GREAT EVENTIDEAS AGUIDE FOR VOLUNTEERS.

Institution of MECHANICAL ENGINEERS

ISSUE ONE



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INTRODUCTION

This guide has been created by the IMechE's Young Members Board (YMB) for use by YM volunteer groups across the IMechE network.

Every year the Board conducts a number of projects aligned with specific objectives which aim to help further the interests of Young Members (YM) of the Institution by:

- Providing a medium for Young Members to represent other Young Members
- Reviewing issues which affect the profession
- Providing a communication channel for Young Members
- Holding training days and designing resource materials for Young Members
- Liaising with the Young Members of other professional engineering institutions (PEIs), both UK-based and international
- Promoting Continuing Professional Development (CPD)
- Lobbying for change both within and external to the IMechE
- Supporting the regional Young Member network.

Find out more about the YMB at www.imeche.org/YMB-Board.

WHY DO WE NEED THIS GUIDE?

Many YM volunteer groups look to the YMB for volunteer support, to facilitate sharing best practice and help in generating ideas for new events. Organising events is a large part of what volunteers do. This guide summarises tried and tested events and technical visits that could be adopted or used as inspiration by all volunteers across the IMechE network. This guide will help:

- New committees get started by giving them examples of the kinds of events other committees organise
- Committees with limited resources do more, by giving them access to pre-packaged, pre-designed events
- Inspire established committees do new things through the sharing of ideas
- Prevent all committees re-inventing the wheel to draft their annual events programmes
- Provide a good way of sharing events that directly contribute to the learned society attributes the Institution aims to meet
- Collaboration across PEIs in the long term. It is hoped this will become a shareable resource that many PEIs can contribute to.

HOW CAN YOU GET INVOLVED?

If you know of a great event or technical visit that you would like to see featured in this guide, please fill in the event summary template at www.imeche.org/geg, or send us details of technical visit options that would be good to feature. Completed templates, along with any supporting resources, e.g. poster or flyer templates should be returned to the YMB Chair at wmbchair@imechenearyou.org.

We hope to reissue this guide on an annual basis, and in the longer term, build an online collection of supporting resources for all volunteers across the Institution to use.

IN THE GUIDE

The guide lists various different types of events:

• Learned Society events

Contribute to achieving, either in full or in part, the Learned Society attributes

• Professional Development events

Contribute to the professional development of engineers

• Engineering social events

May contribute to achieving, either in full or in part, the Learned Society Attributes, the CPD of engineers, or simply provide good networking opportunities for engineers

• Institutional competition events

Further information about key events run by the Institution to broaden volunteers' understanding of what the Institution provides.

HELPFUL HINTS AND TIPS

Each ideas page contains specific hints and tips for running the event, the key recurring themes are:

• Plan in advance

Make sure you give yourself plenty of time to plan and execute your event, to maximise available marketing time and attendance numbers.

• Avoid important local dates or events

Double check the calendar when planning your event. Events such as half term and local holidays can impact on attendance. Don't forget feasts such as Eid al-Adha, Eid al-Fitr, or Easter don't hold the same date every year. Other things to avoid include popular local pub quiz nights or similar local social events.

LEARNED SOCIETY EVENTS

PANEL DEBATE

SUMMARY OF EVENT

Typical length of event: 2 hours

AIM:

To create an innovative and interactive event concept, aimed at Members of the engineering institutions. It could be run as a series in different locations to discuss key themes that are directly relevant to the current and future generations of engineering professionals. The event could be held with a similar topic nationwide or worldwide, with lessons learned being passed between event holders. This event works similarly to BBC's Question Time.

FORMAT:

- Introduction from chairperson (5 minutes)
- Speakers' introduction (total 10 minutes)
- Debate (total 60 minutes)
- Questions from the audience and closing remarks (total 20 minutes)
- Post-event networking and discussion (max. 1 hour)

"Back to the future: What is the future of local transport?"



THIS EVENT IS GREAT FOR...

- Fostering great working relationships with other professional engineering institutions (PEIs).
- Fuelling lively debate on the key themes of PEIs in the respective local contexts.

LEVEL OF EFFORT REQUIRED

IMechE support: G&E, Theme Manager

Before event

No. volunteers: 5

On day of event No. volunteers: 5, including a chair person for the event

LEVEL OF FINANCE REQUIRED

Overall level of finance: Medium

Central funding available: Maybe

Sponsorship needed: Yes/No

Event type: Free

Estimates of key budget breakdown:

Various guaranteed costs such as venue, refreshments, marketing, gifts for speakers and volunteer expenses.

Filming the event for distribution online/by social media, or other media outlets could be a good way of increasing involvement and engagement, but will also cost.

Overall level of effort: High HELPFUL HINTS & TIPS

What works well:

Start planning at least six months in advance of your event date. Create a dedicated team.

Pitfalls to avoid:

If requesting central funding, ensure your budget is approved by HQ before making funding commitments.

FOR MORE INFORMATION

The Global Engineering Debate is an example of this type of event.

Contacts: ged14@imeche.org

Useful webpages: Facebook, Twitter, YouTube, Website

CHAIN

THIS EVENT IS GREAT FOR...

- Engaging with a wide range of people, institutions and organisations.
- Networking, collaborating with other institutions, finding speaker and trip ideas, recruiting more volunteers and hearing from a varied and interesting range of speakers.
- Raising the profile of engineering organisations including your own and building the engineering community in your area.



SUMMARY OF EVENT

Typical length of event: 1x Saturday, e.g. 9.30am - 4.30pm

CHAIN is a one day inter-institutional event designed specifically to engage, inform, and inspire early career engineers based in a specific area. Aimed at ages 15 to early-30s, from students and apprentices to recent graduates and those aiming to gain professional registration.

