## Research Report ਙ



## General Association of Engineers in Romania - A.G.I.R. A.G.I.R. 2015 Award to the category "Applied Sciences" Prof. Vasile MARINCA, PhD & Prof. Nicolae HERIŞANU, PhD

The A.G.I.R. 2015 Award - for the book: Marinca V., Herisanu N., THE OPTIMAL HOMOTOPY ASYMPTOTIC METHOD. ENGINEERING APPLICATIONS

SPRINGER International Publishing AG Switzerland, 2015, ISBN 978-3-319-15373-5

Since 1995, the AGIR Award is awarded yearly, for the previous year, to the most valuable engineering works or original published works with high scientific level. On September 16, 2016 prof. V. Marinca and prof. N. Herisanu received this award to the category "Applied Sciences" for their book published by Springer in 2015.

This is a reference book with an essential contribution to the development of the field of "Engineering Science" and it is primarily intended to researchers, academics, professional engineers and PhD students working in different engineering branches.

The subject approached by the authors in this book is related to analytical investigation of nonlinear dynamical systems. The authors proposed an original method, which already produced a good impact in the scientific world, judging upon the numerous papers published based on this method by many researchers worldwide.

The entirely book relies on the original research results obtained by the authors in the field of nonlinear dynamical systems and represents a continuation of their first book published by Springer in 2011 – "Nonlinear Dynamical Systems in Engineering. Some Approximate Approaches", ISBN 978-3-642-22735-6.





The book emphasizes the applicability of the OHAM to various models selected from various engineering fields such as vibration, classical and fluid mechanics, electrical machines, thermodynamics, physics, and so on.

The analytical solution of such dynamical systems are optimized through rigorous and efficient procedures using computer programs so that always a very good accuracy is ensured even for strong nonlinearities.

It is to remark that according to WorldCat database www.worldcat. org, the book is already present in 201 libraries worldwide, including some of the most important top universities of the world such as Stanford University and Massachusetts Institute of Technology (MIT). The awarding ceremony took place on September 16, 2016 at the headquarters of AGIR from Calea Victoriei 118, Bucharest.

