2018 Arcachon, France



12th International DYMAT Conference

Arcachon, France 9 – 14 September 2018







The 12th International DYMAT Conference took place in Arcachon, France, and was organized by the Commissariat à l'Energie Atomique et aux Energies Alternatives (CEA) in partnership with the Institute of Mechanics and Engineering of the University of Bordeaux (I2M). It was co-chaired by Antonio Cosculluela, vice-president, and Eric Buzaud, treasurer of Dymat association.

As in previous years, the conference has offered two types of publications. The proceedings of the conference have been collected into an issue of the "European Physical Journal - Web of Conferences" (EPJ-WoC). Alternatively,

authors have submitted their articles to a peer review process in order to publish their work in an issue of the "European Physical Journal - Special Topics" (EPJ-ST), entitled "Advances in the Characterization, Modelling and Simulation of Materials Subjected to dynamic loading".

This year, the prestigious John S. Rinehart Award ceremony has been rewarding the careers of two famous searchers. The recipients were George T. Gray, for original contributions and outstanding effort in the study and modeling of the dynamic properties of materials, and Gordon

Participants 257
Countries 26
Oral presentations 66
Poster presentations 126
Technical Exhibitors 13



R. Johnson, for outstanding creative work in the science and technology of computational methods applied to the mechanical response of materials subjected to dynamic loadings.

Considering the feedback collected from attendees of recent editions of Dymat's international conferences, several innovations and evolutions were adopted in the organization of this conference. For the first time, a 3 hours course, "A Short introduction to the Mechanical and Physical Behaviour of Materials under Dynamic Loading" was proposed before the opening of the conference; also two

dedicated 2-hours poster sessions were introduced into the schedule. Moreover, the participation of students has been strongly increased thanks to a special reduced fee, and a new prize was created to recognize the excellency of a recent Ph.D.. Two promising searchers were rewarded: Lewis J. Lea for his works on the structural evolution in the dynamic plasticity of FCC metals (2018), and Daniele Forni for the progressive collapse induced by fire and blast (2017).

