

## Contents

<i>Preface</i> . . . . .	v
<i>List of Contributors</i> . . . . .	xi

### SESSION I—RECENT DEVELOPMENTS IN ULTRASONICS FOR PRESSURE VESSELS

US Developments in the Ultrasonic Examination of Pressure Vessels . . . . .	3
G. J. DAU and M. M. BEHAVESH ( <i>USA</i> )	
French Developments in the Ultrasonic Examination of Pressure Vessels . . . . .	19
P. DUMONT, M. BIETH and J. P. LAUNAY ( <i>France</i> )	
Japanese Developments in the Ultrasonic Examination of Pressure Vessels . . . . .	25
S. TAKAMA ( <i>Japan</i> )	
UK Developments in the Ultrasonic Examination of Pressure Vessels . . . . .	49
M. J. WHITTLE ( <i>UK</i> )	
German Developments in the Ultrasonic Examination of Pressure Vessels . . . . .	65
V. SCHMITZ and P. HÖLLER ( <i>Federal Republic of Germany</i> )	

Italian Developments in the Ultrasonic Examination of Pressure Vessels . . . . .	83
V. REGIS ( <i>Italy</i> )	
<i>Discussion on Session I</i> . . . . .	119
<b>SESSION II—RECENT DEVELOPMENTS IN OTHER NDE TECHNIQUES</b>	
European Developments in Radiological Methods . . . . .	123
P. S. JEHEMSON ( <i>Italy</i> )	
US Developments in Radiological Methods . . . . .	139
W. E. FREEMAN and D. E. MACDONALD ( <i>USA</i> )	
European Developments in Eddy Current Methods . . . . .	163
D. CHIRON, F. BODSON and J. P. LAUNAY ( <i>France</i> )	
Indian Developments in Ultrasonics and Acoustic Emission Methods . . . . .	171
A. K. RAO and C. R. L. MURTHY ( <i>India</i> )	
General Review of Developments in Acoustic Emission Methods	179
F. TONOLINI, A. SALA and G. VILLA ( <i>Italy</i> )	
US Developments in NDE for Steam Generators . . . . .	203
A. S. BIRKS, S. D. BROWN, A. E. CURTIS, III and C. S. WELTY, JR ( <i>USA</i> )	
European Developments in NDE for Steam Generators . . . . .	209
B. S. GRAY ( <i>UK</i> )	
European Developments in NDE for Primary Pipework . . . . .	219
P. J. MUDGE ( <i>UK</i> )	
European Developments in Theoretical Modelling of NDE for Pipework . . . . .	227
J. A. G. TEMPLE ( <i>UK</i> )	
<i>Discussion on Session II</i> . . . . .	269

## SESSION III—ASSESSMENT OF NDE EFFECTIVENESS

A Review and Further Analysis of the Results of the Defect Detection Trials . . . . .	275
R. A. MURGATROYD and D. FIRTH ( <i>UK</i> )	
Status of Stainless Steel Pipe Inspection in the US . . . . .	295
G. J. DAU, M. M. BEHRAVESH and S. R. DOCTOR ( <i>USA</i> )	
<i>Discussion on Session III</i> . . . . .	307

## SESSION IV—THE PISC II PROGRAMME

Summary of the PISC II Project: PISC II Report No. 1—June 1985 . . . . .	311
S. CRUTZEN ( <i>Italy</i> )	
<i>Discussion on Session IV</i> . . . . .	347

SESSION V—FUTURE ASPECTS OF NDE EFFECTIVENESS  
STUDIES

PISC III Proposals . . . . .	355
S. CRUTZEN ( <i>Italy</i> )	
<i>Discussion on Session V</i> . . . . .	365
<i>Index</i> . . . . .	367