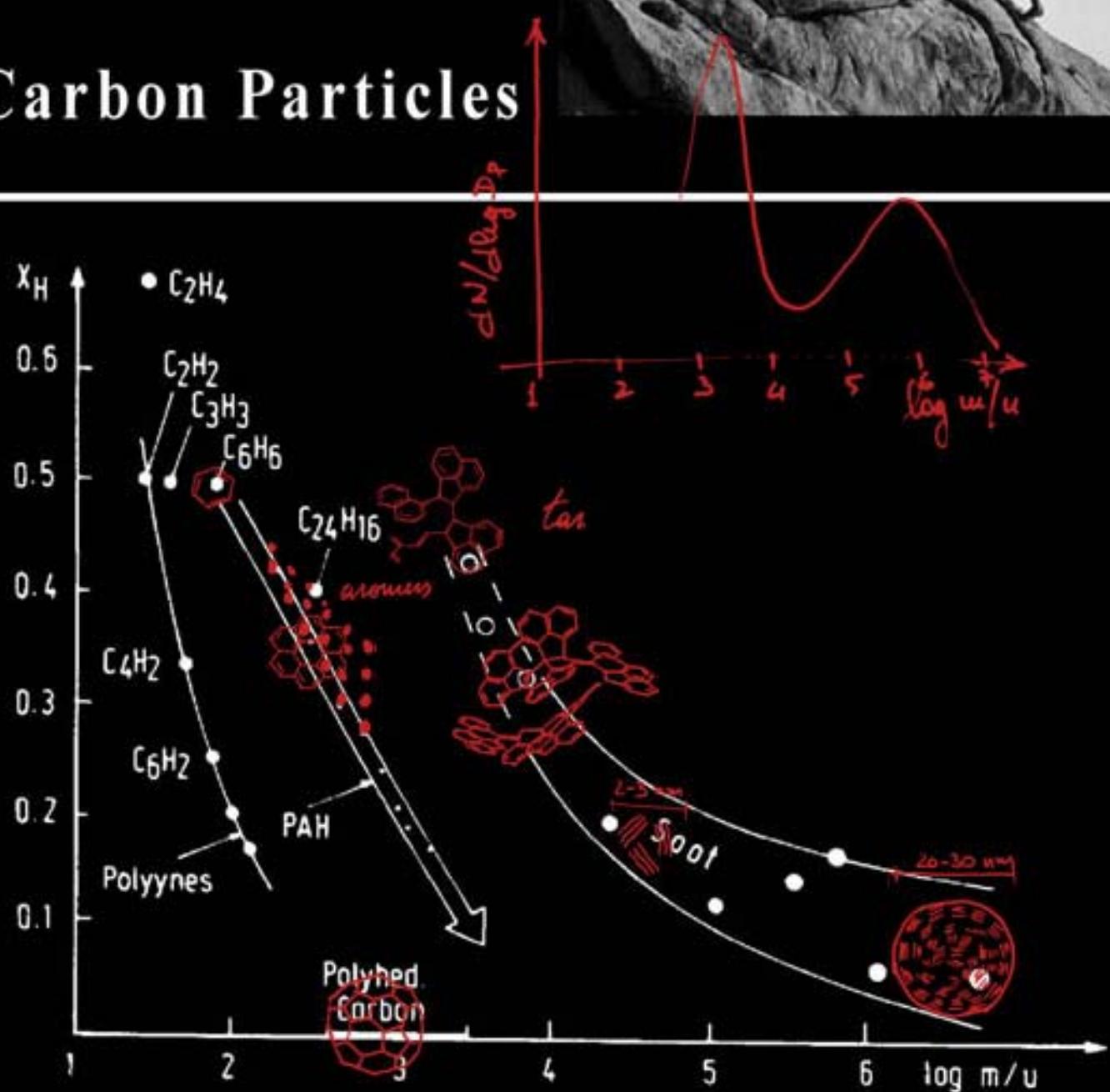


# International Workshop on Combustion Generated Fine Carbon Particles



International Workshop on  
**Combustion-Generated Fine Carbon Particles**

*Villa Orlandi – Anacapri*  
13-16 May, 2007

## Institutions of Workshop Organizers

Istituto di Ricerche  
sulla Combustione CNR



Istituto di Ricerche sulla Combustione



Universität Karlsruhe (TH)  
Research University • founded 1825



Università degli Studi  
di Napoli Federico II



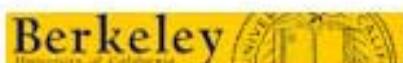
Universität Karlsruhe (TH)  
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Collaborative Research Centre 606: UNSTEADY COMBUSTION:  
Transport Phenomena-Chemical Reactions-Technical Systems