AIM:

- Present a cross-section of the engineering world to inform young people about a wide range of projects and ideas happening today.
- Inform attendees about current and future issues that may affect them as engineers.
- Explain the different institutions that are available, who they are, who they cater for and specifically what they do in the local area, even if the institution does not have a local network.
- Encourage young people who are interested in engineering in their local area to network and get involved with their local engineering community.
- Inspire and create opportunities for all those that attend the event

FORMAT:

The following example format was used at the Manchester CHAIN event held in February 2016:

- 09.30 Registration
- 10.00 Welcome
- 10.10 Speaker 1: IET Artificial Intelligence
- 10.40 Speaker 2: RAeS Engineering the Air
- 11.10 Speaker 3: Young Railway Professionals Systems Engineering
- 11.40 Lunch / Stalls
- 12.40 Speaker 4: Manchester Association of Engineers Dr Allan Mann, A career in engineering
- 13.10 Speaker 5: Newcomen Society Innovation in a closed world: the remarkable story of UK military projects during the Cold War
- 13.40 Speaker 6: Institution of Chemical Engineers (IChemE)
- 14.10 Break / Stalls
- 14.40 Speaker 7: Institution of Civil Engineers (ICE) A woman in a man's world? Why I chose engineering
- 15.10 Speaker 8: Institution of Mechanical Engineers (IMechE) Bloodhound Supersonic Car
- 15.40 Discussion between different disciplines
- 16.10 Conclusion and close

CHAIN (continued)

LEVEL OF EFFORT REQUIRED

IMechE support: Business Development Managers, YM volunteers, regional panels

Before event

No. volunteers:

2-3 volunteers for the lead institution:

- 1 coordinator
- 1 speaker liaison
- 1 media.

1 per participating institution:

- Arrange a speaker
- Liaise with other institutions
- Organise stall and advertising

On day of event

No. volunteers:

5 from lead institution:

- 1 Master of Ceremonies
- 2 meet and greet delegates
- 2 man stall

3 per participating institutions to man their stall (in addition to their speaker)

LEVEL OF FINANCE REQUIRED

Overall level of finance: High

Central funding available: No

Event type:

Sponsorship needed: Yes

Free

Estimates of key budget breakdown:

The Manchester CHAIN event used a free room provided by a local university.

The largest cost was catering for 150 people, approx. £1000. The cost should be shared between participating institutions; cost is between £100 - 200 per institution.

There should be no charge for CHAIN delegates. Other costs are optional, including promotional materials - pens, bags and leaflets. Wristbands for entry are relatively cheap. Roller banners can be supplied upon request. The IET can source kit for filming events such as this.

Each institution to bring its own promotional materials, leaflets, etc. at their own cost.

Overall level of effort: Very high

HELPFUL HINTS & TIPS

- Twitter: ensure that you start tweeting and using an unique appropriate hashtag well in advance of the event itself. This shows that the page is active and makes other relevant organisations aware of what you're planning.
- Link your event's Facebook page and Twitter account so that whatever is posted on one is posted on the other. Be aware of things like character limits on Twitter.
- Invest in a "clicker" for presentations and make sure it works with your presentation. Ensure you receive all the presentations before the event so that they can be combined into one presentation. This prevents issues with changeovers between speakers.
- Engage with the speakers as early as possible and keep them updated. Speak to them on the phone, confirm the details of their presentation titles and ensure that they understand the concept of the event, i.e. the format and why you are running it.
- Record who is attending, e.g. are they a student, graduate, member of any institutions already, etc.
- Have someone with a timer to ensure that speakers keep to timings, particularly during questions.
- Have people with microphones to hand out to audience members asking questions.
- Get the participating organisations to bring laptops so that they can sign delegates up to their organisations there and then.
- Encourage institutions to sign up delegates to their mailing list if they do not wish to formally sign up to that institution.
- Plan introductions to say before each speaker. Get speakers to submit their own intros?

FOR MORE INFORMATION

Contacts: Nick Valentine N. Valentine@edu.salford.ac.uk

Useful webpages: www.youngengineers.co.uk/chain, Facebook - www.facebook.com/ChainMcr
Twitter - twitter.com/ChainMcr

Link to resources: Contact Nick Valentine for useful resources such as document and PowerPoint templates, roller banners and how to set up a website for your CHAIN event.

TECHNICAL LECTURES

SUMMARY OF EVENT

Typical length of event: 2 hours

AIM:

- Provide interesting engineering talk to members and general public
- Increase awareness of IMechE in local area with members.

FORMAT:

- Attendees arrive and network with refreshments (optional) such as tea/coffee
- Introduction of speaker by IMechE volunteer
- Speaker provides presentation for approximately 45mins – 1 hour
- Q&A from audience
- Closing vote of thanks from IMechE volunteer
- Refreshments and networking (optional).



THIS EVENT IS GREAT FOR...

- Stimulating local IMechE interest.
- Networking.
- Continuing Professional Development (CPD).

LEVEL OF EFFORT REQUIRED

IMechE support: volunteers, theme manager

Before event No. volunteers: 2-3

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- Sort venue
- Get speaker
- Advertisement
- Bookings

On day of event
No. volunteers: 2

- Set up of venue and speaker/s
- Welcoming and registration of attendees

LEVEL OF FINANCE REQUIRED

Overall level of finance: Low/Medium/High/Very high

Central funding available: No

Sponsorship needed: Maybe

Free or Paid

Estimates of key budget breakdown:

Cost elements:

- Venue hire see if local industry or university will provide for free/low cost
- Speaker fee and speaker expenses (most awesome speakers charge a fee) – approx. £200
- Refreshments.

Overall level of effort: Medium

HELPFUL HINTS & TIPS

IMechE Divisions & Groups hold a variety of these events throughout the calendar year.

What works well:

- Doing a lecture on a high profile/popular/topical subject.
- Making it an annual part of the calendar.

Pitfalls to avoid:

Avoid organising on half term week / big school holidays or else attendance could be poor.

FOR MORE INFORMATION

Contacts:

Useful webpages:

IMECHE DOES SCIBAR

SUMMARY OF EVENT

Typical length of event: 2 hours

SciBar is run by the <u>British Science Association</u>, who have volunteer led committees around the country. SciBar aims to engage with the general public in the local community.

