Title: ”Road and Off-Road Vehicle System Dynamics Handbook”
Editors: Giampiero Mastinu and Manfred Ploechl
Publisher: CRC Press, Taylor and Francis, New York, 2014, ISBN:-13:978-0-8493-3322-4 (Hardback)

This is an authoritative Handbook on vehicle system dynamics with more than 50 authors (9 from industry) from 13 countries.

It is structured in 42 chapters distributed on 1694 pages and written for both the experienced and beginner in automotive engineering working already in the industry or being a graduate student in electrical, mechanical or control engineering.

The math proofs are left out intentionally, but the book treats generously principles, models and results, mostly graphical format.

The rich Contents refers to: modeling, analysis and optimization in vehicle systems dynamics, vehicle concepts and aero dynamics, pneumatic tires and contact wheel-road / off-road, vehicle subsystems modeling, vehicle dynamics and active safety, man-vehicle interaction, intelligent vehicles, accident reconstruction and passive safety.

Though the automobile is the main focus, considerable attention was given to commercial and to off-road vehicles and to motorcycles.

Each of the 42 Chapters has numerous paragraphs that treat its essential issues thoroughly. The Handbook encouraged different views / approaches on same topic, letting the reader the freedom of choice.

The mixing of academic and industrial perspective is also a main feature of this book.

Appreciating the extraordinary effort of book editors to coordinate such a vast project with very good final results, and reminding you the strong recent progress in vehicle technologies, including electrification, we warmly recommend this valuable Handbook to all mechanical, electrical and control engineers and graduate students.

Sincerely,
Prof. Ion Boldea, IEEE Life Fellow