

## Foreword

DYMAT, the European Association for research into the dynamic behaviour of materials and its applications, has been organizing a five days single sessions conference of oral presentations and poster exhibitions since 1983. The triennially DYMAT International Conferences are the platform to present the most recent scientific achievements on dynamic behaviour of materials.

Being an association of leading research institutions in Europe and well linked to the relevant industry sectors, DYMAT can claim excellence in science along with industry oriented research and a variety of platforms to publish. Where the spectrum of events to gather and to exchange is ranging from the International Conference over Technical Meetings, Working Groups to Student Camps. The success of the institution also became visible at the exceptional meeting of former presidents and governing board members 2013 in Paris when DYMAT celebrated its 30 anniversary.

2014 was the DYMAT year to celebrate the centenary of the epoch making invention by Bertram Hopkinson (1894–1918). With his 1914 seminal paper, “A method of measuring the pressure produced in the detonation of high explosives or by the impact of bullets” Phil. Trans. R. Soc. Lond. A213 437-456, Bertram Hopkinson pioneered the development of an experimental set-up which even nowadays seems to be in greater demand than ever.

The Hopkinson Centenary Conference was intended to commemorate this ground-breaking invention and to reflect the most recent scientific developments in the area of Hopkinson bar type tests for dynamic material testing. With Cambridge University as the place where Bertram Hopkinson studied at Trinity College and where he was Professor for Mechanisms and Applied Mechanics, a perfect location could be found for the Centenary Conference.

DYMAT 2015 will have the honour of being the third DYMAT International Conference to give the John S. Rinehart’s Award. This distinction, established in 1990 to recognize outstanding effort and creative work in the science and technology of dynamic processes in materials, has been awarded every five years on the occasion of several EXPLOMET International Conferences. Since 2009, DYMAT is the Custodian of the Award. A special jury, composed of the members of the DYMAT International Advisory Committee and members of the DYMAT Governing Board, voted and selected two winners. Our sincere congratulations go to Carlo Albertini and to Ron Armstrong, the two recipients of the John S. Rinehart Award 2015.

My sincere gratefulness goes to Professor Ezio Cadoni, chairman of the Conference and co-editor of the 2015 EPJ-ST issue. Ezio has completed a remarkable work in the organization and the success of this conference. My thanks go to him and his colleagues, who greatly contributed to the success of DYMAT 2015.

Finally, I would also like to thank the members of the International Advisory Committee and the Governing Board for their commitment in ensuring the high scientific level of the conference.

**Freiburg, April 12<sup>th</sup> 2015**  
**Stefan Hiermaier**  
**DYMAT President**