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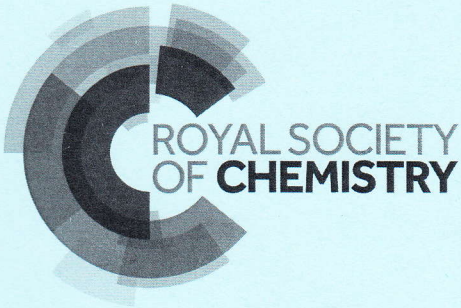

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HUMPHRY DAVY CHEMICAL LANDMARK PLAQUE ERECTED IN PENZANCE: A SUCCESS FOR THE HISTORICAL GROUP

In April 2015, the Historical Group Committee recommended an RSC Chemical Landmark plaque for the building in Penzance in which Humphry Davy (1778-1829) was an apprentice apothecary from 1795 to 1798 (No 1, Market Place). The recommendation was accepted by the RSC Outreach team. The plaque has now been installed (Figs 1 to 3) following a most successful ceremony in The Exchange, an art gallery a few tens of metres from the building. The ceremony, which took place on Thursday 17 September 2015, was funded by RSC Outreach. The author of this report acted as master of ceremonies on behalf of the Historical Group Committee.

Fig. 1. The plaque in close-up

Fig. 2. The plaque installed, with the existing statue of Sir Humphry Davy to the right. The photograph is taken along Market Jew Street, which narrows at the junction with the side street to the left (New Street) and becomes Market Place.

The main features of the ceremony were, firstly, a lecture by Professor Frank James [1], entitled " 'the place of my nativity': The role of Cornwall in Davy's life", and secondly, the presentation of the plaque itself by a past-president of the RSC, Professor Jim Feast, CBE, FRS to the owners of the building, represented by Mr Jon Symons, JP. Other speakers were Ms Susan Stuart, of the local Humphry Davy Project, and Councillor David Nebesnuick, Mayor of Penzance.

The RSC Chemical Landmark plaques seek to make the general public aware of historic chemists – and thereby of the importance of chemistry in society and of the RSC. In this case, the townspeople of Penzance were already very aware of Davy as "Penzance's most famous son", but this if anything seems to have increased their enthusiasm for the national recognition provided by the plaque. The forthcoming ceremony was "trailed" twice at length by the local newspaper, *The Cornishman*, and also by Radio Cornwall in the breakfast programme on the day. A reporter and photographer were sent to the ceremony by *The Cornishman*; the resulting report, under the headline "Royal Society of Chemistry travels to Penzance to deliver Humphry Davy plaque", comprised a substantial account of the event and the background and a group photograph similar to Figure 3.

Fig. 3: Group photograph taken shortly after the presentation. Left to right, Head Girl Jodi, David Nebesnuick, Jon Symons, Jim Feast, Frank James, Head Boy Harry, Michael Jewess.

Pre-existing local recognition of Davy takes various forms: the imposing statue in Figures 2 and 3; the local Humphry Davy Project already mentioned, which seeks to inspire youngsters through the example of Davy; and the naming of the local comprehensive school for ages 11-16. The building itself has in one of its display windows (in Figure 2, just out of view down New Street to the left) a mural depicting Davy at work (Figure 4).

Fig. 4. The Davy mural, commissioned by Jim Saulter and executed by Tim Wright. Since this photograph was taken, the date "1794" has been corrected to agree with the date on indenture in possession of the Royal Institution and with the Chemical Landmark plaque.

The venue for the ceremony was fully occupied with about 40 people. Attendees included the following: Lord St Levan, the occupant of St Michael's Mount, the spectacular island in the nearby bay; the pharmacist who while a tenant of the building had commissioned the mural (Mr Jim Saulter); the artist of the mural (Mr Tim Wright); and the Head Boy and Head Girl of the Humphry Davy School.

