PREFACE

The trend towards the integration of modelling, analysis, and design tools that started in the 1990s is now well underway, and it is increasingly evident that formerly disparate engineering functions such as stress analysis, fracture mechanics, elasticity, and vibration analysis will continue to move further together, as seamlessly integrated computational design tools evolve. The series of *Modern Practice in Stress and Vibration Analysis* conferences have always reflected this alliance, with particular specialist contributions to the development and enhanced application of powerful numerical methods in conjunction with seminal papers on new techniques in experimental mechanics.

The papers in this volume represent the fifth conference in the series and bring together research from a diverse range of mechanical engineering disciplines within specific sessional groupings as well as offering a unifying forum for discussion and cross-fertilisation. The conference has been organised by the Stress and Vibration Group of the UK's Institute of Physics but is of course, entirely dependent upon the expert contributions of the authors. The Organising Committee would like to thank the authors for their co-operation and hard work in completing their papers, and Sally Cryer of BSSM for her considerable input to the planning and logistics of the BSSM exhibition. Finally, special thanks are due to Fiona Catriona Cartmell for her inspired motivation.

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