

JOURNAL OF SOUND AND VIBRATION

An official medium of publication for the Institute of Acoustics

Founder: E.J. Richards

Editors Emeritus: P.E. Doak
M. Petyt
W. Soedel

Editors

Editor-in-Chief and European Editor:

C. Morfey
Institute of Sound and
Vibration Research
University of Southampton
Southampton SO17 1BJ
UK
E-mail: jsv@isvr.soton.ac.uk

Associate European Editors:

M.P. Cartmell
Department of Mechanical Engineering
University of Glasgow
University Avenue
Glasgow G12 8QQ
UK
E-mail: m.cartmell@mech.gla.ac.uk

A.V. Metrikine
Head of Wave Mechanics Research Group
Section of Structural Mechanics
Faculty of Civil Engineering and Geosciences
Delft University of Technology
Stevinweg 1, 2628 CN Delft, The Netherlands
E-mail: A.Metrikine@tudelft.nl

P. Joseph and J. Astley
Institute of Sound and Vibration Research
University of Southampton
Southampton SO17 1BJ
UK
E-mail: jsv@isvr.soton.ac.uk

Americas Editors:

J.S. Bolton and P. Davies
c/o Donna Miller
Ray W. Herrick Laboratories
Purdue University
140 South Martin Jischke Drive
West Lafayette, IN 47907-2031
USA
E-mail: dmiller@ecn.purdue.edu

Australasian Editor and Associate Editors:

Y.K. Cheung, L.G. Tham and J. Lam
University of Hong Kong

Submissions c/o:

Journal of Sound and Vibration
S&T Editorial Services
1 West, Elsevier
The Boulevard, Langford Lane
Kidlington, OX5 1GB
UK
E-mail: jsv@elsevier.com

K. Shin
School of Mechanical Engineering,
Aandong National University,
388 Songcheon-Dong,
Andong, Kyungbuk 760-749
South Korea
E-mail: kshin@aandong.ac.kr

Book Review Editor:

M.C.M. Wright
Institute of Sound and Vibration Research
University of Southampton
Southampton SO17 1BJ
UK
E-mail: mcmw@isvr.soton.ac.uk

Editorial Board

M. Amabili
Department of Industrial Engineering,
University of Parma, Parco Area delle
Scienze 181/A, Parma 43100,
Italy

J. Brownjohn
Department of Civil and Structural
Engineering, University of Sheffield,
Mappin Street, Sheffield, S1 3JD, UK

M.J. Buckingham
University of California San Diego
La Jolla, CA 92093-0213, USA

C.J. Chapman
Department of Mathematics, University of
Keele, Keele, Staffordshire, ST5 5BG, UK

A. Cummings
Trenwith, Ludlow Road, Little Stretton,
Church Stretton, Salop, SY6 6RB, UK

P. Cupial
Institute of Mechanics and Machine Design,
Cracow University of Technology, A Jana Pawla II 37,
Krakow, PL-31-854,
Poland

E. Dokumaci
Dokuz Eylul University, Bornova 35100, Izmir,
Turkey

J.F. Dunne
University of Sussex, Falmer, Brighton,
Sussex BN1 9QT, UK

I. Elishakoff
Florida Atlantic University,
Boca Raton, FL 33431-0991, USA

F. Farassat
NASA Langley Research Center, M/S 461,
Hampton, VA 23681-2199, USA

J.M. Fields
10407 Royal Road, Silver Spring
MD 20903, USA

L. Fryba
Academy of Sciences of Czech Republic
Prosecká 76, 190 00 Prague 9, Czech Republic

G.M.L. Gladwell
University of Waterloo,
Waterloo, Ontario, Canada N2L 3G1

S.A.L. Glegg
Florida Atlantic University,
Boca Raton, FL 33431-0991, USA

D.J. Gorman
770 King Edward Ave., University of Ottawa,
P.O. Box 450, Stn. A., Ottawa K1N 6N5,
Canada

M. Griffin
Human Factors Research Unit,
Institute of Sound and Vibration Research,
University of Southampton, Highfield,
Southampton, SO17 1BJ, UK

J.-L. Guyader
INSA-Lyon, F-69621 Villeurbanne Cedex, France

M. Heckl
Keele University, Keele, Staffordshire ST5 5BG, UK

J. Horner
Department of Aeronautical & Automotive
Engineering, Loughborough University,
Loughborough, LE11 3TD, UK

H. Hu
Institute of Vibration Engineering Research,
Nanjing University of Aeronautics and
Astronautics, 29 Yudao Street,
Jiangsu 210016, China

A. Kahraman
Department of Mechanical Engineering,
Ohio State University, 201 West 19th Ave.,
Columbus OH 43210, USA

D. Kennedy
Cardiff School of Engineering (ENGIN6),
University of Wales Cardiff, PO Box 925,
The Parade, Cardiff, CF24 0YF,
UK

G.H. Koopmann
Pennsylvania State University,
University Park, PA 16801-1400,
USA

R.S. Langley
University of Cambridge,
Cambridge CB2 1PZ, UK

A.W. Leissa
Colorado State University,
Fort Collins, CO 80523-1374,
USA

A. Lees
Department of Mechanical Engineering,
University of Wales Swansea, Singleton Park,
Swansea, SA2 8PP, UK

R. Lewandowski
Technical University of Poznan, Piotrowo
Street 5, Pznan 60-965, Poland

D.J. Mead
82 Orchards Way,
Southampton, SO17 1RE, UK

N.C. Perkins
Department of Mechanical Engineering,
University of Michigan, 2212 G.G. Brown,
Ann Arbor, MI 48109-2125, USA

B.A.T. Petersson
Technical University of Berlin,
D-10587 Berlin, Germany

A.A. Shabana
Department of Mechanical Engineering,
University of Illinois at Chicago,
842 W. Taylor Street, Chicago,
IL 60607-7022, USA

R. Singh
Ohio State University,
201 West 19th Ave.
Columbus, OH 43210, USA

S. Sorokin
Department of Mechanical Engineering,
Aalborg University, Pontoppidanstraede
101, Aalborg, DK-9220, Denmark

J.Q. Sun
School of Engineering, University of California,
Merced, 5200 N. Lake Road, Merced,
CA 95343, USA

E.E. Ungar
Acentech Inc., 33 Moulton Street,
Cambridge, MA 02138-1118, USA

D. Wagg
Department of Mechanical Engineering,
University of Bristol, Queen's Buildings,
University Walk, Bristol BS8 1TR, UK

J. Woodhouse
Department of Engineering, University
of Cambridge, Trumpington St., Cambridge
CB2 1PZ, UK

K. Worden
Department of Mechanical Engineering,
University of Sheffield, Mappin Street,
Sheffield, S1 3JD, UK

S.X. Wu
Department of Architecture, South China
University of Technology,
Guangzhou, China

G. Yamada
Hokkaido University, Kita-13, Nishi-8,
Kita-ku, Sapporo 060, Japan

Y.B. Yang
Department of Civil Engineering,
National Taiwan University,
No 1 Sec 4 Roosevelt Road,
Taipei 10617, Taiwan