Preface

In this book are published the papers of the XII International Conference on the Mechanical and Physical Behaviour of Materials under Dynamic Loading – DYMAT2018 held in Arcachon (France) September 9–14, 2018.

In continuity with previous DYMAT international conferences [Paris (1985), Ajaccio (1988), Strasbourg (1991), Oxford (1994), Toledo (1997), Krakow (2000), Porto (2003), Dijon (2006), Bruxelles (2009), Freiburg (2012) and Lugano (2015)], this book contains 175 scientific papers from 32 countries and 5 continents that collectively provide an excellent snapshot of the state-of-the-arts in the field of the mechanical properties of materials at high rates of strain and highlights some remarkable modern developments and industrial applications. This volume covers four topics such as Modelling and Numerical simulation (66 papers), Experimental Techniques (65 papers), Microstructural Effects (29 papers), and Industrial Application (15 papers).

The conference was organized by the Commissariat à l’Energie Atomique et aux Energies Alternatives in partnership with the Institute of Mechanics and Engineering of the University of Bordeaux.

We wish to express our sincere gratitude to all authors, who once again have massively answered our call for papers. In addition, we would like to express our thanks to the International Advisory Committee and the members of the Governing Board of the DYMAT Association. Their remarkable and continuous support in the reviewing and organization processes of DYMAT2018 has been extremely helpful in setting up the scientific program of the conference.

Le Barp, May 31st 2018

Eric Buzaud & Antonio Cosculluela

Co-chairs of DYMAT2018