



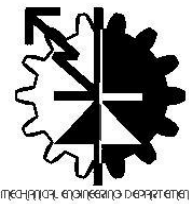
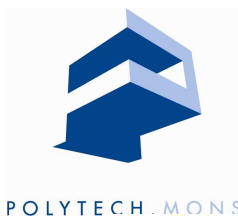
## ETE' 2009

Second EUREKA International Symposium on Environmental Testing  
Engineering  
Towards an information exchange between Academy and Industry

26-27 November 2009  
Royal Military Academy, Brussels, Belgium



BEMEKO



Comité national de Mécanique théorique et appliquée  
Nationaal comité of theoretische en toegepaste mechanica

Environmental Engineering and Testing aim at the design and manufacturing of the best possible products. Not only functional and economical requirements but also environmental specifications and regulations have to be taken into account. The influence of the product on its environment and of the environment on the product should be simulated and/or tested. Important aspects are noise, vibration, shock, temperature, moisture, dust, chemical contamination, ageing, corrosion, qualification testing, accelerated testing, stress screening, reliability growth tests, virtual testing, Environmental Engineering and Testing are vital for the design and life-cycle-management of sustainable products.

This second EUREKA International Symposium on Measurement and Control in Environmental Testing Engineering is aiming to gather high quality and original contributions in the testing field and associated measurement domain with the final goal of bringing together Academic R&D and Industrial Needs. The contributions will focus on theoretical backgrounds and applied methods developed for the design of reliable and sustainable products, production, Quality Control and Quality Assurance as well as on the theoretical bases of environmental testing techniques. Beside invited lectures, technical contributions (posters, exhibitions) from companies are welcome to provide a full picture of the state of the art and measurement tools in this area. Beside the symposium, GRASMECH (PhD Courses in Mechanical Engineering) will organize a two-days Education Programme focusing on the experimental tools (Software/Hardware) at disposal of R&D activities in the domain of Vibration, Acoustics and Fluid Mechanics

## Topics

The topics and field of interests may be found on the EUREKA [www.eneest.eu](http://www.eneest.eu) . Among the Environmental Testing Engineering, a particular emphasis will be devoted to research and applications related to:

Accelerated Test  
Environmental Stress Screening  
Failure Identification, Analysis and Fix  
Failure mode and effect analysis  
Highly Accelerated Stress Screening  
Highly accelerated test  
Reliability, Availability, Maintainability and Safety  
Reliability Growth Test  
Test Tailoring  
Vibration, shock, Climatic Tests  
Failure detection  
Predictive Maintenance  
Quality Assurance

## Time schedule

The invited contributions will focus on theoretical backgrounds and applied methods explicitly developed for the sustainable design of products and their life-cycle-management, as well as on the theoretical bases of testing engineering techniques. Interested in a communication: send an abstract (approximately 300 words in English) not later than September,30, 2009. Electronic submissions of the abstracts (PDF or Word -files) should be mailed to:

[Yvan.baudoin@rma.ac.be](mailto:Yvan.baudoin@rma.ac.be) and [Francois.crepain@telenet.be](mailto:Francois.crepain@telenet.be)

- ⌘ Abstract proposal deadline: September, 30 , 2009
- ⌘ Final selection and invitation of participants: October, 20 , 2009
- ⌘ Receipt of camera-ready papers/digital papers: November, 16, 2009

**Technical posters or exhibited Testing/Measurement Material will be accepted as well:**  
pictures and detailed content of the description may be sent to the same address.

Registration: [www.eneest.eu](http://www.eneest.eu)

## Local Organisation Committee

### National Organising Committee

**Chairmanship:**

Yvan Baudoin, RMA/BSMEE  
Olivier Verlinden, FPMS/BSMEE

**Members**

Jos PINTE, AGORIA/BSMEE  
Ivo Hostens, SIRRIS  
JC.Golinval, Ulg  
V.Legat, UCL  
P.Dehombreux, FPMs  
F.Crépain, BSMEE/National  
EUREKA/TENEEST Secretary

Workshop inquiries to:

ETE'2009  
BSMEE  
Dpt Mech Eng  
30 Avenue de la Renaissance  
B 1000 Brussels  
Tel: +32 2 7426553  
Fax: +32 2 7426547  
Home pages :  
**www.bsmee.be**

[Yvan.baudoin@rma.ac.be](mailto:Yvan.baudoin@rma.ac.be)  
[Francois.crepain@telenet.be](mailto:Francois.crepain@telenet.be)

#### International Programme Committee

|                  |   |
|------------------|---|
| <b>Austria</b>   | Prof P.Kopacek, HUT Vienna  |
| <b>Belgium</b>   | Prof P.Guillaume, VUB Brussels<br>Prof L.Van Biesen, VUB Brussels<br>Prof B.Lauwers, KUL<br>Prof P.Dehombreux, FPMs Mons<br>Prof JC Golinval, ULg<br>Prof V.Legat, UCL<br>Prof J.Degrieck, UGent<br>Prof D. Vandepitte, KUL |
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| <b>Russia</b>             | Prof V.Gradetski, IPM, Moscow  |
| <b>Sweden</b>             | Prof. Håkan Torstensson, CEEES<br>Prof. Lennart Josefsson, Chalmers<br>Prof. Bo Carlsson, Kalmar Högskola<br>Prof. Kjell Ahlin, SVS<br>Dr Peter Eriksson, Chamers<br>Dr Magnus Davidsson, SEEE   |
| <b>United<br/>Kingdom</b> | Dr Ir David Richards (LMCO-UK)   |
| <b>USA</b>                | Prof Dr Ir C.Bostater (Florida<br>Institute of Technology)   |

