

CALL FOR PAPERS

Deadline **MARCH 27th, 2009**

CIP₀₉

17th International Colloquium
on Plasma Processes

MARSEILLE (FRANCE)
JUNE 22-26, 2009

- ✓ Advanced plasma sources
- ✓ Plasma diagnostics and modelling
- ✓ Multiphase plasmas
- ✓ Plasma deposition processes
- ✓ Plasma for functional and multifunctional coatings
- ✓ Plasma for life science
- ✓ Plasma for surface engineering
- ✓ Plasma for microelectronics, micro and nanotechnology
- ✓ Plasma for energy and environmental applications
- ✓ Low temperature plasmas for ITER

www.vide.org/cip2009.html

SV
TM
2009

In connection with SVTM 2009, International Exhibition on Vacuum and Surface Engineering

sfv

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introduction

The 17th International Colloquium on Plasma Processes (CIP 09) will be held in Marseille (France) on June 22-26, 2009.

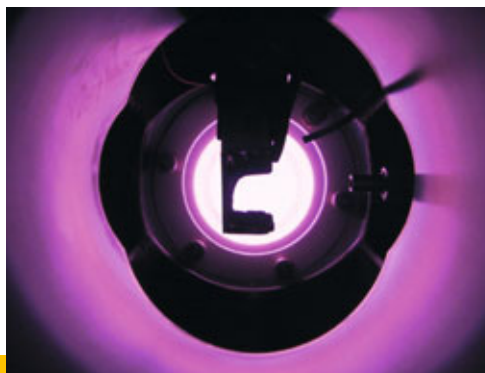
CIP is a biennial international conference focussing on the latest developments in plasma processing science and technology. It is a well-established international conference which covers the whole area of plasma processes from fundamentals to applications. Special attention is devoted to the understanding of plasma-surface interactions, and more generally the relationship between the plasma parameters, the structural and functional properties of the deposited films and plasma-treated surfaces as well as the development and modelling of new plasma sources.

The aim of the conference is also to feature recent issues and challenges for plasma processes in various industrial fields, such as microelectronics, micro-nanotechnology, aeronautics, mechanics, energy and environmental technology and life science.

Due to the proximity of Cadarache and the future International Thermonuclear Experimental Reactor (ITER), CIP'09 proposes a new topic focused on low temperature plasmas for ITER. The conference will include invited conferences, selected oral presentations and poster sessions. The official language of the conference is English.

*The CIP 09 Conference is preceded by three half-days (June 22-23) dedicated to **short courses** on plasma science and technology (page 4).*

*CIP 09 is organized by the French Vacuum Society (SFV) and is coupled with **SVTM 2009** (Salon du Vide et des Traitements des Matériaux / International Exhibition on Vacuum and Surface Engineering) and the 37th A3TS Congress devoted to surface treatment.*





conference topics

1 • Advanced plasma sources: pulsed plasmas, HiPIMS, microdischarges and microplasmas, modular plasmas...

2 • Plasma diagnostics and modelling

3 • Multiphase plasmas: plasmas in liquids, dusty plasmas...

4 • Plasma deposition processes: plasma and laser assisted deposition (PECVD, PVD, PLD, ALD...)

5 • Plasma for functional and multifunctional coatings: thermal, optical, mechanical, tribological, electrical and other functional properties of plasma deposited thin films, micro and nanoscaled functional materials...

6 • Plasma for life science: biocompatibility, antimicrobial coatings, sterilization, functionalization of biomaterial surfaces, immobilization of biomolecules...

7 • Plasma for surface engineering: surface treatment of polymers, glass and metals

8 • Plasma for microelectronics, micro and nanotechnology: plasma etching and patterning, nanoparticles and nano-objects synthesis...

9 • Plasma for energy and environmental applications: gas and dust abatement, plasma processing for fuel cell, photovoltaic devices...

10 • Low temperature plasmas for ITER: plasma wall interactions, fast atom and ion sources...

short courses

June, Monday 22nd
and Tuesday 23rd

Some short courses will cover the basic principles of plasma physics and plasma surface interactions, some overview of plasma assisted deposition and etching processes as well as their application in microelectronics, micro-nanotechnology, biomaterials and biosensors. All lectures and discussions will be held in English.