One evening a month they rent a space in a local pub and put on a short presentation (about 20mins), beer break (about 15mins) followed by questions (about 20mins). They cover any and all interesting science-related topics and aim for a diverse range of speakers from both academia and industry.

Some SciBar groups like to include an "engineering science" talk on their agenda and have paired up with IMechE committees to run a joint event where the IMechE provides the speaker. Good topics capture the general public's attention - future of energy/transport/health - but also will present some basic science theory/learning.



THIS EVENT IS GREAT FOR...

- Forming cross-institution links.
- Engaging with the general public the majority of people who attend SciBar are not part of science or engineering professions but find it interesting.

LEVEL OF EFFORT REQUIRED

IMechE support: volunteers

Before event No. volunteers: 1

IMechE

• Arrange speaker

On day of event No. volunteers: 1

IMechE

Liaise with speaker

Overall level of effort: Low

LEVEL OF FINANCE REQUIRED

Overall level of finance: Low High

Central funding available: No

Sponsorship needed: Maybe

Event type:

Free

Estimates of key budget breakdown:

Cost to IMechE is usually negligible.
BSA usually arrange and pay for venue and may
even offer to cover speaker expenses of whomever
IMechE can provide as speaker, though this
should not be relied upon.

HELPFUL HINTS & TIPS

What works well:

- SciBar works because it is held in the same pub on the same week of each month, building up a regularly attending audience who come with their mates as a night out at the pub.
- Speakers need to be able to talk to an audience who have no background in science and engineering.

Pitfalls to avoid:

Don't organise on the same night as the venue's pub quiz or else people go to that instead.

FOR MORE INFORMATION

Contacts:

Useful webpages:

PINT OF SCIENCE FESTIVAL

SUMMARY OF EVENT

Typical length of event: 1-3 days

AIM:

The Pint of Science (PoS) Festival is a non-profit organisation run by volunteers that brings some of the most brilliant scientists to local pubs to discuss their latest research and findings with the general public. The festival runs every year in May over three consecutive evenings at six pubs in each participating city around the world. Each pub hosts one particular theme for three nights, e.g. Tech me Out.

FORMAT:

One to three evenings, approx. 3-4 hours starting from 7pm, at a local pub:

- Guests arrive and register
- Introduction on the IMechE
- Presentations from speakers, panel discussion, quiz, interactive activities, etc. (format of the evening is free, and is to be arranged with the speakers)



THIS EVENT IS GREAT FOR...

- Engaging with the local community
- Raising the profile of engineers, showing the great work engineers and IMechE do in academia/industry & how this is transforming our world
- Showcasing benefits of public/private investments in research and development

LEVEL OF EFFORT REQUIRED

IMechE support: Local panel, volunteers

Before event No. Volunteers: 1-2

- Arrange venue
- Identify speakers
- Advertise event

On day of event No. volunteers: 2

- Welcome guests and speakers
- Introduce IMechE and speakers

LEVEL OF FINANCE REQUIRED

Overall level of finance: Low (£200 per evening)

Central funding available: No

Event Type:

Sponsorship needed: Maybe

PAID

Estimates of key budget breakdown:

- Central Pint of Science (PoS) charges a £200 fee to allow an external organisation (IMechE) to organise a single event
- Ticket revenue goes to PoS

Overall level of effort: Medium

HELPFUL HINTS & TIPS

What works well:

- Work closely with the local PoS volunteers to identify a suitable venue and speakers
- Look for speakers who have recently presented at similar outreach events, who can present to a
 generalist audience
- Find a "catchy" title, remember, the audience is not specialised in the field!
- Two to three speakers per night (15min. each), with a demonstration and/or panel discussion is a successful format

FOR MORE INFORMATION

Contacts: Mattia Di Francesco mattia.difrancesco@nccuk.com / contact@pintofscience.com

Useful webpages: www.pintofscience.co.uk

SITE/TECHNICAL VISIT

SUMMARY OF EVENT

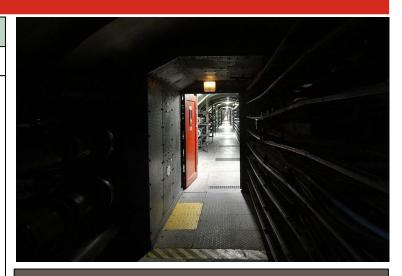
Typical length of event: 2 hours

AIM:

- Provide interesting site visit to members and general public
- Increase awareness of IMechE and engineering company in local area

FORMAT:

- Attendees arrive and network with refreshments (optional) such as tea/coffee
- Introduction of company and host by IMechE volunteer
- Host takes attendees on guided tour of site (possibly in multiple small groups) for approximately 1 hour
- Q&A from attendees
- Closing thanks from IMechE volunteer.



THIS EVENT IS GREAT FOR A CONVIGINT TOWN IN

- Stimulating local IMechE interest
- Increasing IMechE ties with local companies
- Company recruitment
- Networking
- Continuing professional development

LEVEL OF EFFORT REQUIRED

IMechE support: Local panel, volunteers

Before event No. volunteers: 2

On day of event No. volunteers: 2

LEVEL OF FINANCE REQUIRED

Overall level of finance: Low

Central funding available: No

Event type:

Sponsorship needed: No

Estimates of key budget breakdown:

Budget ideally less than £100.

- Travel (if absolutely necessary)
- Refreshments, although company may provide

Overall level of effort: Low

HELPFUL HINTS & TIPS

What works well:

- Prioritise confirming date of event, host and company venue. Add to NearYou at least 12 weeks before event
- Create event poster and distribute via email 2 weeks prior to event

Pitfalls to avoid:

• Last minute organisation and advertising.

Previous successful locations:

• The YMB can provide a list of successful locations if you need any suggestions

FOR MORE INFORMATION

Contacts:

Useful webpages:

PROFESSIONAL DEVELOPMENT EVENTS

FAST TRACK TO REGISTRATION

SUMMARY OF EVENT

Typical length of event: 1 day

NUMBER OF PEOPLE: 6-12

AIM:

To help people complete the application form for professional registration (CEng, IEng, EngTech) through the direct entry/standard route. Attendees are guided through the professional registration application form, aiming to have it almost completed by the end of the workshop. Attendees then commit to putting in an application within an agreed timeframe.

