

# Contents

<b>Foreword</b>		<i>ix</i>
<b>Automotive Engineer Editor's Foreword</b>		<i>x</i>
<b>Chapter 1</b>	<b>Overview of Rapid Casting Processes</b> <i>G Tromans</i>	<i>1</i>
<b>Chapter 2</b>	<b>Review of Potential Rapid Tooling Techniques for Magnesium Die-casting Applications</b> <i>R Hague</i>	<i>11</i>
<b>Chapter 3</b>	<b>Rapid Tooling for Magnesium Die-cast Components – An Investigation into Innovative Technologies and Processes for Ericsson Mobile Communications AB</b> <i>R Hague</i>	<i>21</i>
<b>Chapter 4</b>	<b>Rapid Tooling for Aluminium Die-cast Components – An Investigation into EOS DMLS 20 µm Tooling Inserts for a ‘Clutch Housing’ for Dyson</b> <i>R Soar</i>	<i>41</i>
<b>Chapter 5</b>	<b>Rapid Route for Investment Casting</b> <i>C Ryall, S Zhang, and D Wimpenny</i>	<i>67</i>
<b>Chapter 6</b>	<b>The Use of QuickCast™ and Investment Casting for the Production of Novel A-posts for a Functional Safety Concept Car</b> <i>N Hopkinson and J Almgren</i>	<i>81</i>
<b>Chapter 7</b>	<b>Rapid Prototyping with Vacuum Investment Casting</b> <i>R Minev</i>	<i>91</i>
<b>Chapter 8</b>	<b>Direct Shell Sand Rapid Prototyping</b> <i>C Ryall, G J Gibbons, and R Hansell</i>	<i>105</i>
<b>Chapter 9</b>	<b>Direct Shell Production Casting (DSPC)</b> <i>Y Uziel</i>	<i>119</i>
<b>Index</b>		<i>133</i>