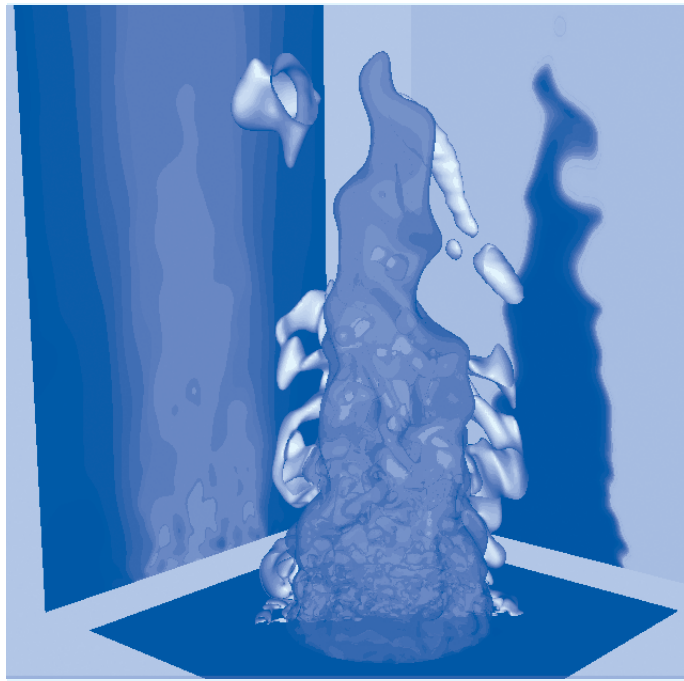




**von KARMAN INSTITUTE
FOR FLUID DYNAMICS**

TURBULENT COMBUSTION



May 25-29, 2009

	von Karman Institute for Fluid Dynamics 72, Chaussée de Waterloo 1640 Rhode-Saint-Genèse, Belgium
	Phone: +32(0)2 359 96 04 - Fax: +32(0)2 359 96 00 E-mail: secretariat@vki.ac.be , TVA BE 0407 185 709 Website: http://www.vki.ac.be

INTRODUCTION

The objective of this Lecture Series on Turbulent Combustion is to present the state-of-the-art review of on-going activities in turbulent combustion and to outline current research directions. Introductory lectures on the fundamentals of combustion, and in particular of turbulent combustion, are followed by up-to-date reviews on numerical modelling and experimental results in single and two-phase flows. The lecturers will also give an appraisal of the future challenges and perspectives in the domain.

TIMETABLE

MONDAY MAY 25

- 09:00** Welcome address
09:30 Introduction to turbulent combustion
*Prof. L. Vervisch, INSA de Rouen, And CNRS CORIA, France
& Dr. D. Veynante, CNRS & Ecole Centrale des Arts et
Manufactures, France*
- 14:00** Introduction to turbulent combustion (Continued)
Prof. L. Vervisch & Dr. D. Veynante

TUESDAY MAY 26

- 09:00** Turbulent combustion modelling
Prof. L. Vervisch & Dr. D. Veynante
- 14:00** Turbulent combustion modelling (Continued)
Prof. L. Vervisch & Dr. D. Veynante

WEDNESDAY MAY 27

- 09:00** Spray combustion
Dr. R. Koch, Universität Karlsruhe, Germany
- 14:00** Spray combustion (Continued)
Dr. R. Koch
- 15:45** Gas-turbine combustion
Dr. P. Flohr, Astom, Switzerland

THURSDAY MAY 28

- 09:00** Experiments in turbulent combustion
Prof. A. Dreizler, TU Darmstadt, Germany
- 14:00** Experiments in turbulent combustion (Continued)
Prof. A. Dreizler
- 15:45** Combustion in industrial furnaces: advances and challenge
*Dr. D. Galley, St-Gobain Service Elaboration des Verres,
France*

Participants to the lecture series are invited to present a poster of their activities related to turbulent combustion. A pdf-file of the poster should be submitted to vanbeeck@vki.ac.be (Jeroen van Beeck) before 8 May 2009.