FORMAT:

Run by an IMechE Business Development Manager (BDM) and a technical expert, in a region or company. Covers:

- Introductory presentation on UK-SPEC and background of IMechE application process
- Interactive workshop session to provide detailed input on each UK-SPEC competence
- Guidance on preparing for the professional review interview.



THIS EVENT IS GREAT FOR...

- Engaging with companies of all sizes in your area. A valuable resource for employers engaging with the IMechE and to support their staff through to professional registration, or for individuals to attend a regional event to progress to professional registration
- Engaging with Associate Members in your region.

LEVEL OF EFFORT REQUIRED

IMechE Support: BDM(s)

Before event

Always refer initially to your local BDM before organising any event. Liaise with BDM re the specific members to be invited.

On day of event

The BDM and a technical expert will always be present. Can be run without an additional volunteer

Overall level of effort: Medium/High

LEVEL OF FINANCE REQUIRED

Overall level of finance: Medium

Central funding available:

Event type: Free

Sponsorship needed: No

Estimates of key budget breakdown:

Budget is usually covered within the BDM team when organised by the BDM. Includes venue & catering (often sourced free), BDM time and T&E and the cost of the technical expert operating as a consultant to the IMechE and their T&E - circa £500 per event in total direct costs.

HELPFUL HINTS & TIPS

What works well:

- Confirm when someone is booking that they have the right qualifications, right level of experience and intent to register within a few weeks of completing the workshop.
- Ensure all people registering for the course complete the pre-work.
- Attendees will usually need to be able to bring a laptop with the professional registration forms on it so that they can participate effectively in the interactive workshops.

FOR MORE INFORMATION

Contacts: Local BDM - bdm@imeche.org

Useful webpages: https://www.imeche.org/our-people

SPEAK OUT FOR ENGINEERING

SUMMARY OF EVENT

Typical length of event: 2 hours

The IMechE Young Members' presentation competition, run locally in international regions with regional winners competing in a grand final. Members can enter the competition or turn up to the events to listen to presentations on a diverse range of subjects.

NUMBER OF PEOPLE: 50-100 AIM:

Offers university students and early-career engineers a platform to demonstrate their understanding of the importance of engineering and practice the art of communication.

FORMAT:

Competitors must give a 10 minute oral presentation followed by questions on a subject relating to mechanical engineering. A number of regional heats, with prizes, take place with winners going through to a grand final round. One person will be chosen as the overall champion of SOfE.



THIS EVENT IS GREAT FOR...

Engaging with local Young Members, university students and school pupils in your area, very valuable and can be an opportunity for the panel to recruit more members and volunteers. It can also be used as a route to advertise other IMechE STEM events to schools worldwide.

LEVEL OF EFFORT REQUIRED

IMechE support: lead panel & volunteers

Before event No. volunteers: 3-5

- Arrange venue
- Advertise event
- Liaise with entrants
- Find judging panel

On day of event No. volunteers: 5-7

- Judging panel
- Event chair
- Person to organise presenters

Overall level of finance: Medium to High

LEVEL OF FINANCE REQUIRED

Central funding available: Yes

Event type:

Sponsorship needed: Yes

Free

Estimates of key budget breakdown:

- Prize money is issued by the Trustee Boards Awards Committee (TBAC) and allocated at the start of each year - 1^{st} prize £300 and 2^{nd} prize £200. Contact sofe@imeche.org if interested in obtaining prize money.
- Main expense is finding a venue, and catering.

Overall level of effort: Medium to High

HELPFUL HINTS & TIPS

What works well:

Ensure all volunteers and judges read the Entrant's and Organiser's Packs. Find judges from various engineering backgrounds. Advertise the competition at least one month in advance so participants have enough time to work on their synopses. Advertise the heat competition in local universities and ask current students and recent graduates to participate. Advertise the final competition in local universities and local schools and invite them to attend.

FOR MORE INFORMATION

Contacts: sofe@imeche.org

Useful webpages: www.imeche.org/sofe-entrants Link to resources: www.imeche.org/sofe-entrants

CV WRITING/INTERVIEW SKILLS

SUMMARY OF EVENT

Typical length of event: 1 x evening

AIM:

Seminar covering how to write a successful CV, tips and advice for interviews and what employers are looking for.

FORMAT:

- YMs arrive
- IMechE volunteer introduces the first speaker
- Speaker presents including Q&A
- Break for refreshments
- IMechE volunteer introduces the second speaker
- Second speaker presents including Q&A
- IMechE volunteer closes the event
- YMs are invited to leave their CVs to be reviewed if they wish – with feedback emailed out after the event
- Networking opportunity.



THIS EVENT IS GREAT FOR...

- Improving IMechE/student engagement
- Providing careers and employability advice
- Enabling YMs to speak one-to-one with industry experts, e.g. HR recruitment
- Refresher course for those currently in work, and those looking for a career change.

LEVEL OF EFFORT REQUIRED

IMechE support: Lead panel, volunteers

Before event

No. volunteers: 3-6

- Arrange venue
- Find speakers
- Promote event

On day of event No. volunteers: 4

- Welcome YMs
- Open and close event
- Provide refreshments

LEVEL OF FINANCE REQUIRED

Overall level of finance: Medium

Central funding available: No

Sponsorship needed: No

Event type:

Free

Estimates of key budget breakdown:

- Travel expenses for speakers
- Refreshments
- Advertisement such as poster printing

Overall level of effort: Medium

HELPFUL HINTS & TIPS

What works well:

- Finding good speakers, e.g. recruiters from industry and skills training providers
- Using a university as a venue this is often free and universities will usually promote the event too.

Pitfalls to avoid:

- Make sure the venue is happy for you to serve refreshments have a backup plan of somewhere to go post-event if they aren't
- For maximum attendance, organise it for an evening.