Well-known experts in the field will present lectures in the following areas:

- Non thermal plasma physics at low and high pressure
- Plasma surface interactions
- Diagnostics of non thermal plasmas
- Deposition of thin films by PECVD (Plasma Enhanced Chemical Vapour Deposition) and magnetron sputtering



- Plasma etching for microelectronics and microtechnology
- Plasma treatment of polymers surfaces and applications to biomaterials and biosensors engineering

invited lectures

(provisional)

■ **The study of plasma chemistry in microplasma jets for thin film deposition**
Jan Benedikt – *Univ. Bochum (Germany)*

■ **Carbon erosion by a hydrogen plasma jet: a plasma spectroscopic study**
Richard Engeln – *Univ. Eindhoven (The Netherlands)*

■ **Thin films by means of homogeneous dielectric barrier discharges at atmospheric pressure**
Nicolas Gherardi – *LAPLACE, Toulouse (France)*

■ **Making flashes in bubbles in liquids**
Bill Graham – *Univ. Belfast (United Kingdom)*

■ **Application of low-pressure non equilibrium plasma discharges for sterilization and decontamination of surfaces**
Ondrej Kylian – *Univ. Prague (Czech Republic)*

■ **Dusty plasmas: synthesis, structure and dynamics of a dust cloud in a plasma**
Maxime Mikikian – *GREMI, Orléans (France)*

■ **Transport of non-thermal deposition particles in an argon plasma at low pressures, in connection with the thin film nanostructure**
Alberto Palmero – *CSIC, Sevilla (Spain)*

■ **Dry plasma processing for industrial c-Si solar cell production**
Jochen Rentsch – *Fraunhofer Institut, Freiburg (Germany)*

■ **Interactions of plasma with carbon walls in magnetic fusion devices**
Pascale Roubin – *Univ. de Provence, Marseille (France)*

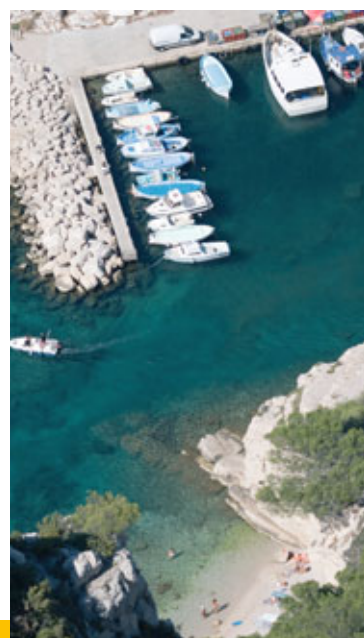
■ **Liquid-phase laser ablation plasmas and their applications**
Koichi Sasaki – *Nagoya Univ. (Japan)*

■ **Low temperature deposition of alumina thin films**
Jochen Schneider – *RWTH Aachen Univ. (Germany)*

■ **Studies of oxygen and chlorine atom recombination reactions on dynamic surfaces using a rotating substrate technique**
Luc Stafford – *Univ. Montréal (Québec, Canada)*

■ **Fast silicon etching by negative ions**
Eugen Stamate – *Univ. Roskilde (Denmark)*

■ **High-power pulsed magnetron sputtering discharges: experiments and modelling**
Jaroslav Vacek – *Univ. West Bohemia, Plzen (Czech Republic)*



general information



Grants for students

Up to five grants of 300 euros will be available for PhD students. Candidates are invited to apply when submitting their abstract on the CIP'09 website. The applying procedure (student CV and recommendation letter from the supervisor to send to SFV before April 10th, 2009) will be detailed on the website.

Abstract submission

Abstracts have to be submitted on line before March 27th, 2009 using the template available on the CIP'09 website.

Publication

The one-page abstracts of accepted communications will be published in a book of abstracts which will be distributed to the participants at the opening of the Colloquium.

In addition, invited speakers and contributors are invited to submit a paper to the European Physical Journal – Applied Physics (EPJ-AP). The papers will be subjected to a peer-review process arranged by the editorial CIP Committee.

