

# DOUGLAS BOMFORD TRUST

## ARKWRIGHT SCHOLARSHIP SCHEME

The Trust has continued its support for The Arkwright Scholarship Scheme by sponsoring two more students – George Hammond from Hertfordshire and Harry Stichbury from Kenya – both now working towards their “A-levels” at Uppingham School and with an interest in agricultural engineering as a possible future career. George and Harry were presented with their awards at a prestigious ceremony held at The Institution of Engineering and Technology headquarters in Savoy Place, London on Friday 28<sup>th</sup> October.

The Trust is aiming to improve the way in which we work with our Arkwright Sponsored students by providing them with:

- Student membership of The Institution;
- Opportunities to experience commercial activities in the agricultural engineering sector through company visits and short-term work experience placements – we plan to do this in collaboration with the Agricultural Engineers Association.



**Arkwright scholars Harry Stichbury (left) and George Hammond (centre) with Douglas Bomford secretary Paul Miller having received their scholarships at the 2016 presentation event in London.**

**BELOW: The presentation of Arkwright Scholarships at The Institution of Engineering and Technology in London**



## STUDENTSHIPS AND PRIZES

### Studentships

Fifteen applications were received for DBT studentships for the 2016/17 academic year. These awards typically provide successful undergraduate students with up to £1,500 to support their studies during the year. Eight students have been selected for interview at Harper Adams University on 17<sup>th</sup> November and the results of the selection process will then be finalised.

The Trust was pleased to congratulate two of its sponsored scholars, James Charnley and Adam Montgomery, at their graduation ceremony on 23<sup>rd</sup> September 2016.



**Adam Montgomery (Left) and James Charnley (Centre) with Trust secretary Paul Miller at the 2016 Harper Adams University graduation ceremony.**

### Prizes

This year The Douglas Bomford Trust prize “For the best FdSc Agricultural Engineering student” at Harper Adams University was awarded to Kevin Walsh. The award, comprising a scroll and a cheque, was presented to Kevin by Paul Miller, secretary to The Trust, at the Harper Adams University Graduation day on 23<sup>rd</sup> September 2016.

**Kevin Walsh receiving The Douglas Bomford prize from Paul Miller, Trust secretary, at the Harper Adams University graduation ceremony in September.**



## PROJECT REPORT Bio-lubricants

PhD student, Julia Carrell from Sheffield University, presented the results of her research concerned with bio-lubricants at a seminar at Harper Adams University on 15<sup>th</sup> November 2016 attended by Trustees, staff and students from the University. Julia received a small one-off grant from The Trust back in 2014 and is now working to complete her PhD next year.

She explained that interest in bio-lubricants was being stimulated by environmental concerns associated with oil leakage and disposal issues. Her work to date had particularly examined the interactions between the performance of sealing materials with different oils including both mineral and vegetable oils. The results she had obtained contradicted information in the published literature with less change in seal dimensions when using some vegetable-based oils than would have been expected. Some sealing materials (e.g. EDPM) also showed larger changes in dimensions than expected with all types of oil.

Julia indicated that the future potential for all oil types using surface bonding additives was exciting and had the potential to substantially improve engine performance and economy. Her work to date had used simplified laboratory apparatus but she was hoping to conduct tests with a full-scale engine before completing her studies.

Julia indicated that much of the funding for her PhD had come from The Institution of Mechanical Engineers but she was very grateful to The Douglas Bomford Trust for providing the funding that had enabled her to conduct the practical work associated with her project.

## OTHER NEWS

The Trust web-site has been updated and now includes links to project and travel grant reports – see [www.dbt.org.uk](http://www.dbt.org.uk)