FOR MORE INFORMATION

Contacts: Christobel Gondwe (previous event organiser) christobel.gondwe1@googlemail.com

Useful webpages:

GET REGISTERED

SUMMARY OF EVENT

Typical length of event: 2-3 hours

AIM:

Gives members and potential members an introduction to becoming professionally registered, with practical steps on finding the right route to professional registration, an introduction to the application process and what support and help is available towards application.

FORMAT:

Usually held in the evening to enable attendance after work. The regional BDM will lead a presentation including an introduction to the IMechE, benefits of membership and particularly registration, and an overview of the requirements for professional registration.

They will also cover how to go about applying for professional registration at EngTech, IEng or CEng, including an introduction to the UK-SPEC competence framework and requirements for application. Next steps and one-to-one or group support will be offered.



THIS EVENT IS GREAT FOR...

- Associate members in region
- Those looking for help and support to becoming professionally registered
- Linking with SMEs and local employers

LEVEL OF EFFORT	REQUIRED	LEVEL OF FINANCE REQUIRED	
IMechE support: Volu	nteer(s), BDM, Admin	Overall level of finance: Low	
Before event No. volunteers:	On day of event No. volunteers:	Central funding available:	Event type:
		Sponsorship needed:	FREE
• 1-3 depending on size of event.	• 1-3 depending on size of event.	Estimates of key budget breakdown:	
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Overall level of effort: Low

Venue hire (sometimes free depending on venue and region), potentially catering – e.g. coffees, snacks

HELPFUL HINTS & TIPS

What works well:

Involve the BDM up front - book their attendance and discuss the events. Use local networks to encourage attendance from existing and new members and plan event marketing in advance.

Pitfalls to avoid:

High venue costs, areas that people can't easily get to after work.

FOR MORE INFORMATION

Contacts: Jacqueline Brown, BDA, bdm@imeche.org or local BDM

Useful webpages: example - http://nearyou.imeche.org/eventdetail?id=13702

ENGINEERING SOCIAL EVENTS

RAILTRAIL

(ENGINEERING HISTORY TRAIL)

SUMMARY OF EVENT

Typical length of event: 1.5 hours + networking

AIM:

Social event that aims to highlight some of the vast railway history that is available in a given location, including buildings that have been demolished or are no longer used for their original purpose.

Encourages teamwork, clear communication, and problem solving.

The first event was held in London, but the format could be used for other locations with an industrial history – not just rail.

FORMAT:

Teams of 4 people start at a fixed location, with a clue to the first location. At the first location. a volunteer gives the teams the second clue and so on. A good amount of locations is between 4 and 6, depending on distance between them. The teams are selected at random, which means that further networking is available en-route.



THIS EVENT IS GREAT FOR...

- Learning about some of the local history of an industry, and networking
- Additional points were given out for finding out facts along the route, which should increase participant knowledge about the history of their industry. It was great to have time at the end for inter-team networking

LEVEL OF EFFORT REQUIRED

IMechE support: Volunteers

Before event No. volunteers: 1-2

• Location generation

- Clue generation
- Route testing

On day of event No. volunteers: min 3

- Initial brief at start
- Volunteers stationed at clue locations

Overall level of effort: Medium

LEVEL OF FINANCE REQUIRED

Overall level of finance: Low

Central funding available: No

Event type:

Sponsorship needed: No

Estimates of key budget breakdown:

- Prizes required
- Refreshments could be provided post-event during the networking session.

HELPFUL HINTS & TIPS

What works well:

A number of locations should be used. Four were used for the first event – RailTrail 2016 in London. Collecting phone numbers of attendees before the event, means volunteers can have numbers with them to make attendees aware of their location if necessary. There was also an "if lost open me" envelope which had the final location in. This meant that if the team did get lost, they would still be able to join in with the networking.

Pitfalls to avoid:

Like exam questions, the clues should start easier and get trickier, so avoid starting too difficult!

FOR MORE INFORMATION

Contacts: Tom Scaramuzza

Useful webpages: www.imeche.org/railtrail

BREWERY TOUR TECHNICAL VISIT

SUMMARY OF EVENT

Typical length of event: 1.5 hours + networking

Take a tour of a local brewery or micro-brewery followed by beer tasting. Established breweries offer standard tours which typically vary between 1-2 hours and usually include a complimentary drink. Some breweries will do special tours with higher technical content for engineers if specifically requested in advance.

AIM:

- Learn the technical details of brewing, mainly related to engineering
- Social visit to connect with other local members.

FORMAT:

- Introductions (note down names)
- Technical tour
- Questions (hopefully engineering-related)
- Socialise, and networking opportunity.



THIS EVENT IS GREAT FOR...

Welcoming all grades of membership, and ages, to network together.

LEVEL OF EFFORT REQUIRED

IMechE support: None, mainly run by brewery

Before event No. volunteers: 1

Arrange a date

Create a poster

Advertise online

On day of event No. volunteers: 1

Note down names of attendees.

LEVEL OF FINANCE REQUIRED

Overall level of finance: Low (typically <£10pp)

Central funding available: No Event type:

Sponsorship needed: No

PAID

Estimates key budget breakdown:

Funding for each person on the tour, dependent on ticket price set by brewery, and ticket price set by event

Overall level of effort: Low

HELPFUL HINTS & TIPS

What works well:

- Ensure all people register for the event; to pay a deposit at registration if necessary, to ensure attendance.
- Make the event a "members only" visit (due to funding) not a necessity, as you can set a non-members rate if required.
- Food isn't provided, but post-event networking may include an optional extra trip to a local pub/restaurant.
- To prevent too much sampling of alcohol, vouchers were given during this visit.

FOR MORE INFORMATION

Contacts: Gavin Kerby (previous event organiser) gavinkerby@live.co.uk

Useful webpages: <u>www.ringwoodbrewery.co.uk/tours</u>

Link to resources: Email Gavin Kerby for a copy of the event poster.

ENGINEERING CINEMA NIGHT

SUMMARY OF EVENT

Typical length of event: 1 x evening

Hire a screen at a local cinema for a night or borrow an auditorium, e.g. from a university to screen an engineering-themed movie or documentary for a night.

