

CONTENTS

Section I: Classification of Stresses and Deformations for Code Design Evaluations	
<i>R. Seshadri</i>	1
A Design Methodology for Application of Strain Softening Materials	
<i>D. L. Marriott</i>	3
The Effect of Multiaxiality and Follow-Up on Creep Damage	
<i>R. Seshadri</i>	13
Gloss Plot – Validation and Application to Elevated Temperature Component Design	
<i>S. Vaidyanathan, R. K. Kizhatil, and R. Seshadri</i>	25
Code Evaluation of 3D Stresses on a Plane	
<i>J. L. Hechmer and G. L. Hollinger</i>	33
Elastic Follow-Up and the Categorisation of Secondary Stress	
<i>J. T. Boyle</i>	47
Thermo-Plastic Analysis of a Bowed Sodium Pump Shaft	
<i>E. O. Weiner</i>	55
Rigid-Viscoplastic Finite Element Analysis of Pipe Bending Process	
<i>J. J. Park and S. I. Oh</i>	61
Section II: Piping and Pressure Vessel Code Rules and Application to Design and Analysis	
<i>J. P. Breen</i>	69
Swedish Pressure Vessel Rules and Their Application to a Transonic Wind Tunnel	
<i>G. Hessling and T. G. Moll</i>	71
Overview of Chapter VII, Nonmetallic Piping and Piping Lined With Nonmetals, in the ASME	
B31.3 CP&PR Piping Code	
<i>W. E. Short II</i>	83
Flexibility Design and Stress Analysis of Thermoplastic Double-Containment Piping Systems	
<i>C. G. Ziu</i>	91
Section III: Panels on Codes and Standards Topics	
<i>G. L. Hollinger</i>	99
Guidelines for Fiv Analysis of Tubes and Tube Bundles	
<i>M. K. Au-Yang</i>	101
Trends in Seismic Evaluation Techniques in Section III	
<i>J. D. Stevenson</i>	101
Recent Developments in the Working Group on Piping Design	
<i>G. Slagis</i>	103
Panel on Design for High-Integrity Elevated Temperature Components	
<i>B. Wei</i>	105
Section IV: Conference Tutorials	
<i>S. Y. Zamrik</i>	107