### **Abstract Submission**

Abstract submission is open for Ph. D. Students of the Department of Mechanical and Process Engineering. All the contributions will be presented as posters. Priority will be given to the students already in the two final semesters of their project.

Abstract submissions (see detailed instructions for the preparation of abstracts at www.stodola.ethz.ch), by e-mail to Maddalena Velonà:

maddateria.vetoria@ipe.mavt.etiiz.ci

# Venue

Ph.D. Student Day and Stodola Lecture ETH Zentrum Auditorium Maximum Rämistrasse 101 Zurich

<u>Poster Exhibition</u>
Gallerie in front of the Auditorium Maximum

# Organisation

Prof. Dr. Marco Mazzotti Department of Mechanical and Process Engineering Deputy Head, Research + Ph.D. Studies

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# **Deadlines**

Abstract submission: April 20<sup>th</sup>, 2004
Abstract acceptance: April 27<sup>th</sup>, 2004
Final program: April 28<sup>th</sup>, 2004
(see program at www.stodola.ethz.ch)

Ph.D. Student Day: May 11<sup>th</sup>, 2004



# **DMAVT Ph.D. Student Day**

The Ph.D. Student Day of the Department of Mechanical and Process Engineering brings to the forefront the work of the doctoral students, which constitutes the backbone of D-MAVT research. It gives them the opportunity to present their work and to interact among themselves, with colleagues at ETH Zurich, with professors, and with external guests, e.g. alumni and industry people. This event will also highlight the multi-faceted research activities at D-MAVT, and their significance as regards the needs of the society.

During the day, a few personalities from different fields will present their view about science and technology either in their own area or with reference to ETH Zurich and D-MAVT. Among these there will also be the recipient of the ETH Stodola Medal.

The D-MAVT Ph.D. Student Day will be celebrated at ETH Zentrum, in the AudiMax, on May 11<sup>th</sup>, 2004.

The doctoral students at D-MAVT are invited to submit abstracts for presentation, and all interested people are kindly invited to attend.



The image on the front page combines a detail of Michelangelo's Cappella Sistina (1508-12) with

Aurel Stodola's design of an artificial hand (1916). It refers to the quest of scientists and engineers for transcending human limits and boundaries, and at the same time to the importance of the exchange between society and science that this event wishes to foster.

### Stodola Lecture

D-MAVT organizes annually the Stodola Lecture with the intention to commemorate the personality and the seminal contributions to the field of mechanical engineering of its former faculty member Aurel Stodola (1859-1942, active at ETH Zurich from 1892 to 1929). A pioneer in the



area of the technical thermodynamics and its applications, Aurel Stodola has guided through his work many generations of engineers and engineering developments worldwide

The Stodola Lecture is given by an internationally recognized expert in the field of mechanical and process engineering, which is selected by the department faculty and is awarded the ETH Stodola Medal.

The 2004 ETH Stodola Medal is awarded to Professor Sheldon Friedlander of the University of California, Los Angeles, for his work in the field of aerosol engineering, i.e. the science and technology of fine particles in gases, with applications to air pollution and advanced materials.





Eidgenössische Technische Hochschule Zürich Swiss Federal Institute of Technology Zurich

# Program

### 09:15 Welcome address

og:25 "Haben Schweizer Polytechniker eine Zukunft in einem nordamerikanisch geführten, weltweit tätigen Industriekonzern?".

Georg Reif, President Alcan Composites

10:00 "Numerical analysis of particle transport and flow modification in temporally evolving mixing layers", Dr. Chidambaram Narayanan, ETH Zurich, 2004 ETH Medal

#### 10.20 Poster exhibition and coffee break

10:40 "Nano-scale patterning of aluminium films by water and light",

Dr. Daniel Häfliger, Technical University of Denmark, 2004 ETH Medal

11:00 "Flow, Flame Characterization and Nitric Oxide Formation in Turbulent Premixed Flames",

Dr. Kai Herrmann, ETH Zurich, 2004 ETH Medal

11:20 "The values of Wissenschaft between mind and money",

Prof. Michael Hagner, ETH Zurich

#### 11:50 Poster exhibition and lunch buffet

13:15 "Engineering, Science, and our Future",
Prof. Richard Ernst, ETH Zurich

14:00 "Prion research: primer and progress report",
Prof. Adriano Aguzzi, University Hospital Zurich

### 14:45 Poster exhibition and coffee break

#### 15:30 Stodola Lecture

"Nanoparticle aerosol technology: an enabling discipline", Prof. Sheldon Friedlander, University of California Los Angeles