There are many films which will fit the bill – for example, breaking world records - World's Fastest Indian, historical - The Dambusters or Those Magnificent Men in Their Flying Machines and a few fictional ones where science and engineering save the day.

AIM:

- People to learn something through the film
- Enjoyable way to spend an evening
- Networking after the film.

FORMAT:

- Meet for pre-event snacks/drinks
- Watch movie
- Network following event in nearby pub/bar/restaurant.



THIS EVENT IS GREAT FOR...

- Being something a bit different
- A good thing to do on dark winter nights
- Getting mixed ages if older movies are picked then older members come out for the nostalgia and younger members because they might not have seen the film/documentary.

LEVEL OF EFFORT REQUIRED

IMechE support: Volunteers

Before event No. volunteers: 1

- Find venue
- Pick movie
- Get license
- Advertise

On day of event No. volunteers: 1

- Liaise with venue
- Show people where to go

Register attendees

LEVEL OF FINANCE REQUIRED

Overall level of finance: Medium

Central funding available: No

Event type:

Sponsorship needed: No

Estimates of key budget breakdown:

- Venue can be very cheap. Borrow/rent an auditorium from a local university. Or a few hundred pounds to rent from a local arthouse type
- Film license: £50-70 dependent on film choice.

Overall level of effort: Medium

<u>HELPFUL HINTS & TIPS</u>

What works well:

- You must apply to the film licensing agency to get a one-off permit to show the film in a public
- Ask people to pay a deposit before the evening to encourage attendance, particularly if needing a good attendance to cover the costs of the venue.

Pitfalls to avoid:

Try not to pick a film that has been on recently, particularly around about Christmas. Check that there are no major sporting events - football/rugby etc., on TV on your event night.

FOR MORE INFORMATION

Contacts:

Useful webpages:

SPORTS DAY/EVENING

SUMMARY OF EVENT

Typical length of event: Few hours

A fun summer social activity involving teams of people competing in various traditional races and challenges such as tug of war, sack race and egg & spoon race. Can also add in engineering challenges, e.g. assembly tasks, demolition or solving puzzles.

Points or time taken can be scored for each event culminating in a leader board and a winner.

Works nicely in a park especially if combined with a barbecue.

AIM:

People to have fun and to network

FORMAT:

- Welcome speech
- Form into teams
- Sports day activities
- Barbecue and socialising.



THIS EVENT IS GREAT FOR...

Getting people from different organisations and age groups to mix. Either allow teams to preregister in advance – encouraging healthy competition between local companies or local schools – or you can allocate teams on the day and mix people up. The barbecue provides a natural networking opportunity.

LEVEL OF EFFORT REQUIRED

IMechE Support: Volunteers

Before event No. volunteers: 1-2

• Advertise

 Acquire basic equipment for events / challenges.

On day of event No. volunteers: 3-5

- Races need, at least, a starter and finisher.
- Someone to get the barbecue going!

LEVEL OF FINANCE REQUIRED

Overall level of finance: Low

Central funding available: No

Event type:

Sponsorship needed: No

Free or Paid

Estimates of key budget breakdown:

- May need to buy a few pieces of equipment (e.g. rope, sacks, spoons etc.)
- Food and drink for BBQ can ask people for contribution.

Overall level of effort: Medium

HELPFUL HINTS & TIPS

What works well:

- Do the event just after university exams have finished but before everyone goes on holiday for the summer.
- Ensure that you have any necessary barbecue permit from the council/park owner if required.
- Checking the historical weather statistics on the MET office website some days in June have a rainy precedent!
- Make it an annual event and have a trophy that gets passed on each year.

FOR MORE INFORMATION

Contacts:

Useful webpages:

THE RACE CENTRE

SUMMARY OF EVENT

Typical length of event: 1 x evening

The Race Centre offers a realistic driving experience in 10 fixed seat simulators arranged around a large room. Each simulator has a large (108") screen, a set of pedals, a steering wheel with force feedback, and Drivers wear headphones. The simulators are linked so you race in real time with the other people in the room.

AIM:

- To experience the differences between different types of cars in a safe environment
- Social visit to connect with other local members.

FORMAT: (suggested)

- Introduction to the simulators and cars
- First 10 people have a qualifying session
- Second 10 people have a qualifying session
- Top 10 fastest qualifiers compete against each other in a race.



THIS EVENT IS GREAT FOR...

Socialising and networking.

LEVEL OF EFFORT REQUIRED

IMechE support: Volunteers

Before event No. volunteers: 1

- Arrange a date
- Book venue
- Create a poster
- Advertise

On day of event No. volunteers: 1

- Liaise with staff at venue
- Take names of attendees

LEVEL OF FINANCE REQUIRED

Overall level of finance: Low (~£12per head)

Central funding available: Yes

Event type: Paid

Sponsorship needed: No

iship needed: No

Estimates of key budget breakdown:

Only expense is funding for each person on the event – min 11 people

Overall level of effort: Low

HELPFUL HINTS & TIPS

What works well:

- Charge moderate fee to encourage people to turn up and not "just book" with no intention of coming.
- Food isn't provided at this venue but drinks are; pizza can be ordered. Event was only 1.5 hours.
- Advertising is key!
- Previous event running charged £2.40 and limited to IMechE Members only. Event format was suggested and could be modified depending on numbers.

FOR MORE INFORMATION

Contacts: Simon Porter (previous event organiser) WessexYMChair@imechenearyou.org

Useful webpages: www.theracecentre.co.uk/index.php

Link to resources: E-mail Simon Porter for details.

ANNUAL DINNER

SUMMARY OF EVENT

Typical length of event: $1 \times \text{evening}$

Hire a function room or interesting space that can seat a large number of people and put on a formal three course dinner. Companies, IMechE committees or groups can book a table, or members can simply apply for individual tickets and be matched with others. Have an IMechE speaker and also pay a professional entertaining after-dinner speak to come. Liven things up with a raffle for charity or similar.

AIM:

- Raise IMechE's profile in the area.
- Allow people to meet others and socialise.

