

Table 1. Mobility program between APT and the four collaborators

No.	From	To	Year	Type of persons	Type of event
1	APTL	HONDA	1 st	Pr. Coordinator	Exchange of know-how
2	APTL	HONDA	2 nd	Pr. Coordinator	Exchange of know-how
3	APTL	HONDA	2 nd	Pr. Coordinator Engineer	Training / Exchange of know-how
4	HONDA	APTL	3 rd	Researcher	Exchange of know-how
5	APTL	AVL	1 st	Pr. Coordinator Researcher	Exchange of know-how
6	APTL	AVL	2 nd	Researcher	Exchange of know-how
7	APTL	AVL	2 nd	Researcher	Training
8	AVL	APTL	2 nd	Researcher Engineer	Exchange of know-how
9	AVL	APTL	3 rd	AVL	Exchange of know-how
10	APTL	CRF	2 nd	Researcher Researcher	Exchange of know-how Exchange of know-how
11	APTL	CRF	3 rd	Researchers	Exchange of know-how / Training
12	CRF	APTL	2 nd	Researcher Engineer	Exchange of know-how / Training
13	CRF	APTL	3 rd	Researchers	Exchange of know-how
14	APTL	CERTAM	2 nd	Researchers	Exchange of know-how / Training
15	CERTAM	APTL	2 nd	Researchers	Exchange of know-how
16	CERTAM	APTL	3 rd	Researchers	Exchange of know-how / Training

Table 2. Schedule of APT-STEP Joint Measurement Campaign

Place	Period	Other organizations involved	Measurement of:
Turin (Italy)	16-22 Feb. 2015	ARPA	Air Quality
Turin (Italy)	23-27 Feb. 2015	CRF-FIAT	Brake wear (non-exhaust) emissions (preliminary / trouble shooting tests)
Rouen (France)	16 Mar.–1 Apr. 2015	CERTAM	In-cabin air quality (chase study)
Turin-Ispra (Italy)	18-22 May 2015	JRC	Brake wear (non-exhaust) emissions (final tests)

Table 3. APT-STEP W1 Agenda

W1 1 st DAY - Thursday, October 16 th 2014			
9:00	9:15	Registration	
9:15	9:30	Welcome	
S1. Future Fuels - Future Engines			
9:30	10:00	S1 - Plenary Lecture	Rik S.G. BAERT , TNO <i>"Feeding the internal combustion engine -changes ahead!?"</i>
10:00	10:15	S1 - L1	Athanasios G. KONSTANDOPOULOS , APTL/CERTH <i>"Solar Fuels"</i>
10:15	10:30	S1 - L2	Loukia CHRYSIKOY , LEFH /CPERI/CERTH <i>"Carbon footprint of renewable diesel produced via waste cooking oil catalytic hydrotreatment"</i>
10:30	10:45	S1 - L3	George SKEVIS , APTL/CERTH <i>"Smart Fuels for Smart Engines: Perspectives and Challenges"</i>
10:45	11:30	Panel discussion	
11:30	12:00	Coffee Break	
S2. Multifunctional Emission Control Devices			
12:00	12:30	S2 - Plenary Lecture	Martin VOTSMEIER , UMICORE <i>"Simulation based Design of Multifunctional Exhaust Devices"</i>
12:30	12:45	S2 - L1	Massimo ASTI , Centro Ricerche Fiat (CRF) <i>"New Concepts for Integrated Diesel Exhaust Gases After-Treatment technologies"</i>
12:45	13:00	S2 - L2	Michael FISCHER , HONDA R&D <i>"NOx Control Technologies for low Real Driving Emissions of Diesel Engines"</i>
13:00	13:15	S2 - L3	Dimitrios ZARVALIS , APTL/CERTH <i>"Multi-Functional Reactor for Emission Reduction of Future Diesel Engine Exhaust"</i>
13:15	14:30	Lunch break	
14:30	15:15	Panel discussion	
15:15	17:00	Poster session with coffee	
20:30		Dinner at <i>Ouzeri Aristotelous</i> (Aristotelous 8 str.)	
W1 2 nd DAY - Friday, October 17 th 2014			
S3. Challenges in Low Emissions Measurement and Testing			
9:30	10:00	S3 - Plenary Lecture	Oliver BISCHOF , TSI <i>"Recent Developments and Challenges in the Measurement of Low Particle Emissions"</i>
10:00	10:15	S3 - L1	Alexander BERGMANN , AVL List GmbH <i>"AVL Real Driving Emissions: Challenges in Emissions Measurement and Testing"</i>
10:15	10:30	S3 - L2	Apostolos TSAKIS , APTL/CERTH

