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FOREWORD

It was in 1971 when Professor H. Beer from University of Graz, who together with his colleague, Dr. G. Schulz, had proposed the first version of European (ECCS) Buckling Curves equations (Construction Metallique, No. 3, 1970), suggested to organize an International Colloquium, as a forum of discussion and comparison between such equations and those of Eastern Europe, the United States and Japan. The event, entitled "International Colloquium on Column Strength", was organized in November 1972, in Paris, with the support of IABSE, but, sadly, after the sudden death of Professor Beer. This is the event which may be considered the starting point of a long series of International Colloquia dedicated to the Stability of Steel Structures. However, the *real* organization of the series of International Colloquia, thought of as to *globally cover the instability problems of steel structures,* emerged two years later, in London, as a common initiative of Dr. D. Sfiintesco, on behalf of ECCS, and Professor L. Beedle, on behalf of SSRC. The basic idea was to organize several series of *travelling* colloquia, with *sessions* located in different areas of the world. The first series was organized in 1976-1977, with sessions in Tokyo, Liege and Washington, and, further on, the world wide circuit continued.

In October 1982, the Department of Steel Structures and Structural Mechanics of the Politehnica University of Timisoara organized one of the East-European Sessions of the 3rd International Colloquium on Stability of Steel Structures; it was followed by other two sessions, organised in 1983 in Toronto and Paris.

In July 1997, at the Asian Session of the 6th Colloquium, the name of the events was changed into *International Colloquium on Stability and Ductility of Steel Structures - SDSS*. Next, the European Session was organized in September 1999, again in Timisoara. It was followed by those in Budapest (2002), Lisbon (2006) and Rio de Janeiro (2010).

The 2016 edition of SDSS is jointly organized by the *Politehnica University of Timisoara, Department of Steel Structures and Structural Mechanics* in co-operation with the *Romanian Academy - Timisoara Branch*, with the support of the *European Convention of Constructional Steelwork (ECCS),* through the *Structural Stability Technical Committee (TC8),* and the *Structural Stability Research Council (SSRC).*

270 authors from 26 countries on 5 continents are contributing with 115 scientific papers and 4 Keynote Lectures, covering 9 topics, i.e.

1. *Advanced structural design;*
2. *Connections;*
3. *Lightweight steel constructions;*
4. *Members' behaviour: tension, compression, beams, beam-columns;*
5. *Plate, shell and space structures;*

6. *Robustness;*
7. *Seismic-resistant structures;*
8. *Steel-concrete composite members and structures;*
9. *Tubular constructions.*

Since the revision of structural Eurocodes has been already started in Europe, and both stability and ductility of steel structures issues are on the desk of the drafters, this event enables the exchange of knowledge and experience in the field and the debate around the best solutions offered, and is therefore a useful opportunity for all the participants.

On behalf of the SDSS'2016 Organizing Committee, we express our gratitude to Keynote Speakers and authors, to the members of the International Scientific Committee and to all the participants in this international scientific event.

We also appreciate the support of the *Technical Committee 8* within the *European Convention of Constructional Steelwork (ECCS)* and of the *Structural Stability Research Council (SSRC)*.

Thanks are also due to *Joana Albuquerque*, from *CMM – Associação Portuguesa de Construção Metálica e Mista* and also to *Ernst and Sohn and Wiley Company*, for their support and the printing quality of the Proceedings.

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Timisoara, May, 2016

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