FORMAT:

- Pre-dinner drinks & networking
- Welcome speech
- Dinner
- Keynote speaker / entertainment
- Charity raffle



THIS EVENT IS GREAT FOR...

Getting key organisations / companies in your areas and IMechE committee together. Hosting a "key event" to really emphasise IMechE presence in region.

Allowing people to meet and socialise in a fun "black tie" style event.

LEVEL OF EFFORT REQUIRED

IMechE support: Volunteers

Before event No. Volunteers: 3+

No. volunteers: 3+

- Find venue/catering
- Advertise/sell tickets
- Arrange entertainment

On day of event No. volunteers: 3+

- Welcome guests
- Liaise with guests/venue
- Run the raffle

LEVEL OF FINANCE REQUIRED

Overall level of finance: High

Central funding available: No

Event type:

Sponsorship needed: Yes

Paid

Estimates of key budget breakdown:

- Venue, catering & entertainment costs
- Need to charge for tickets to event. May also require a company to sponsor the event.

Overall level of effort: High

HELPFUL HINTS & TIPS

What works well:

- Getting local companies to book out or sponsor a table. Get in touch with senior managers in local companies.
- Giving anyone volunteering for the IMechE a discounted ticket rate to encourage attendance.
- Make it a black tie event where people get to dress up, go somewhere a bit fancy and have nice food.

FOR MORE INFORMATION

Contacts:

Useful webpages:

INSTITUTIONAL COMPETITION EVENTS

FORMULA STUDENT

SUMMARY OF COMPETITION

AIM:

Formula Student is Europe's most established educational motorsport competition. Backed by industry and high-profile engineers such as Patron, Ross Brawn OBE, the competition aims to develop enterprising and innovative young engineers and encourage more young people to take up a career in engineering.

FORMAT:

Provides an ideal opportunity for the students to test, demonstrate and improve their capabilities to deliver a complex and integrated product in the demanding environment of a motorsport competition.

Your team is tasked to produce a prototype for a single-seat race car for autocross or sprint racing, and present it to a hypothetical manufacturing firm. The car must be low in cost, easy to maintain, and reliable, with high performance in terms of its acceleration, braking and handling qualities. During the competition your team must demonstrate the logic behind your proposal and must be able to demonstrate that it can support a viable business model for both parties.

Each team goes through a rigorous testing process, made up of:

- Static events
- Dynamic events.

Central funding available: N/A Sponsorship needed: N/A LEVEL OF FINANCE REQUIRED Event type: N/A



THIS EVENT IS GREAT FOR...

The project usually forms part of a degree-level project and is viewed by the motorsport industry as the standard for engineering graduates to meet, transitioning them from university to the workplace. It is a kite-mark for real-world engineering experience.

As a student, taking part in Formula Student gives the chance to demonstrate technical, engineering design, and manufacturing skills.

Participants will also learn important lessons on team working, time management, project management, budgeting and presentation: all things that any prospective employer will be looking for.

Formula Student graduates also find that the professionalism they gain as practising engineers means they are well equipped for their future engineering careers.

OPPORTUNITIES

Volunteers are welcome at the challenge, which takes place in July at Silverstone Circuit, UK. For more information on volunteering please visit: www.imeche.org/fsvolunteer

If you would like to get others involved in this event, talk to a local university about setting up a team. You could provide people from industry to help a local team, or arrange for another established team to come and give advice to a new/inexperienced team. Teams are always looking for sponsorship, so you could help them find sponsorship from industry.

FOR MORE INFORMATION

Contacts: fs@imeche.org

Useful webpages: www.imeche.org/formula-student

RAILWAY CHALLENGE

SUMMARY OF COMPETITION

AIM:

The Railway Challenge, organised by our Railway Division, provides a brilliant opportunity for aspiring teams to compete in a challenging industry-specific competition, showcasing their skills, expertise, knowledge, and business acumen.

FORMAT:

Teams are to assume that they work for a design consultancy producing a design proposal and a prototype for a small locomotive for a large corporation.

They are required to design and manufacture a miniature (10¼" gauge) railway locomotive in accordance with a strict set of rules and a detailed technical specification. The locomotives will be tested live against the other teams' entries during the competition weekend at Stapleford Miniature Railway in Leicestershire, where several categories of winners and an overall Railway Challenge champion will be crowned.

LEVEL OF FINANCE REQUIRED

Overall level of finance: N/A

Central funding available: N/A Event type:

Sponsorship needed: N/A N/A



THIS EVENT IS GREAT FOR...

The Railway Challenge provides participants with real-life experience of the entire cycle of designing and manufacturing a prototype in a structured environment supported by academic and industry mentors.

The challenge brings together teams of university students, as well as apprentices and graduates working in industry across the UK to test their business knowledge, design ability and technical skills in a live test environment.

It also provides a fairly risk free but representative environment in which you can develop key engineering skills alongside business and soft skills that will enhance your future in an engineering career.

OPPORTUNITIES

Spectators are welcome at the event at the Stapleford Miniature Railway over the competition weekend, however Sunday is the best day as the locomotives will be in direct competition, having passed scrutineering.

Does your own or old university enter the competition? If not, get your university involved! If you can assist teams or the event itself with sponsorship, either contact a team or the IMechE for information on the various packages available. A list of teams for the event are published on the website following the closing of entries each year.

You can also volunteer at the event, either as a scrutineer for a team, a judge, or just to help over the weekend with operations and spectator movement!

FOR MORE INFORMATION

Contacts: railwaychallenge@imeche.org

Useful webpages: www.imeche.org/railway-challenge

DESIGN CHALLENGE

SUMMARY OF COMPETITION

AIM:

To enable participants to gain real-industry experience, practical employability skills and enhanced business and people skills, all within a set time frame. It is intended to complement the academic curriculum and the requirements for the design, build, test module.

FORMAT:

- Teams to design, build and test a vehicle to compete with other teams
- Produce a poster to publicise the team's work
- Give a short presentation explaining the design and development of the device (demonstrating the team's verbal and presentation skills
- Submit to a peer review where all students have the chance to vote for the best engineered solution to the problem.



