

My name is David Mather and I have ten years' experience in the building services engineering industry. I recently joined Peter Brett Associates as a Senior Mechanical Engineer based in their Reading office. I am also the Vice-Representative of CIBSE YEN (Young Engineers Network).

I produce reports, feasibility studies, design calculations, specifications and drawings for mechanical services and renewable energy technologies. My current projects fall into a number of sectors including workplace and offices, education and residential. I enjoy the teamwork, variety and challenges that this role provides.



WHAT INSPIRED YOU TO WANT TO BECOME A BUILDING SERVICES ENGINEER AND PURSUE A CAREER IN ENGINEERING?

As a child I enjoyed learning about how the world works – I asked “why?” every day, and always needed a detailed explanation. This inquisitive nature once led to a damaged TV as I thought I would test out if the TV was magnetic!

During secondary school I had a week's work experience at JDP – this opened my eyes to the variety of careers in the engineering sector. This drive to work in engineering led to my choice to study mathematics and physics at A Level.

After my A levels I started working in the CAD department at JDP. I was hooked! Building services engineering is my vocation.

WHAT QUALIFICATION PATH DID YOU CHOOSE AND WHY?

After GCSE's I went on to study for A Levels in mathematics and physics. After starting work as a Junior CAD Technician JDP sponsored me on both City & Guilds Computer Aided Design Level 2 & Level 3 part-time courses.

My ambition then turned to an engineering role. I was offered the opportunity to study towards an HND in building services engineering on a day release basis with the support of JDP. I studied this at London South Bank University. After the first two years of the course I switched onto the BEng (Hons) building services engineering course. This took three further years to study part-time. In 2012 I graduated with a BEng (Hons) after a total of five years of part-time study on day release at LSBU.

For their support of my career to date I nominated JDP for the CIBSE Employer of the Year award, which they won in 2012.

In 2013 I then returned to London South Bank University on day release, to take my studies further with a MSc in Sustainable Energy Systems. This should be completed in January 2016 once my dissertation is finished. This course also provides a stepping-stone to Chartered Engineer status.

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

As a graduate member of CIBSE it is great to have access to the CIBSE Knowledge Portal to obtain the technical guidance documents which assist me in my day-to-day role. I have been a regular attendee of Regional events



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and events organised by the Young Engineers Network (YEN). Attending CIBSE events is great for getting information about new systems, guidance or legislation. Events such as a site tour of the Olympic Park Energy Centre with YEN London was particularly inspiring.

Liverpool, Dublin and London has motivated me to build YEN London to be the best centre we can offer and to inspire more young engineers starting in their careers.

YEN GLOBAL CONFERENCE IN HONG KONG

In November 2015 I attended the first global YEN conference in Hong Kong. It was an incredible experience and provided a valuable insight into building services engineering in a different country. The challenges of high humidity, high temperatures and typhoons are very different to my experience of designing buildings to cope with the UK's temperate climate. The majority of buildings in Hong Kong are also high-rise, another difference to the projects I have worked on.

As well as a global conference with YEN representatives from across the world, we were lucky enough to have plantroom tours at several large M&E installations in the city. The services in very tall buildings, such as the 108 storey ICC Building, were an order of magnitude larger than the cooling plant that I have worked on in my career to date. The passion for engineering was apparent in the facilities teams at EMSD's Kai Tak District Cooling Plant and The Venetian in Macau. Facilities teams we met in Hong Kong were very proud to maintain and operate these large systems without loss of cooling provision. The week was truly inspiring for all the attendees.

WHY ARE YOU LOOKING TO BECOME CENG?

My aim is to reach accreditation as a Chartered Engineer. I feel that gaining CEng registration

will be a vital component in my ambition to lead a team to undertake the mechanical design on low-carbon projects across a variety of industry sectors. It has been my ambition for many years, and this objective has determined my choice to study for an MSc.

WHY DO YOU THINK BECOMING PROFESSIONALLY REGISTERED IS IMPORTANT/BENEFICIAL?

It is important for me to show both current and future clients that I have the experience, competency and qualifications to meet the standard of work that they expect from a building services engineer. Clients will have comfort that CIBSE and the Engineering Council have assessed my ability before awarding CEng and MCIBSE.

WHAT IS YOUR GREATEST PROFESSIONAL ACCOMPLISHMENT TO DATE AND WHAT DO YOU HOPE TO ACHIEVE IN THE FUTURE?

Although I have been involved in the design of mechanical services across a number of projects, I am proudest to have been involved in the design of renewable technologies. In particular, I have designed photovoltaic arrays on a number of different projects – one of which has 572 panels. Each of these arrays reduces the carbon footprint of their respective buildings.

I hope in the future to work on a net zero carbon building. My aspiration is that this would be a landmark building so that it can provide inspiration to the buildings occupants, visitors and the next generation of engineers. ■



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I have enjoyed the networking opportunities and the variety of events provided by YEN. I was eager to join the London centre committee to assist with the organisation of new events. YEN London's regular attendees and the committee's members are all approachable, friendly and supportive.

After several years of committed involvement, I became the Chair of the YEN London centre. This is a position that has given me the opportunity to improve my public speaking and leadership in an encouraging and supportive environment. CIBSE has provided additional training in chairing meetings and leadership. This position has also led to some incredible opportunities including speaking at London South Bank University's launch event for their school of "The Built Environment and Architecture" to nurture a strong link between YEN London and LSBU.

Meeting other YEN Chairs and Vice-Chairs at conferences in