

# Public perception and engineering reality



By Geoff Marsh MBE

**A personal view of the continuing development of an institution that has served the public and an important industry sector for nearly one hundred years - The Institute of Plumbing and now, Institute of Plumbing and Heating Engineering.**

## Changing Times

In a century of fast moving technology, the present Institute title is only the third to be adopted as an initial indication of its interests and activities. Attempting to sum up the role of an organisation in an article such as this in a few words presents a similar problem. Another way of describing the objective in the following text could be "What you see or read into the word plumbing is not necessarily what you get". In an age of confusion about life styles and work styles, reference to plumbing has been a regular feature in all aspects of the media in the past two years. This attention is to be welcomed on the basis that such publicity raises the profile of an essential occupation. However, many of those now attracted to plumbing will find a severe test awaits them before they can claim to reach the standard required by this branch of engineering. For example, a person practising as a self-sufficient sole proprietor will need to be well qualified, well experienced and prepared to commit himself or herself to Professional Development.

## Definitions and Names

The IPHE definition of plumbing and heating engineering – "Work associated with the provision of water supply pipework including that used for fire-fighting; all forms of space heating, gas installation, sanitary appliances, discharge pipework and drainage, the weathering of structures and buildings" – challenges individuals in the industry to be multi-skilled. The latter term is often used to point out the credentials sought for 21st century employment. Practising plumbing has always demanded multiple skills so we have been ahead of current intellectual thought about work for decades. With such a broad definition of what plumbing entails it is difficult to encapsulate for public information what is on offer. Certainly, the worldwide community associates plumbing with water supply and sanitation. Taps and WCs, cold and hot running water delivered on demand. We in the Institute of Plumbing have, in the past 30 years, considered various titles for our professional institution. When confronted with a range of alternatives, the membership was

unable to favour, by a significant majority, a suitable name for our Registered Educational Charity.

In more recent time, it is the members themselves who have provided the impetus for an improved, expanded headline for the Institute. A study of how they describe their business activity clearly exposed "Plumbing and Heating" as the overwhelming image promoted to their clients and customers.

Then there is the underplayed relationship between plumbing, heating and all other facets of the general definition and engineering. The IPHE is a properly constituted limited liability company, a correctly governed Registered Charity and a Nominating Member of the Engineering Council UK. Carrying the word engineering in our name proclaims what as a body we are engaged in as we serve the public, our industry sector and strive to raise standards.

## Setting the Future Agenda

Well, why all this excitement about a modest change in title for a mature organisation? Answer – it's an opportunity to set the agenda for the immediate and long-term future of the IPHE. Since 1970 the former IoP had been engrossed with establishing a new framework for its operation following a merger with the Registered Plumbers Association (RPA). From 1990, the IoP committed itself to supporting the 2nd World Plumbing Conference in London, helping to establish the World Plumbing Council, playing an active part in the Plumbing Forum which became the Plumbing & Heating Industry Alliance, developing its own Annual

Conference to an increasingly high standard and trying to keep pace with many external demands on the time of its Staff by Government Departments.

Now, with membership increasing and a new approach to expanding its central technical service, there is a task to be dealt with in promoting how plumbing and heating engineering are benefiting from our pro-active attitude.

## Environmental Concern, Energy Conservation and Home Comfort

Firstly, the IPHE Domestic Heating Group has been hard at work carrying the message about changes in Building Regulations that affect the design and installation of heating systems to gatherings of Institute members and others around the country. These amendments reflect national and international environmental concern about CO<sub>2</sub> emissions. They also provide advantages to home occupiers in the form of energy conservation, improved heating system control and reduced bills. Domestic heating has been an essential component of plumbing before and since the introduction of small diameter pipework and a new generation of circulating pumps in the 1950s. In 1963 at the Annual Meeting of the RPA General Council held in Scarborough, the Mayor, Alderman W A Smith JP said in his speech of welcome, "You are concerned with high standards of workmanship and it does strike me that you should consider changing your name to the Association of Registered Plumbers and Domestic Heating Installers. I think this would benefit you because most members of

the public will probably turn to those people who call themselves domestic heating installers rather than just plumbers”.

The Mayor's comments were made against a background of what some commentators regarded as a chaotic situation in the new and booming market of domestic central heating and hot water supply. An initiative taken in 1961 to create an independent National Register of Domestic Heating Installers foundered when sectorial interests proved stronger than the call for unity. As a result, a number of different groups were formed to take advantage of the new technology that was to raise the engineering content of plumbing concerned with domestic heating.

