

Contents

1	How to Join Fiber-Reinforced Composite Parts: An Experimental Investigation.....	1
	Yaomin Dong, Arnaldo Mazzei, Javad Baqersad, and Azadeh Sheidaei	
2	Analysis of a Composite Pi/T-Joint Using an FE Model and DIC.....	11
	Chris Sebastian, Mahmoodul Haq, and Eann Patterson	
3	5xxx Aluminum Sensitization and Application of Laminated Composite Patch Repairs.....	21
	Daniel C. Hart	
4	Investigation and Improvement of Composite T-Joints with Metallic Arrow-Pin Reinforcement.....	33
	Sebastian Heimbs, Michael Jürgens, Christoph Breu, Georg Ganzenmüller, and Johannes Wolfrum	
5	Review of Natural Joints and Bio-Inspired CFRP to Steel joints.....	41
	Evangelos I. Avgoulas and Michael P.F. Sutcliffe	
6	Fabrication of 3D Thermoplastic Sandwich Structures Utilizing Ultrasonic Spot Welding.....	49
	Cassandra M. Degen and Navaraj Gurung	
7	Impact and Lap Shear Properties of Ultrasonically Spot Welded Composite Lap Joints	59
	Cassandra M. Degen, Lidvin Kjerengtroen, Eirik Valsest, and Joseph R. Newkirk	
8	Numerical and Experimental Characterization of Hybrid Fastening System in Composite Joints	71
	Ermias G. Koricho, Mahmoodul Haq, and Gary L. Cloud	
9	Application of Digital Image Correlation to the Thick Adherend Shear Test	81
	Jared Van Blitterswyk, David Backman, Jeremy Laliberté, and Richard Cole	
10	Interfacial Strength of Thin Film Measurement by Laser-Spallation	91
	Leila Seyed Faraji, Dale Teeters, and Michel W. Keller	
11	Joining of UHTC Composites Using Metallic Interlayer	99
	Noritaka Saito, Laura Esposito, Toshio Yoneima, Koichi Hayashi, and Kunihiro Nakashima	
12	Metal-to-Composite Structural Joining for Drivetrain Applications.....	107
	Peter J. Fritz, Kelly A. Williams, and Javed A. Mapkar	
13	Short-term Preload Relaxation in Composite Bolted Joints Monitored with Reusable Optical Sensors.....	115
	Anton Khomenko, Ermias G. Koricho, Mahmoodul Haq, and Gary L. Cloud	

Joining Technologies for Composites and Dissimilar
Materials, Volume 10
Proceedings of the 2016 Annual Conference on
Experimental and Applied Mechanics
Cloud, G.; Patterson, E.; Backman, D. (Eds.)
2017, VII, 123 p. 111 illus., 91 illus. in color., Hardcover
ISBN: 978-3-319-42425-5