

## Cardboard Boat Building STEM Workshops

### Primary, Secondary and Youth Organisations

Dear Activities Coordinator,

The date for the 2018 IMechE Cardboard Boat Race has been confirmed as the 15th September 2018. The venue will be Commercial Wharf on the Barbican and as with previous years, the program has been divided into a Pre-build and Build on the Day race program.

Each year the number of contestants has increased with a record 45 teams taking part last year. Last year's Outreach STEM program to schools in support this event, enabled us to engage over 400 students in the science, technology, engineering and maths of buoyancy, boat design, construction and use of materials. It was a huge success with all schools involved in the Outreach Scheme producing a race ready boat and race crew.

Last year, with funding from the Engineering Education Grant Scheme, we were able to offer highly subsidised workshops to support the Outreach STEM Scheme. Unfortunately, our grant funding application was not successful this year as there had been a huge demand for funding to support other projects in this "Year of Engineering". Without funding support, we will not be able to subsidise the Outreach STEM Workshops this year, so we have looked at alternative options.

We are acutely aware that schools are facing a funding crisis of their own, so we have sought to find a compromise that will keep this valuable STEM learning and Skills Training program afloat, and ensure that our local students from all backgrounds, can enjoy the same excitement and real engagement with science and engineering as their predecessors. To this end we would like to offer the following STEM and boat building workshops.

STEM Outreach Option. (Primary & Secondary)

### **STEM Workshop and Boat Building Day**

Morning:

STEM Workshops on the Science of Buoyancy and Basic Boat Design , including building and testing cardboard boat models.

Materials and equipment will be provided.

Class size: up to thirty students (Year 5, Year 7 - 9)

Afternoon and after school:

Build a Cardboard Race Boat ( Boat will be built ready to be painted by the school. Guidance on the construction of paddles will also be given, but will only be made if time allows)

All materials (Cardboard, Tape and Glue) and equipment required to build the boat and paddles will be provided.

Team size: 6 students per boat.

Total cost for these workshops will be £200. Members of the PTSA may be able to apply to the PTSA for a subsidy to help with costs.

We are also prepared to run these during the summer holidays and September for schools and youth groups, subject to availability of a suitable venue. Last available date is Thursday 30th August.



## Cardboard Boat Building STEM Workshops

If you wish to take up one of the workshops, please, reply to us by email using [bruce.robby@me.com](mailto:bruce.robby@me.com) ASAP with our school details and a number of proposed dates.

School Details. Please complete these details

Contact name:

School Name:

School Address:

Contact Email:

Contact telephone number:

Workshop Option:

Proposed Workshop Dates: (Please offer at least two dates):

Number of children in the class:

Many thanks

Bruce Robynson / Dr Juliette Jackson  
STEM Outreach Coordinators (IMechE Devon & Cornwall)