			"On-board emissions measurements of locomotive diesel engines"
10:30	10:45	S3 - L3	Heinz BURTSCHER , FHNM "Handheld device for diesel filter inspection"
10:45	11:30	Panel discussion	
11:30	12:00	Coffee Break	
S4. Air Quality Issues and Retrofit Approaches			
12:00	12:30	S4 - Plenary Lecture	Andreas MAYER , TTM "Best available technology for retrofitting CI and SI vehicle engines"
12:30	12:45	S4 - L1	Jean-Paul MORIN , INSERM/CERTAM "Evolution of mobile sources tailpipe emission impacts on air quality and health"
12:45	13:00	S4 - L2	Anastasia POUPKOU , AUTH/LAP "Air quality in a Mediterranean city-port Particulate matter source apportionment using the WRF-CAMx modeling system"
13:00	13:15	S4 - L3	Ilias MAVROIDIS , MIN. of ENVIRONMENT, ENERGY and CLIMATE CHANGE/HELLENIC OPEN UNIV. "Urban trends of NOx, NO2 and O3 in Athens and their relation to traffic"
13:15	14:30	Lunch break	
14:30	15:15	Panel discussion	
15:15	16:30	CERTH tour	
16:30		End of workshop	

Table 4. APT-STEP W2 Agenda

W2 1 st DAY - Thursday, February 25 th 2016			
9:00	9:15	Registration	
9:15	9:30	Welcome	
S1. Enabling Technologies (nanosynthesis and computational materials)			
9:30	10:00	S1 - Plenary Lecture	Jorma JOKINIEMI, Univ. of Eastern Finland “Novel aerosol based methods for Li-ion battery material synthesis”
10:00	10:15	S1 - L1	George FROUDAKIS, Univ. of Crete “Hydrogen Storage in Novel Nanoporous Materials for Automotive Applications”
10:15	10:30	S1 - L2	Athanasios PAPADOPOULOS, PSDI / CPERI / CERTH “Computer-Aided Molecular Design of Pure and Mixed Working Fluids For Organic Rankine Cycles”
10:30	11:00	Panel discussion	
11:00	11:30	Coffee Break / Poster Session	
11:30	13:00	Tutorial speech on <i>Electrochemistry</i> by Prof. Constantinos VAYENAS	

		(Univ. of Patras) with Q&A session	
13:00	14:30	Lunch break	
S2. Challenges in Battery Technologies			
14:30	15:00	S2 - Plenary Lecture	Silvia BODOARDO, Politecnico di Torino “Challenges in Battery Technologies: Materials for electrochemical cells with enhanced performance and new post-lithium ion systems”
15:00	15:15	S2 - L1	Dimitris ZARVALIS, APTL / CERTH “Next generation Li-ion batteries: the eCAIMAN project”
15:15	15:30	S2 - L2	Carlotta FRANZIA, Politecnico di Torino “Li-air pouch cell prototype developed within the STABLE project reaching over 150 cycles in ambient air”
15:30	16:00	Panel discussion	
16:00	17:00	Coffee Break / Poster Session	
20:30		Dinner at Ergon Agora (Pavlou Mela 42 str.)	
W2 2nd DAY - Friday, February 26th 2016			
S3. Challenges in Membrane Electrode Assembly Technologies			
9:30	10:00	S3 - Plenary Lecture	Jens Oluf JENSEN, Technical Univ. of Denmark "Challenges in Membrane Electrode Assembly Technologies"
10:00	10:15	S3 - L1	Dimitrios TSIPLAKIDES, Aristotle Univ. of Thessaloniki "Membrane electrode assemblies for solid polymer water electrolyzers"
10:15	10:30	S3 - L2	Maria DALETOU, FORTH / ICE-HT "Stable and effective electrochemical interfaces for HT PEMFCs"
10:30	11:00	Panel discussion	
11:00	11:30	Coffee Break / Poster Session	
S4. From Materials to Systems			
11:30	12:00	S4 - Plenary Lecture	Vottorio RAVELLO, CRF "Hybrid and Electric Vehicles Powertrain E-Components: Challenges and Perspectives. Opportunities for Novel-Improved Materials?"
12:00	12:15	S4 - L1	Peter PRENNINGER, AVL List GmbH "SOFC Systems for Truck and Small/Medium Power Stationary Applications"
12:15	12:30	S4 - L2	Spyros VOUTETAKIS, PSDI / CPERI / CERTH “Efficient system design and energy management for renewable hydrogen production based on PV power and PEM water electrolysis”
12:30	13:00	Panel discussion	
13:00	14:30	Lunch break	
14:30	16:00	APT Lab. tour	
16:00		End of workshop	

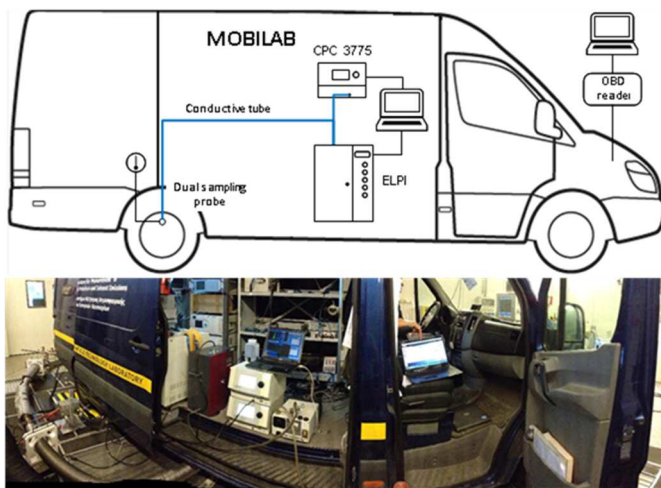


Figure 1. Experimental apparatus arrangement in CRF and JRC