Preface to the special issue on Mechanics of Fibre-reinforced Materials: Theory and Applications – Part III

This special issue of the Journal of Engineering Mathematics on the Mechanics of Fibre-reinforced Materials (FRMs) is the third such issue on this topic within a period of seven years. Following the two previous special issues [1, 2], it continues the promotion of high quality research in the mechanics of fibre-reinforced materials, with a particular focus on materials subject to large deformations. The genesis of the special issue was a mini-symposium (MS1) that contributed to the success of the international conference ETAMM 2016 (Emerging Trends in Applied Mathematics and Mechanics), Perpignan, France, 30 May - 3 June, 2016.

All the relevant historical background, motivation and research trends that underpin this ongoing effort are detailed in the prefaces of [1] and [2]. These are all still valid and hence we refer to these for further information rather than repeat them here. Suffice it to say that the mathematical theory of FRMs continues to develop while applications continue to proliferate in several different parts of applied mechanics and engineering, physics and biology.

This new special issue comprises twelve research papers, which reflect clearly the above observations and, hence, support the aims and aspirations of this developing subject. The papers appear in an order that marks chronologically the end of their peer review evaluation process. The editors of this special issue are grateful to each of the contributors for their well-received support.

References

1. Soldatos, K.P., Ogden, R.W. (eds) (2010) Preface to the special issue on “Mechanics of Fibre-reinforced Materials: Theory and Applications”, J. Eng. Math. 68: 1-4.
2. Soldatos, K.P., Ogden, R.W., J. Merodio (eds) (2015) Preface to the special issue on “Mechanics of Fibre-reinforced Materials: Theory and Applications – Part II”, J. Eng. Math. 95: 1-4.

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