

MS FACTORY VALLEY, RHYDYMWYN.
Recollections of Jack Jackson who was on site for a short time in 1941/42.

I arrived at MS Factory, Valley at the beginning of December 1941 as a member of a group of eleven young men who had been recruited by ICI Special Products Division to form the laboratory staff of MS Factory Springfields which was at that time under construction and due to commence operations in early 1942. The age range of this group was 17 to about 30 and comprised three experienced laboratory workers, three pharmacists (two not fully qualified) and five school leavers. Before being let loose in the Toxic Laboratory at Springfields it was deemed essential that all of the new recruits should receive training in the special safety procedures required and also in the analytical procedures relevant to the products concerned. Valley had been selected as the training venue because at that time there was very little production activity on the site, with the exception of one Runcol unit, and the laboratory was very largely available. The only laboratory personnel there were the Chief Analyst, W F Bewes; one toxic analyst, Mr Fitzpatrick and one young laboratory assistant whose name I do not recall.

Dr F E Coleman (Ferdie) from Runcorn was in charge of the training programme.

On arrival on site all of the new recruits were found lodgings in the general vicinity. I together with another member of the party was sent to Mynydd Isa but after the first week moved in with another of the party to New Street in Mold. We all came to and from site on a special Crosville bus direct from Mold to the factory gate.

The day after our arrival the group was introduced to Ferdie Coleman and we were informed that the activities of the factory were highly secret and came within the restrictions of the Official Secrets Act. Thereafter Ferdie told us what the products to be produced at Valley and Springfields were and outlined the chemical processes involved and the laboratory procedures that we would have to become familiar with. Safety in handling the products was stressed and mandatory procedures which, I believe, had originally been developed at the Sutton Oak Government Research Establishment, were described in detail. At this stage all concerned were informed that the true chemical names of products and some of the raw materials would never be used in any circumstances and instead we had to become familiar with the code names of Pyro, Runcol, S20, Syrup, MCB etc.

The ICI laboratory building where the training took place accommodated the Chief Analysts Office, a small non toxic laboratory with a single island bench, apparatus stores, a records office accessible from the non toxic laboratory and the toxic laboratory, the toxic laboratory accommodated four island blocks of four fume cupboards back to back where in a normal laboratory four island benches would have been fitted and eight more fume cupboards comprising four each on two of the walls and, locker rooms (toxic and non toxic) connected to each other by a shower room. Whilst under training our group of trainees were required to wear factory clothing consisting of vest and underpants, service grey socks, a khaki shirt and prison style trousers with tie on braces and jacket with no lapels made of grey shoddy material, and rubber gum boots. Rubber gloves and goggles were absolutely taboo but face visors were available for the more dangerous operations involving close contact with the products. Each individual was additionally provided with a long gas cape which fastened round the neck and the waist. At the beginning of each day all were required to leave their normal clothing in a locker in the non toxic locker room and to proceed to the toxic locker room to dress for the day in works clothing. At the end of the day the procedure was reversed with all taking a shower before donning their normal clothes.

In the laboratory there were strict procedures for handling samples of the product and all had to learn the procedure for cleaning the necks of bottles with filter paper after transferring the product to flasks etc. At each fume cupboard a bucket of decontaminating bleach paste was

provided and all filter paper which had been used for wiping was immediately dumped in the nearest bucket. All were encouraged to smell their hands frequently and any suspicion of contamination on hands necessitated quick decontamination in bleach paste followed by rinsing under the tap followed by the application of "ROZALEX" from one of the dispensers on the wall. All glass apparatus had to be decontaminated after use and for this a fume cupboard was set aside in which were large earthenware pneumatic troughs containing concentrated nitric acid.

The laboratory building was single storey with a flat roof painted in camouflage paint. To comply with blackout requirements, all external exits were provided with a lobby and double doors.

Training included familiarisation with the production plant and in this regard visits were made to P 4 which had been completed but not commissioned. A particular feature for laboratory staff was the procedure for drawing samples for analysis by means of sampling cupboards which were fitted externally to each of the production cubicles. Samples were taken in 16 oz wide mouth glass jars fitted with bunsen valves in order to release any excess pressure.

There was no mains gas supply available on site and all bunsen burners were serviced by calor gas bottles.

Apart from the ICI laboratory there was also the adjacent CID laboratory. CID was short for Chemical Inspection Directorate and was concerned in ensuring that the product from the factory complied with required standards.

In early 1942 I was deemed to have reached an acceptable standard of competence and when the call came for an advance party to move on to Springfields for preparations for start up, I was one of those selected.

Leisure time activities for those employed at Valley were limited but most enjoyed an occasional evening out at one of the local pubs. One of the trainees had been a church organist and found himself from time to time acting as pianist at the Market Tavern in Mold. Others got involved in Saturday football and I and a fellow trainee took to the Clwydian Hills.

After Springfields I moved on to Hillhouse near Fleetwood where a variety of products, mainly derived from Chlorine which was produced on site, were made. These included the war material code named CG and also Carbon Tetrachloride (CC). Carbon Disulphide, Trichlorethylene, Hexachlorethane, Mono Chlor Benzene (MCB), Cereclor (Chlorinated paraffin wax), Chlorinated Rubber, Methyl Methacrylate and Poly Vinyl Chloride (PVC).

All the war time appointments in ICI Special Products Division were designated as temporary. At the end of the war I chose to move on but many who did not were eventually given permanent ICI appointments.