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# International Workshop on Combustion-Generated Fine Carbon Particles

*Villa Orlandi – Anacapri*  
*13-16 May, 2007*

## International Committee

- Henning Bockhorn**  
*Universität Karlsruhe, Germany*
- Andrea D'Anna**  
*Università di Napoli Federico II, Italy*
- Michael Frenklach**  
*University of California, Berkeley, USA*
- John Hewson**  
*Sandia National Laboratories, USA*
- Peter Lindstedt**  
*Imperial College, UK*
- Fabian Mauss**  
*Cottbus University, Germany*
- Adel Sarofim**  
*University of Utah, USA (cbair)*
- Hai Wang**  
*University of Southern California, USA*

## Local Organizing Committee

- Andrea D'Anna**  
*Università di Napoli Federico II, Italy*
- Anna Ciajolo**  
*CNR Napoli, Italy*
- Antonio Tregrossi**  
*CNR Napoli, Italy*
- Stefania Acanfora**  
*MCM Congressi, Italy*

The workshop is held from May 13 to 16, 2007, in Villa Orlandi, Anacapri Italy. The workshop is a sequel to a number of international soot workshops the most recent of which was held in Heidelberg, leading to the publication in 1994 of "Soot Formation in Combustion", edited by Henning Bockhorn.

The purpose of the workshop is to

- Review the current status of our understanding of soot formation mechanisms, new data and experimental methodologies, and advances in the application of soot models to solve practical problems.
- Candid discussion of areas of discrepancies and the priorities for future research.
- The definition of a plan for collaboration between the soot community for the establishment of a web-based data base and model comparison.

Five half-day sessions are planned:

1. Formation of Soot Precursors for Real Fuels
2. Particle Inception and Maturation
3. Dynamics of Mass and Number Growth and Decay
4. Turbulent Flames and Practical Applications
5. Establishment of an International Soot Collaborative

Following a modification of the roundtable format of the Göttingen Workshop, leading to the publication in 1990 of "Soot Formation in Combustion: An International Round Table Discussion", each session will have two prepared half hour presentations summarizing developments in the theme of the session. A variation on the Göttingen format is to have these overview discussions followed by an hour informal poster session with presentations relevant to the session theme. An open discussion will follow the two presentations and the poster session.

The products of the workshop will be the plan for the International Soot Collaborative and a book summarizing the papers, presentations, and discussions.

Adel F. Sarofim  
*Chair of the International Committee*

# Program

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## *Sunday 13 May*

5:00 pm

Villa Orlandi is opened to welcome the participants  
Information material and program of the meeting is distributed

