

Table of Contents

	Foreword	i
	Preface	iii
0	Survey of participants in the <i>fib</i> Workshop on beam shear <i>Hossein Yousefpour and Oguzhan Bayrak</i>	1
1	From detailed test observations to mechanical models and simple shear design expressions <i>Aurelio Muttoni, Miguel Fernández Ruiz and Francesco Cavagnis</i>	17
2	Shear transfer actions in reinforced and prestressed concrete beams <i>Patrick Huber, Tobias Huber and Johann Kollegger</i>	33
3	Predicting the shear strength of thick slabs <i>Michael P. Collins, Evan C. Bentz, Phillip T. Quach and Giorgio T. Proestos</i>	50
4	Shear capacity of members without shear reinforcement based on limit analysis <i>Jakob Fisker and Lars German Hagsten</i>	64
5	Shear transfer actions of slender members without stirrups <i>Karl-Heinz Reineck</i>	81
6	Influence of M/V-combination on the shear behaviour of members without stirrups <i>Nguyen Viet Tue and Nguyen Duc Tung</i>	100
7	Insights from the numerical modelling of reinforced beams under distributed loads <i>Jarrod Zaborac, Trevor D. Hrynyk and Oguzhan Bayrak</i>	121
8	ACI-DAfStb shear databases <i>Daniel Dunkelberg and Karl-Heinz Reineck</i>	135
9	Database of shear tests subjected to uniformly distributed loading <i>Almila Uzel and Ceyda Nur</i>	156
10	Stress fields in concrete teeth and jawbones <i>Peter Marti and Alexander Beck</i>	170
11	Cracking and the shear strength of reinforced concrete <i>E.C. Bentz and M.P. Collins</i>	184

12	Contribution of the shear transfer actions in short span beams <i>Abobakr Elwakeel, Libin Fang, Moheemmed Abdelsalam and Robert Vollum</i>	197
13	Shear strength of UHPFRC I-shaped beams without stirrups <i>Sung-Gul Hong and Ji-Hyung Lee</i>	212
14	Out-of-plane shear strength of steel-concrete sandwich panels <i>Juan Sagaseta and Phil Francis</i>	225
15	Shear fatigue of prestressed concrete beams <i>Frederik Teworte and Josef Hegger</i>	239
16	Simplified Multi-Action Shear Model for shear design <i>Antonio Marí, Antoni Cladera, Carlos Ribas, Eva Oller and Jesús Bairán</i>	254
17	Towards a unified approach for shear design of SFRC and UHPFRC girders <i>Stephen Foster and Ankit Agarwal</i>	268
18	Three-parameter kinematic approach for short coupling beams <i>Boyan Mihaylov and Renaud Franssen</i>	283
19	Biaxial shear in reinforced concrete beams and columns <i>Beatrice Belletti, Fausto Minelli and Andrea Tinini</i>	299
20	Future directions for research on shear in structural concrete <i>Walter Kaufmann, Jaime Mata-Falcón, Alexander Beck</i>	323