### **Exciting Times, Then and Now**

These were exciting times. When I had the opportunity to design and install a small diameter  $\frac{3}{8}$ " black mild steel tube heating system incorporating a Sigmund pump (Accelerator) nearly 50 years ago in a new detached house, it was a defining moment in my plumbing life. Technical support was provided by the British Coal Utilization and Research Association. A few years later I was just one of many disciples of small bore central heating using  $\frac{1}{2}$ " copper tube and fittings. Equipment suppliers targeted plumbers in order to develop the market for their products and we responded. Thousands of plumbing people turned out in the evenings after work to absorb, then apply the technical know-how of forced circulation central heating systems for dwellings. The rest is history. Today the

general public expect and enjoy sophisticated comfort conditions in their homes brought to them through research, product development and an adaptable plumbing industry.

With this story of success in mind it is no wonder that the IPHE has placed "Heating" alongside "Plumbing" in its title to emphasise the importance of that expertise in the working life of its members. Hopefully, public perception of what IPHE represents will be much improved through the addition of the "H" word. Better late than never, in the case of Alderman Smith's remarks 41 years ago at Scarborough.

### **Engineering and Public Health**

Now, a few words about its neighbour – "Engineering". We in the business understand that plumbing has always been an engineering activity. Unfortunately, in the past twenty years during restructuring of plumbing education and training we have lost much of the drive to raise standards, which serve to maintain a sense of excellence in personal achievement. One case in point is that of the redundant "City & Guilds Certificate in Sanitary and Domestic Engineering in relation to Plumbers' Work". Quite a lengthy, but revealing, statement about a course of studies that stretched those with the interest and aptitude towards the design of more complex plumbing engineering.

As previously mentioned, innovation in domestic heating systems raised the engineering content of plumbing. However, in another area of plumbing, that of water supply and

drainage installations for large buildings, City & Guilds "San & Dom" provided a bridge to public health engineering.

At the Institute's Norwich Annual Conference this year, delegates were informed of a new Public Health Engineering Certificate to be introduced by the IPHE. This is being developed in conjunction with the Engineering Council UK and the Engineering Technology board to link the new Certificate's requirements to Incorporated Engineer Registration.

### **Onwards and Upwards**

Meanwhile, at the Dublin Institute of Technology later this year a pilot Advanced Plumbing Course reaches a conclusion. The IPHE are working hard with several of their Fellows and Members who are employed in engineering consultancy, Further and Higher Education to reconstruct the pathway of opportunity for plumbers. As a result, many will be able to release their full potential in our industry sector. In this way we can be confident that the future of plumbing and heating engineering is secure.

As a professional body, the IPHE acting with its Sector Skills Council will continue to uphold high standards in plumbing occupations. Leading a fulfilled life in a chosen branch of plumbing is a truly worthwhile objective. The engineering reality of plumbing and heating is expressed by the IPHE through its actions and the thousands of its members who pledge to abide by its Code of Professional Standards. Their personal voluntary commitment to supporting an educational

charity approaching its centenary is a sign of hope in a world dominated by material self-interest. On the whole, in my opinion, changing from IoP to IPHE seems a perfectly good idea!



### **A potted history of the Institute**

This is the second time the Institute has undergone a name change. It was founded in 1906 and incorporated as a company limited by guarantee in 1907 by the National Association of Master Plumbers. Known then as the Institute of Plumbers, its original objectives related to development of both the industrial and technical aspects of the plumbing trade. Membership was restricted to plumbers in business.

In 1957, the Institute's constitution was revised and its title changed to the Institute of Plumbing. Membership was extended to any individual holding technical qualifications irrespective of their position in the industry.

In the late 1960s discussions began between the Institute and the Registered Plumbers Association (RPA) to bring about a merger of the two bodies. The main role of the RPA was to manage the Register of Plumbers on behalf of the Worshipful Company of Plumbers - the origins of which date back to 1365.

The amalgamation of the IoP and RPA took place on 10 January 1970. The new Institute was charged with the task of further developing technical and educational work; the recognition of qualified plumbing professionals and the pursuit of better standards.

In 1979 the Institute became a registered educational charity in recognition of its work in the public interest. 1986 marked the centenary of the Register of Plumbers, which was started by the Worshipful Company on 21 July 1886 to identify competent and responsible plumbers in the absence of any statutory regulation in the UK - a position which still exists today. The centenary was celebrated by a gathering of over 700 Registered Plumbers at Guildhall, London where special Centenary Certificates were presented.