

I am a building services engineer working at Hoare Lea. They provide mechanical, electrical and public health consultancy plus specialist groups including fire, sustainability, vertical transportation and acoustics. I work in the Bristol office but often travel to London and other parts of the country to visit clients and attend site meetings. Over the last 5 years, I have specialised in the healthcare sector, managing engineers within the healthcare team and I have taken the lead on a number of high profile projects. I have been the CIBSE Regional Chair for the South West since 2011 and became Chartered in 2014.



James Outram

WHAT INSPIRED YOU TO BECOME A BUILDING SERVICES ENGINEER AND WHAT PATH DID YOU TAKE TO ACHIEVE THIS?

I graduated from university with a BEng mechanical engineering degree in 2006 and joined a consultancy as graduate building services engineer.

From an early stage in my career, I decided that belonging to an institution was important as it helps aid progression. I joined CIBSE in 2006. Being a CIBSE member strengthens the institution and this helps CIBSE's voice to be heard above all others on important matters such as climate change.

WHAT IS THE MOST ENJOYABLE ASPECT OF YOUR JOB?

I enjoy the challenge of breaking down the barriers which exist, especially when a new project team is formed or the contractor is brought to the table for the first time. For me, the challenging part of my role is making sure everyone is happy which includes members of my team and our clients; once this happens any engineering problems are normally resolved easily. Everyone has different agendas and stresses in their lives, the key for me is to understand how to get the best out of the team.

I find my job really satisfying and no two days are the same. I am lucky enough to be a mentor to three engineers and I find this particularly rewarding as I'm able to see them progress and avoid the mistakes that I made. I am a driven person always wanting to improve my knowledge and never accepting the answer, 'because that's how we have always done it'.

I am the current chair of the CIBSE South West region and this brings me into contact with a whole variety of people who I wouldn't normally meet during my day-to-day work.

WHAT IS YOUR GREATEST PROFESSIONAL ACCOMPLISHMENT TO DATE?

I had the pleasure of working on the UK's oldest continually running theatre. Bristol Old Vic is a grade 1 listed building built in 1766 and is based in the heart of Bristol. One of the greatest challenges was threading the services through the existing historic structure and bringing the design within the budget. This challenge was exacerbated during construction when two staircases, previously unknown, were uncovered.

Working in the healthcare sector, one of my particular interests is working on the design of a ventilation system for operating theatres which will reduce the rate of infection. Within Hoare Lea we have undertaken research to improve the current provision and have carried out real time testing within theatres under simulated operating conditions. The results are very promising.

WHAT ONE PIECE OF ADVICE WOULD YOU GIVE TO SOMEONE THINKING ABOUT BECOMING A BUILDING SERVICES ENGINEER?

The job will undoubtedly bring



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CIBSE IS THERE TO ENCOURAGE, AND WANTS YOU TO SUCCEED.



as much variety as you desire. One of the main government drives is to increase the number of engineers to plug the shortfall so job security is good. In 2014, the Construction Industry contributed £103 billion in economic output which is 6.5% of the total output so as long as we continue to build there will always be a job in engineering.

WHY DID YOU BECOME MCIBSE CENG?

In my role as CIBSE South West Regional Chair, I face views from people who cannot see the benefit in becoming a CIBSE member. Depending on your role and your ambition, there is a membership grade within CIBSE to suit you. If you are a member of CIBSE and you can show you have been actively involved, this can help with your employability.

If you are keen to become a professional engineer then you will want to gain registration from the Engineering Council (EC). The EC is responsible for registering all engineers within the UK so irrespective of your engineering sector, you are measured against the same criteria (UKSPEC).

Being part of CIBSE at any grade helps you as an individual gain credibility within the industry as all CIBSE members have to adhere to the code of conduct and confirms you are operating at a level of professional competence.

HOW DID YOU FIND THE APPLICATION PROCESS TO BECOME MCIBSE AND WHAT ADVICE WOULD YOU GIVE TO OTHERS CONSIDERING THIS GRADE?

CIBSE has fantastic support material which clearly sets out

the criteria for each grade of membership. All the information including example applications can be found on the CIBSE website, you do not even have to be a member to gain access to them.

Each region tends to run membership evenings. If you are thinking about becoming a member I would strongly recommend you attend one of these. It's amazing what you can learn. I found these sessions invaluable as they explain the reasoning behind the criteria set out on the forms.

HOW DID YOU FIND THE APPLICATION PROCESS TO BECOME CENG VIA THE TECHNICAL REPORT ROUTE AND WHAT ADVICE WOULD YOU GIVE TO OTHERS CONSIDERING THIS ROLE TO REGISTRATION?

Having gained a BEng degree, I needed to demonstrate technical ability to Masters Level. There were two options open to me, either return to university full or part-time to complete a Masters or undertake a Technical Report. I decided to pursue the Technical Report Route.

Initially the prospect of researching and writing a Technical Report was daunting. The subject matter is the first challenge you will face when choosing the Technical Report Route. My advice would be find a subject that interests you and if it is something which will ultimately benefit the institution, that is an added bonus.

Once you have your chosen subject and there are proposals on the CIBSE website to help, then you are ready to start the synopsis. This needs to be submitted to CIBSE so they can

check you've given the subject matter sufficient thought and that it will demonstrate the technical level required.

Having been through the process and having initially been quite sceptical about the amount of time and effort it would involve, I actually really enjoyed it. I had to be quite strict with myself about making time, but it meant that the whole process had a foreseeable deadline. It took me a little over two years whilst working full time to complete. Starting the report is often the hardest part.

When I submitted the finished report, the interview with CIBSE was fairly straightforward as it was about the report and what I had learnt.

WHAT DO YOU CONSIDER TO BE THE BENEFITS OF CIBSE MEMBERSHIP AND WHY?

CIBSE is there to encourage, and wants you to succeed. The criteria is not there to try and catch you out, it is simply a means to check that you are operating at the right level.

BUILDING SERVICES IS GREAT BECAUSE..?

One of my favourite projects was designing the ventilation system on a hospital. The project took four years and I was lucky enough to see the project from design through to construction. For me, being able to see your design come to life is one of the most exciting phases in the project, not to mention the scariest. Seeing the AHU being craned on to the roof suddenly put everything into perspective. ■