

"RECENT ACHIEVEMENTS IN PHOTOCATALYSIS: FUNDAMENTALS, APPLICATIONS AND STANDARDIZED TEST METHODS (A COST 540 WORKSHOP)"

Meeting supported by CEN, AEPI, LA METRO, VILLE DE GRENOBLE and TERA Environnement

La Plateforme: Place de Verdun 38000 Grenoble, France
18-19 January 2010



General Information

The meeting will be held in « La Plateforme » in Grenoble, France, on 18-19 January 2010.

During the meeting representatives and experts from COST Action 540 European countries gave brief survey about actual situation, regarding photocatalytic applications and testing towards industrial applications in their countries.

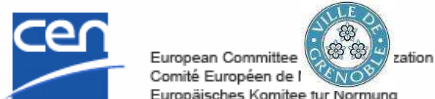
Representatives and experts from COST Action 540 European countries as well as experts will give brief survey about actual situation in their countries.

Guests: experts from academia, partners, CEN et ISO representatives.

Exhibitions and demonstrations of existing ISO and CEN methods and devices will be provided during the meeting.

Plenary Session Topics

The aim of the meeting is to present recent achievements in the photocatalytic fields: fundamentals, applications and standardized test methods.



Fee: 200 €

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Chairman of Cost 540: Detlef BAHNEMANN

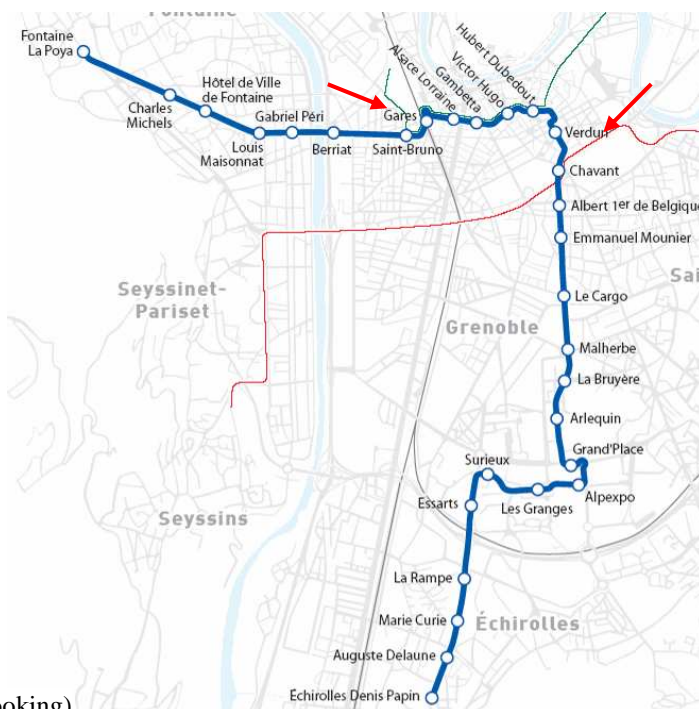
LOCALISATION:

TRAMLINE A:

Direction: « Echirolles Denis Papin »

Departure: « Gare »

Arrived: « Verdun-Prefecture »



ACCOMODATION:

For hotels:

Negotiated rates (Indicate "COST" when booking)

Rooms are blocked until 5 January. Beyond that date, the normal rates will apply.

- **Galia** ** (20 rooms) (free Wifi)

Price: 55€, breakfast included

<http://www.hotel-gallia.com/page1.php?LG=en>

0033 4 76 87 39 21

- **Splendid** ** (20 rooms) (free Wifi)

Price: 66 € with a shower, 83€ with a bath, breakfast included

<http://www.splendid-hotel.com/>

00 33 4 76 46 33 12

Out of negotiated rates:

- **Hôtel de l'Europe****

Price: from 63 €, without the breakfast, extra wifi

<http://www.hoteleurope.fr/hotelch.html>

00 33 4 76 46 16 94

- **Mercure Alp-hôtel** ***

Price: from 115 € breakfast included

<http://www.accorhotels.com/fr/hotel-0652-mercure-grenoble-centre-alpotel/index.shtml>

00 33 4 76 87 88 41

- **Novotel Centre**

Price: from 130 € without the breakfast

<http://www.accorhotels.com/fr/hotel-1624-novotel-grenoble-centre/index.shtml>

00 33 4 76 70 84 84

PROGRAMME OF THE MEETING:

MONDAY, 18th January 2010	
10:00 - 10:20	WELCOMING COFFEE
10:20 - 10:25	OPENING OF THE MEETING
10:25 - 10:45	<ul style="list-style-type: none"> ▪ Introductory Remarks and Session Chair. Detlef BAHNEMANN – <i>Chairman of Cost 540, Germany</i>
10:45 - 12:45	<ul style="list-style-type: none"> ▪ The influence of rapid heat treatment on the photocatalytic activity of titania photocatalysis. Drd. Zsolt PAP - <i>Faculty of chemistry and chemical engineering, Cluj-Napoca, Romania</i>
	<ul style="list-style-type: none"> ▪ Long term experience in application of photocatalytic antibacterial coatings to breweries. Tapio MANTYLA - <i>Tampere University of Technology, Tampere, Finland</i>
	<ul style="list-style-type: none"> ▪ Synthesis and structural characteristics of nitrogen doped TiO₂ aerogels. Drd. Mihaela POPA – <i>Faculty of chemistry and chemical engineering, Cluj-Napoca, Romania</i>
	<ul style="list-style-type: none"> ▪ Does N-doping of TiO₂ by low temperature synthesis actually enhance its photoactivity in the visible spectral range? S.LACOMBE – <i>CNRS PAU, France</i>
12:45 - 14:00	LUNCH
14:00 - 16:00	<ul style="list-style-type: none"> ▪ Ultra-high efficiency for solar photon conversion : how to achieve it? Luc BROHAN, <i>IMN Nantes, France</i>
	<ul style="list-style-type: none"> ▪ Solar photocatalytic processes for water disinfection. Pilar FERNÁNDEZ-IBÁÑEZ, <i>Plataforma Solar de Almería – CIEMAT Ministerio de Educación y Ciencia, Spain</i>
	<ul style="list-style-type: none"> ▪ Development of modified TiO₂/glass composites for NO_x oxidation. Dr Christos TRAPALIS - <i>Institute of Materials Science, NCSR Demokritos, Attikis, Greece</i>
	<ul style="list-style-type: none"> ▪ First principles modeling of bandgap structures in compound Zn-Ti oxide photocatalysts. Jose C. Conesa - <i>Instituto de Catalisis y Petroleoquimica, CSIC Campus de Cantoblanco, Madrid - Spain</i>
	<ul style="list-style-type: none"> ▪ Effect of the crystal structure of nanometre TiO₂ films on their photocatalytic activity. David CAMERON – <i>University of technologie, Mikkeli, Finland</i>
16:00 - 16:30	COFFEE BREAK
16:30 - 18:00	<ul style="list-style-type: none"> ▪ Self-cleaning of textiles and cement plates, photo-sterilization through N-doped of TiO₂ under visible light and DC- magnetron-sputtering preparation of bactericide catalysts. John KIWI - <i>Laboratory for Environmental Biotechnology, Swiss Federal Institute of Technology, Swiss</i>
	<ul style="list-style-type: none"> ▪ Photocatalytic textile with optical fibers for VOC removal. Chantal GUILLARD - <i>IRCELYON, UMR CNRS-Université Lyon-1, France</i>
	<ul style="list-style-type: none"> ▪ Recent topics of visible-light-responsive photocatalyst. Koji Takeuchi - <i>Research Institute for Environmental Management Technology Emtech) National Institute of Advanced Industrial Science & Technology (AIST)- Japan</i>
	<ul style="list-style-type: none"> ▪ Eco-coating Project: an in situ experiment for the abatement of VOCs and NO_x. Laurence PEPIN – <i>TERA Environnement – Crolles, France</i>
18:15	VISIT OF GRENOBLE MUSEUM
20:00	DINNER

Tuesday, 19th January 2010	
9:00 – 10:30	<ul style="list-style-type: none"> ▪ Normacat Project: Development of new materials and systems for "photocatalytic" air treatment. Standardization of methods for characterization and performance tests. <i>Pascal KALUZNY - TERA Environnement, France, Chairman of CEN – TC 386 for Photocatalysis</i> ▪ Flow through reactor <i>Claudio MINERO - Universita di Torino, Torino, Italy</i> ▪ Overview of the Afnor standard for air purifiers device <i>Benoît KARTHEUSER, Centre de Ressources Technologique en Chimie (CERTECH), Belgium</i>
10:30 – 11:00	COFFEE BREAK
11:00 – 12:30	<ul style="list-style-type: none"> ▪ Photocatalytic – light cleaning – Nano material standardization and testing methods, effort within COST 540, overview. <i>Frantisek PETERKA – Research Centre for Nanosurface Engineering – NANOPIN, Czech Republic</i> ▪ Recent Achievements in test methods of photocatalytic surfaces in Slovenia. <i>Urška LAVRENCIC-STANGAR, Urh CERNIGOJ, University of Nova Gorica, Slovenia</i> ▪ Recent R&D efforts on photocatalytic products in Belgium <i>Anne Beeldens - Belgian Road Research Center, Belgium</i>
12:30 – 13:45	LUNCH
13:45 – 15:45	<ul style="list-style-type: none"> ▪ Investigation of by-products formed during photocatalytic treatments of toluene and n-decane at typical indoor air levels (50-800 ppb) <i>F.THEVENET – Ecole des Mines de Douai, France</i> ▪ Eoxolit as novel photocatalist nanomaterial composite application and methods to prove its unique performance. <i>Marc LAMBERT, S.LAMBERT, JIRKOVSKY,SUBRT, KALOUSEK</i> <i>Research Centre for Nanosurface Engineering – NANOPIN - Czech Republic</i> ▪ Recent R&D efforts on photocatalytic products in Germany <i>Ralf DILLERT - Gottfried Wilhelm Leibniz Universität, Hannover, Germany</i> ▪ Development of portable instruments for testing of photocatalytic materials according ISO/CEN proposed tests. <i>Zdenek NAVRATIL, Pavel Stahel - Germany</i>
15:45 – 16:00	<p>CONCLUSION OF THE MEETING</p> <p><i>Detlef BAHNEMANN - Chairman of Cost 540, Germany</i></p>