The directors of the lecture series are Prof. L. Vervisch of INSA de Rouen and CNRS CORIA (France) and Dr. Veynante of CNRS and Ecole Centrale Paris (France).

The local coordinator is Dr. J.P.A.J. van Beeck of the von Karman Institute.

FRIDAY MAY 29

- 9:00** Applications of turbulent combustion modelling
Prof. D. Haworth, Pennsylvania State University, USA
- 14:00** Applications of turbulent combustion modelling (Continued)
Prof. D. Haworth
- 17:00** VKI bus departure

PRACTICAL INFORMATION

Lunch will be taken from 12h30 to 14h00. Coffee breaks are scheduled each morning and afternoon.

*Please pass this announcement to someone
who may be interested if you are unable to
attend the Lecture Series yourself*



VON KARMAN INSTITUTE FOR FLUID DYNAMICS



- ☐ INTRODUCTION TO CFD
(12-16 JANUARY 2009)
- ☐ ADVANCES IN LAMINAR-TURBULENT TRANSITION MODELING
(12-15 JANUARY 2009 - AT THE WRIGHT STATE UNIVERSITY, OHIO, USA)
- ☐ RECENT ADVANCES IN PARTICLE IMAGE VELOCIMETRY
(26-30 JANUARY 2009)
- ☐ MODELING AND COMPUTATION OF NANOPARTICLES IN FLUID FLOWS (RTO-AVT-VKI)
(9-12 FEBRUARY 2009)
- ☐ FLOW CONTROL: FUNDAMENTALS, ADVANCES AND APPLICATIONS
(2-6 MARCH 2009)
- ☐ AERODYNAMIC NOISE FROM WALL-BOUNDED FLOWS
(9-13 MARCH 2009)
- ☐ LIQUID FRAGMENTATION IN HIGH-SPEED FLOW
(16-18 MARCH 2009)
- ☐ HIGH PERFORMANCE COMPUTING OF INDUSTRIAL FLOWS
(5-7 MAY 2009)
- ☐ ADVANCED HIGH TEMPERATURE INSTRUMENTATION FOR GAS TURBINE APPLICATIONS
(11-14 MAY 2009)
- ☒ TURBULENT COMBUSTION
(25-29 MAY 2009)
- ☐ 36TH CFD.ADIGMA COURSE ON HP-ADAPTIVE AND HP-MULTIGRID METHODS
(JUNE 8-12, 2009)
- ☐ NUMERICAL INVESTIGATIONS IN TURBOMACHINERY: THE STATE OF THE ART
(SEPTEMBER 21-25, 2009)

OTHER CONFERENCES:

- ☐ PHYSMOD 2009: INTERNATIONAL WORKSHOP ON PHYSICAL MODELLING OF FLOW AND DISPERSION PHENOMENA
(24-26 AUGUST 2009)
- ☐ 4TH SYMPOSIUM ON INTEGRATION CFD AND EXPERIMENTS IN AERODYNAMICS
(14-16 SEPTEMBER 2009)

COURSE FEE

The fee for the lecture series is 1300 euro, applicable to citizens of NATO countries contributing to the financing of the VKI (Belgium, Czech Republic, France, Germany, Hungary, Iceland, Italy, Luxemburg, Norway, Portugal, Spain and Turkey). For citizens of other NATO countries and of NATO partner countries, the fee is 1700 euro. For non-NATO citizens the fee is of 1850 euro. These prices include 21% VAT.

The fee includes printed notes, transport between VKI from and to the recommended hotels in the center of Brussels, lunches, beverages, and administrative costs.

FELLOWSHIPS

To encourage greater participation in our Lecture Series programme by university members, the Institute has established a limited number of VKI Lecture Series fellowships for citizens of NATO countries contributing to the financing of the VKI, as well as for citizens of other NATO countries coming from a university in a VKI financing country. The recipient of such fellowship is entitled to attend the Lecture Series at a reduced fee, which will be of 650 euro (VAT included) for assistants not having a Ph.D. degree and for Ph.D. candidates, or 300 euro (VAT included) for undergraduate students. The request to be considered for an award must accompany the application to attend the Lecture Series, and the applicant must provide a recommendation letter from his or her professor; if not done so, the request will not be taken into consideration. All possible alternative sources of funding should be investigated before aid is requested under this scheme, so that those most in need will benefit.

