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Volume I - Volume II

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## Foreword

The current economic situation has created very interesting times. We have seen one of the most significant downturns in history and this downturn has affected us all: companies, institutes, banks and governments. Now we face an unprecedented recovery; companies are showing very strong growth, some of them even outpacing their capacity. At the same time government budgets must be cut, during the midpoint of the downturn, to compensate the enormous spending in the good times.

In such turbulent times, innovation is, more than ever, a key issue. Innovation to convert scientific and technological excellence into economic returns in the form of novel, enhanced products, production processes or even new high technology companies. Achieving industrial breakthrough today relies, without question, on effective collaboration and knowledge of forefront technologies. The European Society for Precision Engineering and Nanotechnology (**euspen**) has established itself as a globally respected body bringing together leading industrialists and researchers in their field to cooperate, interact and build extended worldwide networks.

**euspen's** 10<sup>th</sup> International Conference will once again provide a leading forum in which to communicate and survey latest research, technology and product developments within the community. This year we meet in the geographic centre of our European society, in Delft. The Netherlands are renowned for their strong presence in high tech development, not only in the current world, but also in the past. Examples of that famous history include the work of Antony van Leeuwenhoek who is buried here in the Old Church. In the current economy the Netherlands is proud of their strong semiconductor activities with companies such as ASML, FEI, ASMI and NXP- created with leading edge technology, open innovation and strong international collaboration.

The conference will reflect these leading technologies in both the opening key note, to be delivered by ASML, and the following session

on Emerging Patterning Technologies. Next to this and our core sessions on Metrology, Ultra Precision Manufacturing Processes and Machines, we are proud that this year's conference will be supported by both our sister organisations the ASPE and JSPE. They will present their state-of-the-art technology from respectively the USA and Japan.

Following evaluation and feedback by the International Scientific Committee, over 200 papers have been selected for presentation at the meeting from the very large number submitted. We thank the Committee for their exacting work, defining and implementing today's standards for technical and innovative quality, and welcome those of you successful in this review process.

Over 50 leading companies working in the field will also present themselves within the technical exhibition. The Commercial Session will once again evidence the leading expertise, inventiveness and resilience of these companies, inspiring our future optimism.

We thank our colleagues on the International Scientific Committee, the conference Session Chairmen and the local organising committee for their help and assistance. We also thank Heidenhain GmbH for their kind provision of student scholarships for the meeting and TU Delft for their generous sponsorship of the conference dinner.

On behalf of the Council of **euspen**, it is our great pleasure to invite you to this meeting. As standard bearers in the field, we look forward to meeting with you, to the sharing of latest knowledge and capabilities and the formation of valuable new partnerships essential to tomorrow's success.

Delft, the Netherlands, June 2010

Dr Henny Spaan  
**euspen** President

Dr Theresa Burke  
**euspen** Chief Executive

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