

Newsletter January 2019



Welcome to the 2019 Huddersfield Railway Challenge Team (HUDRAIL)

CONTENTS

- New Banner
- Birmingham Trip
- Lifting Rig
- Sponsorship



New Banner

If any of you have been in the Design Studio (HA4/04) recently you may have noticed our brand new HUDRAIL banner hung proudly alongside the Team Hawk and Team Hare banners. We hope this banner will help encourage students to join our team and also spread awareness around the university about the amazing opportunity that is available to engineering students.

Birmingham Trip



On the 10th of January 2019 the HUDRAIL team along with other Railway Challenge teams from around the country, were invited to visit the University of Birmingham to view their innovative Hydrogen Fuel Cell locomotive. The locomotive has been given a highly appropriate name of 'Hydrogen Hero.' Not only does the locomotive run using Hydrogen but the proceeds generated from track days using this locomotive are given to the worthy charity, 'Help for Heroes.'

The University of Birmingham have partnered with Porterbook to develop a full scale, zero-emissions locomotive called the 'HYDRO FLEX'. We would like to wish them the very best of luck and hope to see them at next year's competition. Unfortunately, they won't be attending this year's competition due to the sheer scale of the 'HYDRO FLEX' project with Porterbrook.

The University of Huddersfield is very appreciative that the University of Birmingham is willing to share their knowledge with other teams as we are all one community who are working together to achieve the same ultimate goal to improve the railway industry. The HUDRAIL team has learnt a lot about Hydrogen Fuel Cells aswell as a number of ways of managing HudRail teams more effectively in the future.

Lifting Rig

Recently, we have been testing out the previous teams lifting rig ensuring for practicality and security. The lifting rig is used to try and raise the near 1tonne locomotive onto a dolly and planned rolling road. The test was a success as the locomotive was safely raised off the ground using the ceiling lifting pulley in the Railway Challenge Lab. As a result, the HUDRAIL team will be able to transport the locomotive around more with ease, as it can now be lifted onto its dolley platform. For now, the team will await the construction of the rolling road as the majority of the parts have now arrived. It is hoped that the team will begin testing as soon as possible so we can identify any major problems or improvements that we can fix.

Sponsorship



We would like to thank D'Assault Systemes for signing a sponsorship deal and supplying us with the following software packages; Simpack 2019, Abacus 2019 and Catia V5. These pieces of software will help us simulate and evaluate, which will lead us to having a better understanding of how to improve the locomotive.

