The Multibody Systems Approach to Vehicle Dynamics

Description: Multibody Systems Approach to Vehicle Dynamics aims to bridge a gap between the subject of classical vehicle dynamics and the general-purpose computer-based discipline known as multibody systems analysis (MBS). The book begins by describing the emergence of MBS and providing an overview of its role in vehicle design and development. This is followed by separate chapters on the modeling, analysis, and post-processing capabilities of a typical simulation software; the modeling and analysis of the suspension system; tire force and moment generating characteristics and subsequent modeling of these in an MBS simulation; and the modeling and assembly of the rest of the vehicle, including the anti-roll bars and steering systems. The final two chapters deal with the simulation output and interpretation of results, and a review of the use of active systems to modify the dynamics in modern passenger cars. This book intended for a wide audience including not only undergraduate, postgraduate and research students working in this area, but also practicing engineers in industry who require a reference text dealing with the major relevant areas within the discipline.

Full of practical examples and applications
Uses industry standard ADAMS software based applications
Accompanied by downloadable ADAMS models and data sets available from the companion website that enable readers to explore the material in the book
Guides readers from modelling suspension movement through to full vehicle models able to perform handling manoeuvres

Contents:
Preface
Nomenclature
Introduction
Kinematics and Dynamics of Rigid Bodies
Multibody Systems Simulation Software
Modelling and Analysis of Suspension Systems
Tyre Characteristics and Modelling
Modelling and the Assembly of the Full Vehicle
Simulation Output and Interpretation
Active Systems
References
Appendix A-C

Ordering:
Order Online - http://www.researchandmarkets.com/reports/1764654/

Order by Fax - using the form below

Order by Post - print the order form below and send to

Research and Markets,
Guinness Centre,
Taylors Lane,
Dublin 8,
Ireland.
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit
http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct.

Product Name: The Multibody Systems Approach to Vehicle Dynamics
Web Address: http://www.researchandmarkets.com/reports/1764654/
Office Code: SCDVVQU1

Product Format
Please select the product format and quantity you require:

<table>
<thead>
<tr>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard Copy (Paper back):</td>
</tr>
</tbody>
</table>

* Shipping/Handling is only charged once per order.

Contact Information
Please enter all the information below in BLOCK CAPITALS

Title: ____________
Mr [ ] Mrs [ ] Dr [ ] Miss [ ] Ms [ ] Prof [ ]
First Name: _______________________
Last Name: _______________________
Email Address: * _______________________
Job Title: _______________________
Organisation: _______________________
Address: _______________________
City: _______________________
Postal / Zip Code: _______________________
Country: _______________________
Phone Number: _______________________
Fax Number: _______________________

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card: You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check: Please post the check, accompanied by this form, to:

Research and Markets,
Guinness Center,
Taylors Lane,
Dublin 8,
Ireland.

☐ Pay by wire transfer: Please transfer funds to:

Account number 833 130 83
Sort code 98-53-30
Swift code ULSBIE2D
IBAN number IE78ULSB98533083313083
Bank Address Ulster Bank,
27-35 Main Street,
Blackrock,
Co. Dublin,
Ireland.

If you have a Marketing Code please enter it below:

Marketing Code:

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp