

New Corresponding Member of the Romanian Academy Prof. Vasile MARINCA, PhD

- Romanian Academy is “the highest scientific authority in the country, bringing together the worthiest personalities in science, technology, education, culture and art in Romania, as representing the creative spirituality of the nation.”

BIOGRAPHY

Vasile Marinca is professor at the University Politehnica Timisoara, Department of Mechanics and Strength of Materials since 1978. He received his PhD degree in 1991 with the thesis “Inverse Problems in Analytical Mechanics”.

His main field of interest include nonlinear dynamical systems with application in various engineering branches, approximate analytical methods, nonlinear vibration, theoretical and applied mechanics.

Specific contributions

The most important achievements obtained in the past years are included in two major monographs published by the famous Springer in 2011 and 2015:

- The first monograph entitled „*Nonlinear Dynamical Systems in Engineering. Some Approximate Approaches*” has been cited so far 55 times in the literature and can be found (according to the international catalog WorldCat) in 288 university libraries from all over the world, including the famous MIT and Stanford University
- The second monograph, published in 2015 with the title „*The Optimal Homotopy Asymptotic Method. Engineering Applications*” can already be found in the libraries of the most important top universities of the world (136 university libraries from all over the world, according to www.worldcat.org).
- Prof. marinca authored or co-authored more than 175 papers, among them being 18 papers published in journals ranked in the “red zone” (defined by CNCS) of the journals quoted by ISI-Thomson in JCR (first quartile of the ranking). His papers received so far more than 800 citations on Web of Science and more than 1350 citations on Google Scholar. It to remark that two of his papers (published in International Commun. in Heat and Mass Transfer in 2008 si Applied Math. Letters in 2009) are marked on ISI - Web of Science as „Highly Cited Papers”, which means they belong to 1% most intensely cited papers of the domain „Engineering” in the case of the first paper, respectively „Mathematics” in the case of the second paper.
- Professor Marinca acted as editor within the editorial Board of „Journal of Applied Mathematics” and „The Open Applied Mathematics Journal”, and also was a guest editor for the Special



Issue „Advances in Nonlinear Vibration” organised in 2012 by the Journal of Applied Mathematics. He is a reviewer for a significant number of reputed international journals and also reviewer for Zentralblatt-Berlin. His H-index is 14 on Web of Science and 18 on Google Scholar.

- Professor Marinca is the principal investigator for a number of 12 research grants financed by CNCSU, ANSTI, CNCSIS and Romanian Academy and also for 14 contracts with the industry. He was included by the American Biographical Institute in The International Directory of Distinguished Leadership, he received a research grant financed by the Open Society and he served as assessor for many research proposals received by CNCSIS, ANCS, UEFISCDI and European Commission (Bruxelles, code EX2002B004947-005)
- He proposed in the literature 7 new approximate analytical methods for solving nonlinear dynamical systems, among them the Optimal Homotopy Asymptotic Method (OHAM) being the most popular, since it was adopted by many researchers in their papers and PhD thesis. There are already published in the open literature several hundred scientific papers whose authors (most of them from abroad) used this new method.
- As recognition of his scientific activity and achievements, on 26 November 2015 prof. Vasile Marinca was elected as Corresponding Member of the Romanian Academy.