

**51st UK Conference on Human Responses to Vibration
Institute of Naval Medicine
14th to 15th September 2016
PROVISIONAL PROGRAMME**

Wednesday 14 September 2016

11:00	Registration		
12:00	Lunch		
13:45	Welcome to INM and opening of the conference		
14:15	Session 1: Seating: Testing		
1	14:15	Whole body vibration – seat testing metrics	J N Smith
2	14:30	Pilot study of an exoskeleton for the lower limbs	R S Bridger
3	14:45	Predicting Seat Effective Amplitude Transmissibilities (SEAT values) with simple lumped parameter models and vertical mechanical shocks	G Patelli
4	15:00	Effect of lumbar support on vibration transmission of a car seat with occupant exposed to fore-and-aft whole-body vibration	H Zhou
	15:15	Panel discussion	
15:30	Tea and photograph		
16:15	Session 2: Marine environment vibration		
5	16:15	On the selection and real world effectiveness of shock seats for high speed craft	T E Coe
6	16:30	MOD risk reduction measures to counter the effect from maritime whole body vibration	R A Finnemo
7	16:45	Developing a holistic strategy for shock mitigation on fast boats	J Haynes
8	17:00	Human factors assessment of two commercial whole-body vibration mitigating maritime suspension seats	P J Pisula
9	17:15	Fatigue in military operations: high speed craft repeated shock and other factors	T Dobbins
	17:30	Panel discussion	
17:45	Close of day 1		
18:30	Conference Dinner		

Thursday 15 September 2016

09:00	Session 3: Whole-body vibration		
10	09:00	Three degree of freedom model for the apparent mass of the seated human body exposed to vertical vibration	M Cavacece
11	09:15	On the apparent mass of the human body sitting on a soft seat with vertical vibration	C Liu
12	09:30	Effect of muscle activity on the apparent masses of the human body when exposed to vertical whole-body vibration	M Yang
13	09:45	Rate of growth of vibration discomfort with increasing magnitude of fore-and-aft, lateral, and vertical whole-body vibration in the frequency range 1 to 10 Hz	J J Arnold
14	10:00	Finite element optimisation techniques applied to human vertebral cancellous bone	T Shanker
	10:15	Panel discussion	
10:30	Coffee		
11:00	Session 4: Measurement and assessment		

15	11:00	Does ultra low cost = ultra low quality? Dynamic performance of budget data logging accelerometers	N Mansfield
16	11:15	Passive compensation of accelerations applied to transport patients in emergency vehicles	P Fernández
17	11:30	Optimisation of the rear drive unit bushings of a lightweight vehicle under shock excitation	J Lin
18	11:45	Human response to vibration in armoured fighting vehicles: sources, characteristics and effects	M Weaver
	12:00	Panel discussion	
12:15		Sponsor presentations	
12:30		Discussion of future HRV conferences	
12:45		Lunch	
14:00		Session 5: Hand-arm vibration: measurement	
19	14:00	Vibration emission values and risk assessment	S Hewitt
20	14:15	HSE update on hand-arm vibration	P Delderfield
21	14:30	Effect of charge and elevation on accelerations measured on a 60-mm mortar system during firing	M J Howell
22	14:45	The effect of firing posture on hand-transmitted vibration from small arms recoil	S J Welch
	15:00	Panel discussion	
15:15		Tea	
15:45		Session 6: Hand-arm vibration	
23	15:45	Digital image processing of hypothenar hammer syndrome in workers exposed to vibrating tools	G Aghilone
24	16:00	Sensorineural components of the hand-arm vibration syndrome: a comparison of two standardized tests to assist diagnosis	Y Ye
25	16:15	The development of a new physical model of a finger for assessing transmitted vibrations	A Almagirby
26	16:30	Limitations of vibrotactile thresholds	S R Mills
	16:45	Panel discussion	
17:00		Close of conference	