METHODS OF PAYMENT

Payment 2 weeks prior to the beginning of the course (name and course title clearly indicated) by bank transfer to our account Nr 210-0315330-35 at Fortis Bank, avenue de la Forêt de Soignes 322, 1640 Rhode-Saint-Genèse, Belgium, IBAN BE57 2100 3153 3035 (strongly recommended). SWIFT BIC GEBABEBB.

Late registration can be paid in cash (EURO), or by VISA or Eurocard at the beginning of the course.

PROCEEDINGS

Lectures will be given in English and printed notes will be distributed during registration. Proceedings of other non-RTO lecture series may be purchased at VKI (by e-mail: vanhaelen@vki.ac.be or by fax : 32 2 359 96 00). Information can be found on <http://www.vki.ac.be>.

HOW TO REGISTER

It is highly recommended that the registration/hotel reservation form is sent at the latest 15 days before the beginning of the course. A letter of acceptance and additional information will be sent on receipt of the application form.

ACCOMMODATION & TRANSPORT

Participants are advised to make their reservations as early as possible. VKI secretariat (secretariat@vki.ac.be) can book rooms upon request in the recommended hotels listed below. Daily rates include all charges and continental breakfast. These prices could be subject to changes. **However, participants could occasionally find special offers on hotel websites.**

Hôtel des Colonies http://www.hotel-des-colonies.com	Single: 120 € / Double: 140 €
Hôtel Vendôme http://www.hotel-vendome.be	see the website
Hôtel Marivaux http://www.marivaux.be	see the website
Thon Hotel Brussels City Centre http://www.thonhotels.be/	Single: 142 € / Double: 174 €
Hôtel Le Dôme http://www.hotel-le-dome.be	Single: 125 € / Double: 145 €
Hôtel Orts http://www.hotelorts.com	Single: 200 € / Double: 250 €
Progress Hôtel http://www.progresshotel.be	Single: 200 € / Double: 220 €

A youth hostel, the Sleepwell, is within walking distance of the recommended hotels. We invite you to make your own reservation through their website: <http://www.sleepwell.be>.

The hotels situated in Brussels are all within walking distance from the Place Rogier, closed to Gare du Nord. A train service links the airport with the Gare du Midi, the Gare du Nord and Gare centrale. Complete your journey to the hotel/youth hostel by taxi. Each morning and evening, bus transport will be provided between the Place Rogier and the von Karman Institute, located in Rhode-Saint-Genèse, a suburb south of Brussels.

The following hotels are also recommended, particularly for those who travel by private car.

Auberge de Waterloo****
Chaussée de Waterloo 212 - 1640 Rhode-Saint-Genèse
Tel: +32 (0)2 358 35 80 - Fax : +32 (0)2 358 38 06
<http://www.aubergedewaterloo.be> (1 single room: +/- 106€)

Gravenhof Hotel
Alsembergsesteenweg 616 - B-1653 Dworp
Tel: +32 2 380 44 99 - Fax: +32 2 380 40 60
<http://www.gravenhof.be> (1 single room: +/- 105 €, breakfast not included)

For more information about the location of the Institute and the hotels, please visit our website on <http://www.vki.ac.be>.

HOTEL RESERVATION (if applicable)

Lecture Series Title: TURBULENT COMBUSTION

☐ Mr ☐ Mrs

Family name:

Name & full address of organisation, institution or university:

Phone nr:

Position or title:

Firstname:

Nationality:

Fax nr:

E-mail:

☐ Asking a reduced fee and joining a recommendation letter as: ☐ Undergraduate student ☐ Ph.D. candidate or University assistant

Company / University VAT number:

VAT of the von Karman Institute: BE 0407 185 709

I require accommodation at Hotel

Single: Double:

I shall require transport to and from the Institute

I do not require transport to and from the Institute ☐

Please indicate any special needs (e.g. vegetarian, ...):

for

Date of arrival: Date of departure:

person(s)

Date:

Signature:



Please mail under -cover to VKI