

# TABLE OF CONTENTS

|        |                                                                                                                                                        |           |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 960208 | <b>Engine Valve Stem Seal, Oil Leakage Control Technology and Performance .....</b>                                                                    | <b>1</b>  |
|        | Goich Mori<br>A. R. S. Manufacturing, Inc.<br>Takashi Umeki, Yoshinobu Ueno, and Tetsu Ohishi<br>Arai Seisakusho Co., Ltd.                             |           |
| 960209 | <b>Development of Compact Thermoplastic CVJ Boot .....</b>                                                                                             | <b>9</b>  |
|        | Minoru Shimizu, Shinichi Sugiyama, and Takashi Iwata<br>Keeper Co., Ltd.<br>Hiroyuki Yoshii<br>GKI                                                     |           |
| 960210 | <b>Compatibility of Hydraulic Seal Elastomers with Biodegradable Oils .....</b>                                                                        | <b>19</b> |
|        | Rikito Eguchi and Yoshio Ohtake<br>NOK Corp.<br>Satoshi Ohkawa<br>Komatsu Ltd.<br>Mikio Iwamura<br>Komatsu Zenoah Co.<br>Akiko Konishi<br>Komatsu Ltd. |           |
| 960211 | <b>Spiral Wound Gaskets in Automotive Exhaust Applications .....</b>                                                                                   | <b>25</b> |
|        | E. D. Crowley<br>Flexitallic, Inc.<br>P. L. Silvers<br>McCord Payen, Inc.                                                                              |           |
| 960212 | <b>The New Challenge for Sealant Supplier - A Partnership with the Automotive Industry .....</b>                                                       | <b>31</b> |
|        | Karl-Heinz Ritter<br>Loctite R, D & E<br>Roland Clauss<br>Mercedes Benz AG                                                                             |           |
| 960213 | <b>Development of a Computer Aided Gas Sealability Test System .....</b>                                                                               | <b>41</b> |
|        | Edward Widder and Gary Novak<br>Fel-Pro, Inc.                                                                                                          |           |
| 960214 | <b>The Application of Discriminant Analysis in Shaft Surface Classification for Radial Lip Seals .....</b>                                             | <b>47</b> |
|        | Jiajin Qu<br>CR Industries                                                                                                                             |           |
| 960217 | <b>A Method for Determining the Load-Deflection Curve of an Elastomeric Gasket .....</b>                                                               | <b>53</b> |
|        | Zhi-Quan Hu, T. Y. Chen, and Gary Novak<br>Fel-Pro Inc.                                                                                                |           |

**Application of Advanced Finite Element Techniques to the  
Design and Development of Automotive Gaskets .....59**

Mark H. Robinson

McCord Payen Inc.

Gavin P. Whitham

T&amp;N Technology Ltd.

Tanguy Tronel

Curty Payen SA

Stephen A. Schulze

T&amp;N Technology Ltd.