

DIGITAL GEARS 2020

Hosted by The British Gear Association

17th—19th November 2020



GEARS 2020 ONLINE

The British Gear Association is the UK Centre of Technical Excellence for gear design, manufacture & application technologies. The Annual Technical Awareness Event (**GEARS**) is the leading conference for the Gear Industry in the UK and this long running seminar is considered an essential event for manufacturers, distributors and academics involved in the UK Gears Industry.

For the first time in our history this event will be held online from 17th – 19th November 2020.

Registration for GEARS.

Attendance to Digital GEARS 2020 is **completely free of charge to BGA Members**. Non members can attend the first day of GEARS completely free of charge – subsequent days are charged at £100 per day.

To Register to this event please email Kirsty in the BGA office – admin@bga.org.uk

AGENDA.

We have once again attracted the most **pre-eminent gearing experts to present papers at Gears** as well as some of the best and brightest newcomers, including the winner of the BGA/IMECHE Student prize, who we have no doubt will be making an impact on the Gearing Industry in the future. Please click the button below to download full abstracts for each presentation.

17th November Session 1

9:45-10:00	Welcome and introduction	Graham Penning
10:00-10:30	Structural Optimisation of an EV Gearbox Housing to achieve reduction in gear misalignment	Barry James, Dr. Annabel Shahaj, Dr. Bartosz Lukasik, Romax Technology Ltd. Kyle Grubb, Martin Gambling, GRM Consulting Ltd
10:40-11:10	The Design and Analysis of a High Temperature Gear Test Rig	Reece Chohan
11:20-11:50	Gear efficiency	Jishan Zhang
12:00-12:30	Fault Detection in a Fleet of Trains by Identifying Outlier Gearboxes using Smart Oil Plug	N. Craig, S. Ellwood, S. Lowry, T. Rosinski, J. Rosinski and M. Nixon
12:40-13:10	Closing comments & intro to next sessions /Open for informal discussion	Graham Penning

18th November 2020 Session 2

9:45-10.00	Welcome and introduction	Graham Penning
10.00-10.30	GMaRC – Industrialists’ Roadmap Update	Ben Cook, Michael Farmery
10.40-11.10	Modelling Gear Production by Skiving.	M Fish / K Uriu
11.20-11.50	Optimising efficiency of Gear Manufacture Using design of experiments (DOE/DOX)	Denis Sexton
12.00-12.30	Power skiving – a step changing manufacturing process applicable to multifunctional 5-axis machine tools	Bethany Cousins, Chao Sun, Ben Cook.
12.40-13.10	Closing comments & intro to next sessions /Open for informal discussion	Graham Penning

19th November 2020 Session 3

9:45-10.00	Welcome and introduction	Graham Penning
10.00-10.30	Why we need to measure gears differently- an introduction to the Met4Wind project	Rob Frazer and Martin Stein
10.40-11.10	Holistic evaluation of involute gears.	Martin Stein, Anita Przyklenk, Robert Frazer.
11.20-11.50	Filtering effects on measured gear profile and helix errors.	Tom Reavie
12.00-12.30	BGA BSI standards and Special Interest Group updates	Various
12.40-13.10	Closing comments	Graham Penning
	Open for informal discussion	

Find out more at www.bga.org.uk/gears-2020

