

## PREFACE

The International Conference on Arch Bridges (ARCH 2016), taking place in Wrocław, Poland, on 5<sup>th</sup>-7<sup>th</sup> October, 2016 is 8<sup>th</sup> worldwide meeting of the series gathering researchers, experts, designers, contractors and all those who are interested in problems of arch bridge structures. The conference is following good tradition, high standard and success of the previous seven editions of the ARCH Conference organized every three years since 1995 in: UK (1995), Italy (1998), France (2001), Spain (2004), Portugal (2007), China (2010) and Croatia (2013).

The main idea of the cyclic conference ARCH is creation of the international forum for effective exchange of experiences and specialist knowledge as well as latest information in the field of arch bridge structures. Considered topics are related to wide range of problems of arch bridge structures, including not only technical issues, but also their presence in common live and in culture. Covered subjects are related to various structures: from historical ones, through those designed and constructed contemporarily, up to the latest and forthcoming solutions as well as to innovative concepts and visions.

The leading topic of the 8<sup>th</sup> International Conference on Arch Bridges is "Arch bridges in culture" – taking into account various aspects of mutual interaction of culture and bridge engineering. The extended abstracts and full contributions, including 9 invited keynote papers as well as 120 research & technical papers prepared by authors from 25 countries, are assembled in this book of conference proceedings and in the included CD with full versions of all papers. All published papers have been accepted on the basis of the international review procedure.

The 8<sup>th</sup> International Conference on Arch Bridges is organized by the Wrocław University of Science and Technology with the institutional sponsorship of the International Association for Bridge Maintenance and Safety (IABMAS), Polish Group of the International Association for Bridge and Structural Engineering (IABSE), the International Federation for Structural Concrete (*fib*), the Committee on Civil Engineering and Hydroengineering of the Polish Academy of Sciences, the General Directorate for National Roads and Motorways in Poland, the Lower Silesian District Chamber of Civil Engineers and Polish Society of Bridge Engineers.

We express our sincere thanks to all authors of the papers for their valuable contributions, to members of the Permanent Scientific Committee and the International Advisory Committee and to members of the Organizing Committee for their hard work during the whole process of the conference arrangements. Special thanks are addressed to exhibitors for enhancing the event with their presence as well as to sponsors for their institutional and financial support.

We hope that the 8<sup>th</sup> International Conference on Arch Bridges will be the real forum for fruitful discussions and exchange of experiences between researchers and practitioners in the beautiful scenery of the town crossed with an extensive network of the Odra River channels and tributaries making Wrocław a city of 12 islands and over 300 bridges, including many historical and modern arch structures.

Jan Bień

Chairman of the Permanent Scientific Committee Jan Biliszczuk

Chairman of the Organizing Committee

Wrocław, October 2016