

# MECHANICS & MATERIALS IN DESIGN (M<sup>2</sup>D-4)

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4<sup>th</sup> International Conference

Nagoya University, Nagoya, Japan  
June 5 - 8, 2002

## *Second Call for Abstracts*



## INTERNATIONAL SCIENTIFIC COMMITTEE

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## CONFERENCE Co-CHAIRS

*Dr. Toshihiko Mori*  
Nagoya University, Japan

*Professor Hiroshi Fujii*  
Gifu University, Japan

## CONFERENCE THEME

**M<sup>2</sup>D-4** is the fourth international gathering of scientists and engineers interested in the fields of engineering mechanics, design and materials engineering planned for June 5 - 8, 2002 in Nagoya, Japan. The first conference was held in Toronto in 1996 and attracted over 150 delegates. The second was organised by Professors J.B. Hull and R. Gentle in Nottingham in 1998 and the third was organized by Professor S.A. Meguid in Orlando in 2000. These meetings resulted from the belief that of those disciplines associated with advanced product design and manufacture, engineering mechanics and materials engineering have made the most significant advance in recent years. Important and dramatic improvements in component design can be made by the use of the latest advances in mechanics and materials.

It is with this in mind that this ***Fourth International Conference on Mechanics and Materials in Design*** is organised. The purpose is to bring together scientists and engineers from the mechanics and materials communities to present their latest results and discuss new advances over a broad range of topics dealing with analytical, numerical and experimental techniques in mechanics and advances in materials' technology.

## TOPICS OF INTEREST

The conference addresses six important topics:

### **Intelligent Design**

Smart and Adaptive Structures  
Mechatronic System Design  
Mechanism(s) Design  
Design Against Failure  
Design for Manufacturing  
Design of Ultralight Structures  
Impact Mechanics & Crashworthiness  
Micro-Electro-Mechanical System Design

### **Experimental Mechanics**

Advanced Mechanical Testing  
Nondestructive Tools in Design  
Condition Monitoring  
Photoelasticity  
Quality Assurance and Control  
Intelligent Sensory

### **Micromechanics**

Micromechanical Modelling of Composites  
Failure Analysis: Fatigue and Fracture  
Scattering of Waves  
Multiscale Modelling: Concepts and Methodology

### **Computational Mechanics**

Nonlinear Mechanics in Design  
Novel Numerical Tools in Design  
Geometric Modelling and CAD Tools in Design  
FEM, BEM and Hybrid Methods  
Integrated Computer Aided Design  
Computational Failure Analysis  
Coupled thermo-electro-mechanical Problems  
Optimisation using FEA

### **Materials Processing**

Micromachining  
Thin Film Deposition  
Powder metallurgy  
Metal Forming Processing  
Physical Properties of Materials  
Smart/Adaptive Materials

### **Intelligent Manufacturing**

Recent Advances in Metal Forming/Cutting  
Neural Network  
Fuzzy Logic  
Genetic Algorithms

### **e.Teaching of Engineering Curricula**

This Symposium is Organised by Professors S.A. Meguid and J.B. Hull. The aim is to promote good teaching habits, keep abreast with advances in teaching methodologies and the use of advanced techniques in engineering education in general and mechanics and materials in particular.

## **CONFERENCE SITE**

Nagoya is located at the heart of central Japan, which is blessed with a rich natural environment. As the nucleus of this central area, Nagoya, with its population of more than 2.15 million, is one of Japan's major cities, and an important industrial and cultural center. The city is home to major transportation machinery and steel manufacturers and unique ceramic ware products. It also has many popular tourist destinations, including Nagoya Castle, Higashiyama Zoo and Botanical Gardens, and various other industrial tourism attractions and traditional craft-work centers. The conference will be held in Nagoya University, well suited for conferences in terms of facility, transportation and proximity to hotels.

## **M<sup>2</sup>D BOOK OF PAPERS/EXTENDED ABSTRACTS**

All accepted papers and extended abstracts to be presented in Mechanics & Materials in Design meeting would appear in a book, which will be made available to delegates during the event. Instructions to authors are given below.

## **JOURNAL PUBLICATIONS OF SELECTED ARTICLES**

Extended versions of ALL papers will be considered for publication in one of the international journals. Requirements for reviewing are all different according to the journals you prefer. Please visit the conference web page or contact to any one of organizing committee members for further information and instructions.

## **INTERNET ACCESS**

All conference information, including titles, pre-registration, accommodation, sessions and papers schedule will be provided at the conference web page

<http://mech.gifu-u.ac.jp/~fujiilab/m2d/>

This site will be updated regularly. Please check the announcement page for all updates.

## **COMPLEMENTARY SYMPOSIA**

Individuals interested in running a Symposium on any or derivatives of the above topics should inform the conference chair of their intention as soon as possible. Upon approval, the symposium organiser will be requested to submit a summary of his/her plans with regards to the title of symposium, number of sessions required (5 papers per session), names of potential authors and any other special requirements.

## **SUMMARY OF DEADLINES**

<b>Receipt of abstracts</b>	<b>15 October, 2001</b>
<b>Acceptance Letters</b>	<b>15 November, 2001</b>
<b>Deadline for Early Registration</b>	<b>15 January, 2002</b>

## FORMAT & SUBMISSION OF ABSTRACTS

Extended abstracts must not exceed two pages except with prior permission of the organizers.

<i>Paper Size</i>	A4
<i>Margins</i>	Top 0.75", Bottom 0.75", Left 1.0", Right 0.75"
<i>Font</i>	Times New Roman
<i>Titles</i>	16 point, bold
<i>Authors Names</i>	12 point, bold
<i>Text</i>	12 point
<i>Superscripts &amp; Subscripts</i>	9 point
<i>Justification</i>	Full

A sample abstract is available for download as

- Word 6.0 and Word 7.0 <http://www.mie.utoronto.ca/labs/emdl/Nagoya2002/sample.doc>
- Rich Text Format <http://www.mie.utoronto.ca/labs/emdl/Nagoya2002/sample.rtf>

**PLEASE SUBMIT YOUR ABSTRACT BY ELECTRONIC MAIL AS FILE ATTACHMENT(S) TO DR. MORI at: [mori@everest.mech.nagoya-u.ac.jp](mailto:mori@everest.mech.nagoya-u.ac.jp)**

## REGISTRATION

*The following rates apply when payment is made by Credit Cards (Visa or Master Card)*

Registration Fee†	Prior to 15 January 2002	After 15 January 2002
Full Delegate	40,000 Japanese Yen	50,000 Japanese Yen
Student Delegate	15,000 Japanese Yen	20,000 Japanese Yen

*The following rates apply when payment is made by a certified Cheque††, International Money Order††, Travelers Cheques, or Cash:*

Registration Fee†	Prior to 15 January 2002	After 15 January 2002
Full Delegate	37,000 Japanese Yen	47,000 Japanese Yen
Student Delegate	13,000 Japanese Yen	18,000 Japanese Yen

† Entitles the registrant to one copy of the book of abstracts, attends all technical sessions, reception, refreshments, lunches and banquet. Additional banquet tickets can be purchased for 7,000yen per ticket.

†† Must be drawn on a Japanese Bank.

**For additional information, please contact:**

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