

My 60 Year Journey as a Science Technician

By Chris Rouse

In the spring of 1966, I had three job offers, a cameraman with the BBC, a sound engineer in a recording studio in Soho and a Lab Assistant (Science Technician) at ICI's Plant Protection in Binfield near Maidenhead. I took the job as the Lab Assistant and started in June of 1966, this was a time when female Lab Assistants were paid two thirds of the wage of a male Lab Assistant.

The site was an Agriculture Research Station but had a laboratory block that researched insecticides and various crop sprays. I was put into the Toxic Lab and worked for one of the chemists, doing all of his practical work. Health and Safety and the HSE were eight years away so safety screens and goggles were nowhere to be seen. I learnt my trade under the watchful eyes of an older technician and learnt how to fill a lab notebook, never put any chemical back into a bottle once it was taken out and always put a bottle top upside down on the bench top. One afternoon I was sitting alongside a rotary evaporator (a glass distillation apparatus used to strip out solvents under a vacuum) when my reaction mixture suddenly released a large volume of gas and the apparatus exploded. Luckily, I was wearing prescription glasses, the glass fragments broke both lenses and cut into my face. The worst cut was on my lip where a blood vessel was cut and bleed profusely and I still have a lump in my lip today. I spent almost three years with Plant Protection and the skills I learnt there still come in useful today.

I moved back to Portsmouth to start working with Wyeth Laboratories (a pharmaceutical manufacturer) as a technician in the Chemical Process Development laboratory. There were thirteen grades of Lab Assistant and my salary was just under £400. Our job was to take the new drugs from the research section and find the cheapest way to manufacture them. We worked on a few grams to one or two kilograms, using glass reactors up to twenty litres. My skill set improved during this time, and I learnt how to handle dangerous chemicals in a safe manner. Initially the test equipment was limited, we had a melting point apparatus and an InfraRed spectrum plotter. We tested the purity of our product mainly by melting point and TLC. I also learnt how to make sodamide by taking a large cylinder of ammonia, tipping it upside down and leaning it against the wall. When the gas tap on the cylinder head was opened liquid ammonia ran out and was collected in a bucket. Once the bucket was about half full it was taken back to the lab and we added lumps of sodium. Attached to the main chemical production plant was a small Pilot Plant and I spent some time there. One warm summer day two of us were working in the main plant, refluxing Ether in a 100-gallon reactor, when a friend of mine came over with a two-gallon bucket half filled with concentrated sulphuric acid. He then poured two kilos of potassium permanganate from a plastic bag into the bucket of acid and a purple cloud came out of the bucket. Five of us gathered around the bucket to try and work out what had happened, but what we did not realise was that the temperature in the bucket was increasing and at some point, the whole thing exploded, violently. Concentrated sulphuric acid was blown up to the ceiling, then rained back down on us. Three of the group escaped via a side door and my friend and I took a long route to get out, coming out of the plant alongside a large cooling tower. When I looked down, I found that the acid had eaten away the trouser legs of the boiler suit I was wearing. My

friend decided to hose me down to wash the acid off of my legs. Help arrived and I was taken to the First Aid room, the nurse decided to soak me in a bath while they waited for the ambulance to arrive. The problem was that the bath was filled with ice cold water and when they put me into that I went into shock. The ambulance arrived and they took me off to hospital where I stayed for three days.

I decided that a change of scenery was needed so I left Wyeth and went to work for Maybridge Chemicals in Tintagel. The small company had a building housing the laboratories that produced novel chemicals that could be sold to large companies, saving them time in their search for new products. I only spent three months there as I decided it was not for me. When I asked the chemist that I worked with where the waste bin was emptied, he told me to bring the waste solvent container and follow him. We put the waste bin contents into a 45-gallon drum with the top removed then poured in the waste solvent. A lighted match was dropped into the drum, and it took just a few moments to solve our waste problems! As there were no fume cupboards in the labs, anything that needed one was set up outside in the slate quarry. Power for heating mantles was a very long extension lead connected to the socket in a nearby room, at this point I decided to go back to Wyeth and the Process Development lab.

By the mid 1980's we received more analytical equipment, HPLC and 'on column' GLC being the main ones. Our department set up a small analytical lab that I ran until our company was taken over, and all R&D outside of America was closed down.

A new chapter in my life started when the Monday following my redundancy from Wyeth I started work as a Senior Science Technician at Ryde High School. Over the next 32 years I moved around Island schools, working at Medina, the Studio School, Sandown Bay and finally, four years ago I returned to the new Ryde Academy.

If I had the chance to go back and change anything I would not. Working in the chemical industry is an experience I would never want to have missed. Working as a school Science Technician has had its ups and downs, but a path I am glad I went down. By the end of June 2026, I will have completed 60 years as a Science Technician and will finally retire...