristos, L, S Amanatidis, A Rostedt, K Janka, et al. "Optimization of the Pegasor Particle Sensor for Automotive Exhaust Measurements". In: 23rd CRC Real World Emissions Workshop, San Diego, CA. 2013.
- J. Tikkanen et al, (2013). 'Dilution Artifacts. A Significant Source of Error from Absolute Concentration and Possibly Difficult to Reproduce. PMP vs. Raw Exhaust', 17th ETH-Conference on Combustion Generated Nanoparticles, June 23th – 26th 2013, Zürich, Switzerland.
- M. Besch et al., (2014), ' Off-cycle light-duty diesel vehicle emissions under real-world driving conditions', 24th CRC Real World Emissions Workshop, March 30 -April 2, 2014, San Diego, California.
- Tanfeng C et al., (2014), ' Comparison of the SEMTECH ECOSTAR CPM to AVL 483 MSS, AVL 489 APC, and CVS gravimetric PM', 2014 PEMS Conference and Workshop, April 3-4, 2014, Riverside, California.
- D. Booker, (2014). Challenges and Solutions for Light Duty Real-World PEMS Testing under the auspices of the European RDE/LDV Program', 2014 PEMS Conference and Workshop, April 3-4, 2014, Riverside, California.
- J.Tikkanen, I. Bennett, (2014). 'Pegasor Particle Sensor Technology (PPS) for Exhaust PM and PN Measurement'. JSAE Proceedings, 20145468, May 2014 Issue No.31-14.
- J.Tikkanen, I. Bennett, (2014). 'Pegasor Particle Sensor Technology (PPS) for Exhaust PM and PN Measurement'. JSAE Annual Congress, Yokohama, 21.-23.5.2014.
- Stavros Amanatidis et al., (2014), ' Estimation of the mean particle size by sampling in parallel with two Pegasor Particle Sensors', 18th ETH-Conference on Combustion Generated Nanoparticles, June 22th – 25th 2014, Zürich, Switzerland.
- Delhaye, D et al. 'The MERMOSÉ project: characterization of particulates emissions of a commercial aircraft engine: from morphology to chemical composition'. In: International Aerosol Conference 2014. 2014.
- Chen, J and H Ye. 'On-Road Diesel Truck Emissions Measurement and Inventory Development in Chengdu City of China'. In: AGU Fall Meeting Abstracts. Vol. 1. 2014, p. 3159.
- ZHANG, Qi-Jun et al. 'On-road Emission Characteristics of Logistics Transportation Vehicles in Chengdu'. In: International Conference on Social Science. 2014.
- Saukko, E et al. 'Expanded Capabilities of Dual Pegasor PPS-M Sensor in PEMS Measurements Beyond PN, PM and Particle Size'. In: 6th International PEMS Conference, Riverside, CA, USA. 2016.

References

- [1]. Lehtimäki, M., "Modified Aerosol Detector", in V.A. Marple and B.Y.H. Liu (Ed.), *Aerosols in Mining and Industrial Work Environment* 3, 1135–1143. Ann Arbor Science Publishers, Ann Arbor, Michigan, USA, 1983.
- [2]. Ntziachristos, L., Fragkiadoulakis, P., Samaras, Z., Janka, K. et al., "Exhaust Particle Sensor for OBD Application", SAE Technical Paper 2011-01-0626, 2011, doi:10.4271/2011-01-0626.
- [3]. L. Ntziachristos et al., (2013), 'Application of the Pegasor Particle Sensor for the Measurement of Mass and Particle Number Emissions', *SAE Int. J. Fuels Lubr.* 6(2):521-531, 2013, doi:10.4271/2013-01-1561.
- [4]. Rostedt, Antti et al. "Characterization and response model of the PPS-M aerosol sensor". In: *Aerosol Science and Technology* 48.10 (2014), pp. 1022–1030.

Notes