5:00 pm – 6:00 pm

Light drinks in the garden

6:00 pm – 8:30 pm

Welcome party

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## *Monday 14 May*

8:30 am

Welcome and opening

9:00 am – 9:15 am

Presentation of Session I Formation of Soot Precursors for Real Fuels

*Co-Chairs: P. Lindstedt & F. Mauss*

9:15 am – 10:15 am

Invited talk E. Ranzi – Politecnico di Milano, Italy

Invited talk P. Westmoreland – University of Massachusetts Amherst, USA

10:15 am – 11:45 am

Coffee break and poster session

11:45 am – 1:00 pm

Open discussion

1:00 pm – 2:30 pm

Lunch break: buffet lunch

2:30 pm - 2:45 pm

Presentation of Session II Particle Inception and Maturation

*Co-Chairs: A. D'Anna & M. Frenklach*

2:45 am – 3:45 am

Invited talk A. D'Alessio – Università di Napoli Federico II, Italy

Invited talk M. Frenklach – University of California, Berkeley, CA, USA

3:45 am – 5:15 am

Coffee break and poster session

5:15 am – 6:30 pm

Open discussion

8:00 pm – 10:00 pm

Dinner

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*Tuesday 15 May*

9:00 am – 9:15 am

Presentation of Session III Dynamics of Mass and Number Growth and Decay

*Co-Chairs: H. Bockhorn & A. D'Anna*

9:15 am – 10:15 am

Invited talk A. D'Anna – Università di Napoli Federico II, Italy

Invited talk H. Wang – University of Southern California, CA, USA

10:15 am – 11:45 am

Coffee break and poster session

11:45 am – 1:00 pm

Open discussion

1:00 pm – 2:30 pm

Lunch break: buffet lunch

2:30 pm - 2:45 pm

Presentation of Session IV Turbulent Flames and Practical Applications

*Co-Chairs: P. Lindstedt and H. Bockhorn*

2:45 pm – 3:45 pm

Invited talk H. Bockhorn – Universität Karlsruhe, Germany

Invited talk P. Lindstedt – Imperial College, UK

3:45 pm – 5:15 pm

Coffee break and poster session

5:15 pm – 6:30 pm

Open discussion

7:30 pm

Meeting point in Piazza Vittoria

8:00 pm – 10:00 pm

Social dinner

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*Wednesday 16 May*

9:00 am – 2:00 pm

Open discussion. Light drinks and buffet lunch

2:00 pm - 2:30 pm

Presentation of Session V Establishment of an International Soot Collaborative

*Co-Chairs: M. Frenklach & J. Hewson*

2:30 pm – 4:30 pm

Open discussion

5:00 pm

End of the meeting

## List of participants

**Michael Balthasar**  
*VOLVO*  
*Sweden*

**Henning Bockhorn**  
*Universität Karlsruhe*  
*Germany*

**Kenneth Brezinsky**  
*University of Illinois at Chicago*  
*USA*

**Helen Brockelhurst**  
*Rolls Royce*  
*UK*

**Nabiha Chaumeix**  
*CNRS, Orléans*  
*France*

**Anna Ciajolo**  
*CNR, Napoli*  
*Italy*

**Med Colket**  
*United Technologies Research Center*  
*USA*

**Edwin Corporan**  
*Wright Patterson Air Force Res. Lab.*  
*USA*

**Antonio D'Alessio**  
*Università di Napoli Federico II*  
*Italy*

**Andrea D'Anna**  
*Università di Napoli Federico II*  
*Italy*

**Pascale Desgroux**  
*Université des Sciences et Technologies de Lille*  
*France*

**Richard A. Dobbins**  
*Brown University*  
*USA*

**Ruud Eggel**  
*Rolls Royce*  
*Germany*

**Michael Frenklach**  
*University of California, Berkeley*  
*USA*

**Horst-Henning Grotheer**  
*Institute of Combustion Technology, DLR*  
*Germany*

**Brian Haynes**  
*University of Sydney*  
*Australia*

**John Hewson**  
*Sandia National Laboratories*  
*USA*

**Ian Kennedy**  
*University of California, Davis*  
*USA*

**John Kent**  
*University of Sydney*  
*Australia*

**Stephen Klippenstein**  
*Argonne National Laboratory*  
*USA*

**Katharina Kohse-Höinghaus**  
*Bielefeld University*  
*Germany*

**Markus Kraft**  
*Cambridge University*  
*UK*

**Shuichi Kubo**  
*Toyota Central R&D Lab.*  
*Japan*

**JoAnn Slama Lighty**  
*University of Utah*  
*USA*

**Peter Lindstedt**  
*Imperial College*  
UK

**Matti Maricq**  
*Ford Motor Company*  
USA

**Fabian Mauss**  
*Cottbus University*  
Germany

**Charles McEnally**  
*Yale University*  
USA

**Houston J. Miller**  
*The George Washington University*  
USA

**Patrizia Minutolo**  
*CNR, Napoli*  
Italy

**Frederick Ossler**  
*Lund University*  
Sweden

**Lisa Pfefferle**  
*Yale University*  
USA

**Heinz Pitsch**  
*Stanford University*  
USA

**Eliseo Ranzi**  
*Politecnico di Milano*  
Italy

**Robert J. Santoro**  
*Penn State University*  
USA

**Adel F. Sarofim**  
*University of Utah*  
USA

**LeeAnn Sgro**  
*Università di Napoli Federico II*  
Italy

**Christopher Shaddix**  
*Sandia National Labs*  
USA

**Mitch Smooke**  
*Yale University*  
USA

**Peter B. Sunderland**  
*University of Maryland*  
USA

**Wing Tsang**  
*NIST*  
USA

**Angela Violi**  
*University of Michigan*  
USA

**Pavel Vlasov**  
*Semenov Institute of Chemical Physics*  
*Russian Academy of Science*  
Russia

**Hai Wang**  
*University of Southern California*  
USA

**Jürgen Warnatz**  
*University of Heidelberg, IWR*  
Germany

**Phil Westmoreland**  
*University of Massachusetts Amherst*  
USA

**Michael R. Zachariah**  
*University of Maryland and National Institute of Standards and Technology*  
USA

## Sponsors