No 1 Market Place continued as a pharmacy after the time of Davy. From the 1830s for many years it was run as "Symons", *ie* by the same family as the present owners; latterly it traded as "Peasgoods". Peasgoods relocated to another part of the town in 2011, and the building now houses a Rotary Shop. By putting up a plaque, the RSC has recognised not only Davy himself, but also his master, John Bingham Borlase. Borlase facilitated Davy's career through his connections with men of science and very generously by releasing Davy early from his indentures so that he could take up a position in 1798 at the Medical Pneumatic Institution in Bristol. From Bristol, Davy progressed in 1801 to the Royal Institution, London. With peculiar symmetry, in 1813 Davy secured Michael Faraday's appointment as an assistant at the Royal Institution, Faraday having also benefited from the generosity of his master, George Riebau, while an apprentice [2]. Faraday's place of apprenticeship was acknowledged by a Society of Arts plaque erected in 1875-1876 (and still in place). The corresponding plaque for Davy has been long in coming; but in mitigation the delay allowed its award to coincide with the 200th anniversary of Davy's invention of the miner's gauze safety lamp.

The plaque has a splendid location, facing down the main shopping street of Penzance, Market Jew Street, frequented not only by local people but also, in the season, by tourists from all over the world. It will probably have more "footfall" than any other Chemical Landmark plaque. (The plaque at Moss Bros, 299 Oxford Street, London [3] may well be *passed* by more people per day, but almost certainly it is *noticed* by fewer.)

Historically [4, 5, 6], the plaque reinforces two lessons:–

> **(i) That Davy was indeed a great chemist.** He studied the physiological effects of inhaling various gases, and in particular the effect of nitrous oxide ("laughing gas"). He established and coined the term "electrochemistry", in particular explaining Volta's battery in terms of chemical reactions within the battery, thereby superseding Volta's theory of metal-metal contact potentials. He established that hydrogen chloride and hydrogen iodide contained no oxygen, thereby disproving Lavoisier's "oxygen" theory of acids and demonstrating the elemental nature of chlorine and iodine. He used electricity to isolate sodium, potassium, magnesium, calcium, strontium, barium, and boron (which last Thénard isolated independently), and so demonstrated their elemental nature. He established the reputation of the Royal Institution as the venue for first-class scientific lectures. And – the achievement for which he is best known to the general public – he invented the miner's gauze safety lamp.
>
> **(ii) That Davy's Cornish origins affected his outlook on life.** Born in Cornwall (in Market Jew Street in fact), in 1800 he wrote to his mother,
>
> "Believe me, in the midst of chemical & philosophical experiments & discoveries I very often turn to the beloved place of my nativity and live over again the days of my Infancy & Childhood."
>
> Cornwall imbued Davy with the Romantic spirit: Southey compared Davy's poetry with that of Milton, while Coleridge said that Davy could have become the nation's leading poet had he not chosen to exercise his talents in a different direction. Davy did not feel comfortable for long in London: Professor James describes his condition as "alienation". Davy remained a keen fisherman and travelled widely in the British Isles and elsewhere in Europe.

This mention of Davy's travels allows the author to end this piece with the curious fact that the Penzance plaque is the *second* RSC Chemical Landmark plaque referring to Davy, but the first such *in Britain*. The first, at the Académie des Sciences in Paris, celebrates the award of the "Prix de l'Institut" to Davy in 1808 when Britain and France were at war [7, 8]. Davy collected the prize in person in 1813, having travelled to France (with which Britain was still at war) with a special permit authorised by Napoleon.

References and notes

1. Frank is Professor of History of Science at the Royal Institution, London, and also a Professor at University College London. He is a member of the RSC Historical Group Committee.

2. Michael Jewess, "Faraday's 'blue' plaque – commemorating a remarkable master as well as a remarkable servant", RSC Historical Group *Newsletter and summary of papers*, Summer 2013, **64,** 35-41.

3. Website London remembers – aiming to capture all memorials in London, at http://www.londonremembers.com/memorials/royal-college-of-chemistry.

4. Frank A J L James, "Humphry Davy at Work: Or why do STS", UCL inaugural lecture, 2 March 2015.

5. Frank A J L James, " 'the place of my nativity': The role of Cornwall in Davy's life", lecture at the ceremony, 17 September 2015.

6. Humphry Davy to Grace Davy, 5 May 1800, RI MS HD/26/A/3.

7. *Wikipedia*, "List of blue plaques erected by the Royal Society of Chemistry", https://en.wikipedia.org/wiki/List_of_blue_plaques_erected_by_the_Royal_Society_of_Chemistry.

8. Embassy of France to the UK, "Celebrating the bicentenary of the 'Prix de l'Institut' awarded to Sir Humphry Davy", http://www.ambafrance-uk.org/Celebrating-the-bicentenary-of-the.

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