If you plan to submit a paper, you are invited to mention it when registering on the CIP'09 website. The paper will have to be submitted before June 30th.

Location and Access

Marseille is the historic capital of the Mediterranean Basin and has become France's second largest public research centre of science with more than 3,000 researchers working in 300 laboratories.

The Marseille convention Centre, located in the very heart of the City (Parc Chanot), is at the crossroad of 3 speedways for Spain, Italy and Northern Europe, directly connected to the St-Charles railway station by metro and 30 minutes from the Marseille-Provence International Airport (shuttles every 20 minutes).

Subway station: Rond point du Prado (Line 2)

Bus station: Rond point du Prado
Lines 19, 21, 21b, 21Jet, 21s, 22, 22s, 23, 41s, 44, 45, 72

Links :

- Convention Centre
www.parc-chanot.com
- Marseille Provence Airport
www.marseille.aeroport.fr
- Saint-Charles Railway Station
www.voyages-sncf.com
- Subway and bus
www.rtm.fr

Accommodation

Marseille offers a wide range of hotel accommodation, in all categories.

Feel free to visit: www.marseille-tourisme.com

Rooms will also be available in a student hall of residence in the town center.

general information

Submit your abstract on
www.vide.org/cip2009.html

Important Dates

- March, 27th Deadline for abstract submission
- April, 10th Deadline for applying for a PhD student grant
- May, 11th Acceptance notification
- May, 25th Program on line
- June, 1st Deadline for reduced conference fee
- June, 22nd-23rd CIP 09 Short courses
- June, 23rd-26th CIP 09 Conference
- June, 30th Deadline for paper submission to EPJ-AP



Fees*

| CIP 09 | SFV Member | non-SFV Member | Student |
|--|------------|----------------|-------------|
| Short courses only | 280 € | 340 € | 200 € |
| Conference only | 400 € | 460 € | 200 € |
| Courses + Conference | 600 € | 660 € | 320 € |
| Colloquium dinner | | | 50 € |
| Additional charge for registration after June, 1st | | | 50 € |



Registration on

www.vide.org/cip2009/registration.html

For students, please provide a copy of your 2009/2010 student card.

* **Short courses:** From Monday, June 22nd morning to Tuesday, June 23rd at noon. Fees include coffee breaks and the Monday lunch.

Conference: From Tuesday afternoon, June 23rd to Friday, June 26th at noon. Fees include access to all the oral and posters sessions, the abstract book, coffee breaks, Wednesday & Thursday lunches and the access to SVTM 2009.



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1^{er} Salon du Vide et des Traitements des Matériaux

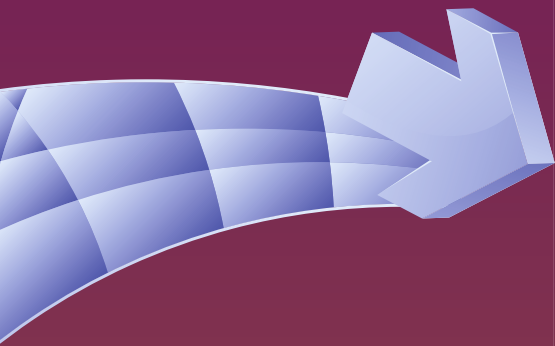


The first international exhibition on vacuum and surface engineering will take place on the same site, at the Marseille Convention Centre.

Organized by SFV and A3TS (Association de Traitement Thermique et de Traitement de Surface), this trade fair for vacuum and surface technology will take place during 2 days, **Wednesday 24th and Thursday 25th**.

A technical forum and several industrial presentations are planned. The access is free.

www.svtm2009.org



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Papers of keynote lectures, oral communications and posters will be published in the CIP 2009 abstract booklet.

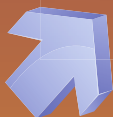
Fill in the application form www.vide.org/cip2009.html

And send to SFV by email sfv@vide.org

your one-page abstract respecting instructions before March, 27th 2009 including:

- ✓ The name of the corresponding author, full address and email
- ✓ Your preference: oral or poster session
- ✓ The topic

**The Steering Committee will advise you on
MAY 11th, 2009**



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