THIS EVENT IS GREAT FOR...

- Introducing first year undergraduates to the IMechE
- Promoting the practical and fun side of engineering at university
- Making connections between universities and university engineering societies

LEVEL OF EFFORT REQUIRED

IMechE support: Design Challenge organising committee, volunteers, BDMs

Before event No. volunteers:

2 organisers plus 1 from each university participating to mentor teams

On day of event No. volunteers:

2-5 to ensure smooth running and assist with competition equipment and displays

Overall level of effort: Medium

LEVEL OF FINANCE REQUIRED

Overall level of finance: Medium

Central funding available: No

Sponsorship needed: Some

Estimates of key budget breakdown:

- Fixed prizes totalling £1200. So far these have been funded by IMechE HQ but going forward will need to be sponsored to cover costs.
- The host university will have some expenditure on equipment and each university will have to support their team's registration as a minimum.

HELPFUL HINTS & TIPS

What works well:

• Have separate areas for posters and the competition - judges and audience can look at the posters while they're eating lunch without getting in the way of setting up the competition area

Pitfalls to avoid:

• Providing lunch can be very expensive if using university catering services, depending on numbers. Source sponsorship to fund food in exchange for admission to the event or having a corporate stand.

FOR MORE INFORMATION

Contacts: designchallenge@imeche.org, S_Mulligan@imeche.org (BDM support)

Useful webpages: www.imeche.org/design-challenge

HOME AUTOMATION CHALLENGE

SUMMARY OF COMPETITION

AIM:

The Home Automation Challenge is a an opportunity for the UK's most talented apprentices to come up with an innovative design, and manufacture an improvement to an everyday home or garden device.

The scope is as broad as your imagination and vour team must demonstrate engineering competences according to the Engineering Council's UK-SPEC for EngTech.

FORMAT:

Teams design a product and build a prototype of a working model. Prototypes are exhibited and presented to judges at a finals day held in July. Teams will submit a short report prior to the competition, which includes a design specification, manufacturing instructions, and a user manual. Teams must also submit a business case for the mass production and sale of the product.

Judges will base their decisions on design integrity, quality of prototype, functionality, presentation, and the depth of each team's knowledge.



THIS EVENT IS GREAT FOR...

The benefits include opportunities to:

- Develop research and practical technical skills
- Broaden professional development and understanding of key EngTech competences
- Enhance project management skills
- Widen manufacturing experience
- Develop leadership and team-working skills.

LEVEL OF FINANCE REQUIRED

Overall level of finance: N/A

Central funding available: N/A N/A

Sponsorship needed: N/A

Event type:

OPPORTUNITIES

- Does your company have apprentices? Get your apprentices involved!
- If you can assist teams or the event with sponsorship please contact the IMechE.
- If you would like to volunteer to assist with the event, be a judge, or simply come along to spectate, then please email the competition address, listed below, for more information.

FOR MORE INFORMATION

Contacts: hac@imechenearyou.org

Useful webpages: www.imeche.org/hac

UAS CHALLENGE

SUMMARY OF COMPETITION

AIM:

The Challenge is the leading annual student competition in the aerospace sector. The Challenge launched in 2014 with the key objectives of developing professional engineers and inspiring the next generation.

It promotes value and cohesion within the industry, providing unique opportunities to universities, their teams, the individual participants and partnering organisations. The Challenge bridges the gap between academia and industry in developing applied UAS-related activities, giving you the perfect opportunity to strengthen links with industry, other universities and enhance employment opportunities for graduates in the aerospace sector.

FORMAT:

Participating teams of undergraduates from all over the world to undertake a full design and build cycle of a UAS with specific mission objectives. There are 10 awards on offer.

The challenge is a year-long project with phased stages of completion that require strict adherence and assessment in order to qualify.

Central funding available: N/A Sponsorship needed: N/A LEVEL OF FINANCE REQUIRED Event Type: N/A



THIS EVENT IS GREAT FOR...

- Providing:
 - Real-world engineering experience for students
 - Opportunities to develop and demonstrate technical, engineering design, and manufacturing skills
 - Opportunities for developing soft skills such as team-working and time management alongside project management, budgeting and presentation skills, becoming better equipped for a long-lasting career in engineering
- Obtaining practical aerospace engineering skills for industry
- Winning backing from potential future employers
- Developing connections and networking with like-minded students.

OPPORTUNITIES

- Does your own or old university enter the competition? If not, get your university involved!
- Assist teams or the event itself with sponsorship contact a team or contact the IMechE for details.
- You can also volunteer at the event, either as a scrutineer for a team, a judge, or just to help over the weekend with operations and spectator movement!
- If you would like to get involved with helping to organise the event, join the UASC Steering Group as a Young Members Representative.

FOR MORE INFORMATION

Contacts: uaschallenge@imeche.org

Useful webpages: http://www.imeche.org/uas-challenge

PHOTOGRAPHER OF THE YEAR

SUMMARY OF EVENT

AIM:

The Photographer of the Year Competition is organised by the Young Members Board. The competition provides a unique opportunity for anyone from all corners of the planet to share inspirational and striking images relating to mechanical engineering.

FORMAT:

Members and non-members of the Institution are invited to submit up to three photographs on a set theme relating to mechanical engineering.

A distinguished judging panel of leading industry professionals will select the winning images. Judges will be looking for photographs that are ambitious, creative and thoughtful.



THIS EVENT IS GREAT FOR...

Engaging people of all ages and backgrounds.

LEVEL OF FINANCE REQUIRED

Overall level of finance: N/A

Central funding available: N/A Event type:

Sponsorship needed: N/A

N/A

Estimates of key budget breakdown:

The competition has fixed prizes. These are funded by the YMB and IYMC.

OPPORTUNITIES

- Would like to participate, please visit the webpage below for further information.
- Would like to help organise the competition? Please get in contact.

FOR MORE INFORMATION

Contacts: ymbphotocomp@imechenearyour.org Useful webpages: www.imeche.org/photography

1 Birdcage Walk Westminster London SW1H 9JJ

youngmembers@imeche.org

www.imeche.org