# GRASMECH' 2009

26-27 November 2009

## Experimentation in Environmental Engineering: Vibrations, Acoustics and Fluid Mechanics

**Organisators:** Royal Military Academy, Vrije Universiteit Brussel, Katholieke Universiteit Leuven, Von Karman Institute

**A. Vibrations, Acoustics, Laser Vibrometry and Applications:** Prof Dr Ir P. Guillaume (VUB) and Dr Ir K. HARRI (KMS), LMS International, Prof Dr Ir D. Vandepitte (KUL)

### Day 1:

Key-note (ETE2009) : **Dr. Thomas Bruns**  
Physikalisch-Technische Bundesanstalt  
Arbeitsgruppen 1.31 & 1.34, Bundesallee 100, 38116 Braunschweig  
GERMANY

**Title: Vibration Measurement – State of the Art**  
Key-note (GRASMECH2009): **Dr ir Herman Vanderauweraer**  
LMS International, Leuven  
**Title: New challenges in Modal Analysis**

### **Courses and Experimentation:**

- a. **Application of optical measurement techniques in Modal Analysis,**  
*Prof dr. ir. Patrick Guillaume (VUB)*
- b. **Application of transmissibility functions in Modal Analysis,**  
*ir. Christof Devriendt (VUB)*
- c. **Application of optimization techniques in Modal Analysis,**  
*dr. ir. Gunther Steenackers (VUB)*
- d. **Application of vibration measurements in Structural Health Monitoring,**  
*dr. ir. Kristof Harri (KMS)*
- e. **Auralization of traffic noise and application at the optimization of sound quality**  
*dr ir Dries Berckmans (KUL)*
- f. **Experimental analysis of structure-borne tyre/road noise due to road surface discontinuities**  
*dr ir Peter Kindt (KUL)*

**B. Fluid Mechanics: measurement of speed, mass flow, air quality and heat transfer: Prof dr Ir Tony Arts (VKI) and Prof dr Ir Walter Bosschaerts (RMA)**

**Day 2**

Key-note: **Prof Ilinca Nastase (Romanie)**

Technical University of Construction in Bucharest, Romania

Universitatea Tehnica de Constructii Bucuresti - UTCB

B-dul LACUL TEI, NR.124, SECTOR 2, RO-020396, BUCURESTI, ROMANIA

**Title: Experimental techniques in ventilation applications**

Courses and Experimentation:

- a. **Heat transfer measurements (convection)**  
*Prof Tony Arts (VKI)*
- b. **PIV measurements of jets**  
*Prof Ilinca Nastase (Romanie)*
- c. **Fine dust particles (quantification)**  
*Prof Karim Limam (Fr)*
- d. **Special probes (cooled probes)**  
*Prof Jean-François Brouckaert (VKI)*
- e. **Hot Wire (turbulence measurements)**  
*Prof Walter Bosschaerts (RMA)*

**REGISTRATION FORM**  
**2th International Symposium ETE'2009 - Brussels, Belgium.**  
**26-27 November 2009**

**FAMILY Name :** \_\_\_\_\_ **First Name :** \_\_\_\_\_  
**Affiliation :** \_\_\_\_\_  
**Address :** \_\_\_\_\_  
**City :** \_\_\_\_\_ **State :** \_\_\_\_\_  
**Zip Code :** \_\_\_\_\_ **Country :** \_\_\_\_\_  
**Phone :** \_\_\_\_\_ **Fax :** \_\_\_\_\_  
**E-mail address:** \_\_\_\_\_  
**Title of paper:** \_\_\_\_\_

**Accompanying person(s) (spouse,...) :**

**Last Name :** \_\_\_\_\_ **First Name :** \_\_\_\_\_  
**Last Name :** \_\_\_\_\_ **First Name :** \_\_\_\_\_

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**Conference fees (remove the inappropriate item)**

|   | Before<br>May 5 | On site   |
|---|-----------------|-----------|
| Authors and members of<br>sponsoring Bodies | 150 €           | 200 €     |
| Others                                      | 200 €           | 250 €     |
| Exhibitors                                  | 150 €/day       | 200 €/day |
| Students                                    | 25 €/day        | 30 €/day  |
| GRASMECH: PhD students                      | -               | -         |
| GRASMECH : Others                           | 25€/day         | 30€/day   |

**The fees include the lunches, get together Buffet, social events and proceedings**

Participation days (students and exhibitors): **Symposium ETE'2009** November 26 [  ] November 27 [  ]  
**GRASMECH ETE'2009** November 26 [  ] November 27 [  ]

**TOTAL PAYMENT (Euro):** \_\_\_\_\_ €

**Please, tick preferred payment**    **Bank transfer** [  ]        **On-Site** [  ]

**Bank transfer data:**

*Bank:* LA POSTE,

*Address:* PLACE JAMBLINNE DE MEEUS , 1000 Brussels

*IBAN:* BE95679002130158    *SWIFT :*BCHQBEBB    *Account number:* 679-0021301-58

*Please, include ETE'2009 PAT-MSTA-ISMCR in the transference document and send a copy of the receipt to the Conference Secretariat by fax +32-2 7426547*

**THIS FORM SHOULD BE RETURNED TO: ETE'2009 Secretariat,**

**Fax: +32-2-7426547, e-mail: [Yvan.Baudoin@rma.ac.be](mailto:Yvan.Baudoin@rma.ac.be)**

