

Challenge	Researchers	Papers	Discussion
1. Round Robin/Benchmark Exercise for Hysteresis Measurements	Ewins , Nowell, Gola, Eriten, Schwingshackl	DETC2013-13724 (Ewins)	DETC2013-13729 (Starr)
2. Round Robin/Benchmark for Measurement/Prediction of Dissipation in Standard Joints	Jacobs , Goyder, Gaul, Ind, Vakakis, Allen, Eriten, Harris, Segalman	DETC2013-12925 (Goyder)	DETC2013-13730 (Allen)
3. Methodology to quantify cost benefits of improved joint design	Brake, Goyder, Ewins, Reuss, Schwingshackl, Allen	DETC2013-12964 (Brake)	DETC2013-13731 (Allen)
4. GRAND CHALLENGE – Define Mechanisms of Friction	Nowell, Brake, Eriten	DETC2013-12976 (Brake/Nowell)	DETC2013-13732 (Brake)
5. Modelling non-metallics	Gaul, Goyder, Petrov	DETC2013-12928 (Goyder)	DETC2013-13733 (Goyder)
6. Multiscale modeling framework	Eriten, Masud, Petrov	In preperation (Melih)	DETC2013-13734 (Eriten)
7. Definition of variability and uncertainty (linked to Round Robin Challenges 1 and 2, also address how to model in the absence of experimental data)	Mignolet, Starr	DETC2013-13321 (Mignolet)	DETC2013-13735 (Mignolet)
8. Epistemic and Aleatoric Modeling	Segalman, Bergman, Brake, Vakakis, Willner	DETC2013-13234 (Brake/Segalman)	DETC2013-13736 (Brake)
9. Time varying model parameters, modeling and experiment “surface chemistry”	Dini, Medina, Eriten, Schwingshackl		Eriten

10. The derivation of constitutive equations based on physical parameters (including measurement of spatial dependence of key physical parameters)

Gaul, Hoffmann, Starr,
Mayes

DETC2013-13726 (Mayes)
DETC2013-13723 (Gaul)

DETC2013-13737 (Starr)

11. Eventual implementation of prediction methods in commercial numerical codes

Brown, Goyder, Petrov,
Brake

DETC2013-12981 (Brake)

DETC2013-13738 (Goyder)

12. Roundup of the 3rd International Joints Workshop Outcomes

Ewins, Bergman, Starr

DETC2013-13725 (Ewins)

N/A