



ICACM 2008

The second US-France symposium organized by :
the International Center for Applied Computational Mechanics
may 28-30, 2008, Rocamadour, France

MATERIALS UNDER EXTREME LOADINGS APPLICATION TO PENETRATION AND IMPACT

www.icacm2008.hmg.inpg.fr

Local organization committee :

E. Buzaud, France, DGA, Centre d'Etudes de Gramat
Contact : icacm2008.ceg@det.dga.defense.gouv.fr



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ORGANIZATION

The conference is being hosted by the Délégation Générale Pour l'Armement, Centre d'Etudes de Gramat. It is the second in a series of US-France symposia of the International Center for Applied Computational Mechanics (ICACM). ICACM is a partnership between several French and American Universities with the scope of promoting joint research at the forefront of computational mechanics. The aim of this conference is to facilitate the exchange and application of the most advanced knowledge behind computational methods for material impact & penetration modeling, with a special emphasis on geomaterials.

Co-organizers of the symposium are: AFRL, CNRS, DYMAT, University of Florida, University of Michigan, Université Paris 13, Institut National Polytechnique de Grenoble (INPG), Université de Savoie, Université de Lille.

OVERVIEW

The scope of the ICACM 2008 conference is to review recent advances in all aspects related the response of materials, submitted to high velocity impacts and penetration mechanics. It will be the occasion of an overview of the different challenges associated with the understanding and modeling of this class of complex interactions.

The following topics will be considered:

- characterization of material behavior under extreme loading (damage, moisture content, influence of pressure,...)
- microscopic observations, analysis of damage & mesoscale modeling
- macroscopic modeling, damage & plasticity
- penetration mechanics, trajectory instabilities
- localization, cracking, dynamic fragmentation of materials, modeling & simulation

Beyond the US-France cooperation fostering objective, the organizers have the intention to mix scientists from different horizons (mathematics, computational mechanics, visualization techniques, materials) and different disciplines (experiments, models, analysis, theory).

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COMMITTEES

Scientific committee:

Pr T. Belytschko	Northwestern University	(USA)
Pr D. Bresch	Université de Savoie	(FR)
Pr O. Cazacu	University of Florida	(USA)
Pr F. Darve	INPG	(FR)
Dr R. Dormeval	CEA Valduc	(FR)
Pr P. Franciosi	Université Paris XIII	(FR)
Pr D. Kondo	Université de Lille	(FR)
Pr M. Ortiz	CalTech	(US)
Dr M. Perez	DGA	(FR)
Pr J. Mazars	INPG	(FR)
Pr A. Molinari	Université de Metz	(FR)
Pr. W. Shyy	University of Michigan	(USA)

Local Organizing committee:

Dr E. Buzaud	DGA/CEG/MAN
Mr. A. Catrain	DGA/CEG/COM
Mrs S. Gratias	DGA/CEG
Mrs S. Rannou	DGA/CEG/SDP
Mrs. M.O. Saves	DGA/CEG/SDP

ABSTRACTS

All potential contributors should submit an extended 2 pages abstract. The abstract should briefly outline the main features, results, and conclusions of the work that will be presented at the conference. It should contain the full name, full address and e-mail of the author (s). A template is included in the jointed invitation email.

The abstract is to be submitted with the registration form at the following address: icacm2008.ceg@det.dga.defense.gouv.fr. The scientific committee will review the proposed abstracts, a notification of acceptance will be delivered to contributors by February 2008.

Abstract Submission Deadline: **15 January 2008**

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PROCEEDINGS

The abstracts will be gathered in a booklet that will be distributed at the registration desk. It is also envisioned to gather presentation slides and distribute it after the conference on a cdrom.

As mentioned previously, a major objective of the conference is to promote and facilitate the exchange and application of the most advanced knowledge in a highly focused topic. Hence, as for ICACM 2007, the scientific committee and the funding organizations have the objective of publishing a book incorporating the major contributions of the conference. For this reason, after the conference, any of the speakers may be proposed to produce a 12-15 pages article.

CONFERENCE LOCATION & ACCOMMODATIONS

The venue of the conference is the medieval town of Rocamadour. Nested on the flank of a canyon of the regional park of "Causses du Quercy", Rocamadour has been for ten centuries one of the most famous pilgrimage destinations in Europe. Today, more than one million visitors come each year to admire breathtaking views of the town, and discover its history & architectural heritage.

With its economy primarily oriented on tourism, the region has also a lot to offer. The Causses du Quercy is a limestone plateau presenting typical karstic landscapes: dry grasslands, trough faults, caves... This makes Quercy a favored destination for nature lovers and trekkers.

The nearest international airport is situated at Toulouse, at 162 km. A bus service will be organized from Toulouse on the 27 and 30 of May. Complementary information is available on the conference web site: <http://icacm2008.hmg.inpg.fr>

ICACM 2008 conference will be held at:

Hôtel du Château
Route du Château
46500 Rocamadour
France
Email: hotelchateaurocamadour@wanadoo.fr
Tel: 33 5 65 33 62 22
Fax: 33 5 65 33 69 00

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Each room may accommodate one or two companions. In this case, participants have to contact directly the hotel to check availabilities and organize by themselves companions booking. Extra charges will be requested by the hotel, the corresponding rates are provided as an indication in the jointed registration form. Those charges will be paid directly to the hotel.

Participants interested by an extended stay in Rocamadour are invited to contact the Hôtel du Château by themselves.

The hotel website can also be consulted directly at the following address (in French solely): www.hotelchateaurocamadour.com

VISITS

Besides the core of scientific lectures, two visits will be organized:

- On May 28 evening, a guided visit of Rocamadour to all participants and companions
- On May 29 afternoon, a guided visit of Centre d'Etudes de Gramat (CEG), registered participants

The second visit will be limited to registered candidates. The registration form incorporates an entry form indicating the bio data requested.

After a general presentation, the CEG visit will focus on the presentation of different test ranges and activities related to terminal ballistics activities. CEG is situated at 12 km from Rocamadour, a transportation service will be organized.

QUESTIONS

All questions regarding the administration and logistics of the conference should be addressed to the organization committee at:

icacm2008.ceg@det.dga.defense.gouv.fr