

Jan 25 '95

Dear Robin,

You might find something here, but there's not a lot, I'm afraid

THE NMRDG and NMR ('63 - '73)

The NMRDG (according to Ernie Cummins)

The truth about its formation is only lightly hidden in the story I told at the meeting when I'd resigned (1973). Jimmie Page, under whom I'd worked for many years at Glaxo (Greenford 1945 -56), rang me at Perkin Elmer and said "You ought to start a discussion group for NMR, like the IRDG {which we had both attended for years}).

At that time (late '62-early '63 ?) only Eric Mooney, at Northern Poly, had a PE 40 MHz machine, despite all the input from Rex Richards at Oxford. (John Leane can tell you why that was) I had come to PE from John Wyeth & Bro. at Havant because PE needed an Applications man from industrial research labs, but I was still IR, UV and GC orientated, knowing very little about NMR.

Knowing the value, to all concerned and involved, of the IRDG, I got permission to do so from A.R.Gilson (MD of PEUK) and talked to Eric Mooney about it. Eric got on with it straight away, and the first meeting was held at the Northern Poly. My memory thereafter fails me, and you ! Eric had enthusiasm and energy sufficient for both of us, (but was always sec. never chair) the chairmen didn't have much to do) and I was very busy selling PE's products.

I can add reminiscences of the Conferences however, because after Eric's departure (in '69 ?), from Birmingham, the Chem. Soc. came into the picture as sponsors, & their man, John Gibson, came on to me for support.

Two come to mind particularly, Guilford & St Andrews. I had quite a lot to do with Guilford's organisation, and with St Andrews, Ed Randall from Queen Mary's shared the planning with John Gibson and me (for St Andrews, that is ).

At Guilford the Chem Soc party shared a students flat to which many of the overseas contingent migrated at night after all the serious business had finished. Our frig was well stocked with drinks, initially at least. A high spot was the Elizabethan Feast, at Sonning, where one of our Italian guests, a Varian user I believe, outsang the Minstrel. Many of the big NMR names were present that night.

At St Andrews the overseas attendance was very high, and the fruit from all the exchanges must have been considerable. That was the week after Arthur Ashe won the Wimbledon title, and fixed in my memory is the tennis defeat my son and I inflicted upon John Gibson and his partner (Les Sutcliffe ?), during some spare moments at that conference. There were more British wives at St Andrews, which accounts for the different style of the parties I guess!

We benefitted from overseas involvement in the one day meetings too. When (David ?) Jackman came from the U.S. to speak at a meeting at the N.P.L., he insisted on staying (at PE's expense ! - he a Varian man through and through) in a hotel at Marble Arch. I hadn't allowed enough time to get him to Teddington to speak, and we only arrived exactly on start time. Jim Feeney obviously thought I'd kidnapped his star performer and was a little shirty to begin with.

Dr Lippmaa from Tallinn was interesting - he was a member of the Soviet Academy, and of the Party - but his main interest to us was the C-13 work he was doing. In order that he might attend the NMRDG, PE had to invite him as their guest officially, saying that all his expenses would be covered etc. He was very impressive in every way, even though he did suspect the KGB were everywhere we went.

## NMR in GENERAL

Anecdotally British science is never exploited by the British for their own advantage. The PE NMR affair may come to be thought of as typical, but I'm not sure. Rex Richards and his men had shown that a permanent magnet was at least as good as an electromagnet for providing the essential magnetic field stability, and Marcel Golay had at some stage designed the essential field refining coils to provide fine tuning, introducing a PE/Oxford connection. So, before I arrived, John Leane and Peter Higham had moved over from Rex's labs to Beaconsfield, where allied with engineers L.K.Parker and John Tournier they were beavering away to create a commercially viable instrument, with the help of Swift Levick who produced the first magnets. As is well known they defeated all the problems except one, commercial viability (in the strictest sense). The higher frequencies of 60 & 100 Mhz, the spin decoupling and the variable temperature probe all came from this small team, who were never assisted by the parent company in Norwalk.

A phenomenal number of R10's were sold in the UK and elsewhere, but then nmr did prove to be a very useful analytical tool. PE were soon associated world wide with Hitachi, and the Japs were quick to spot the potential of what PEUK were doing. We were treated to the amazing phenomenon of the Japanese engineer. One arrived one afternoon, was given a talk by John Leane, took the drawings off to his hotel, and came in next morning knowing all the technical data off by heart (as we used to say). It was incredible. The Hitachi R20 followed shortly.

Varian were not standing still meanwhile, but they were visibly shaken by the introduction of the R12, John Leane's masterpiece, and for a time PEUK swept all before them. But I'm told we weren't really making any money, so accounting department sniping from PEUS wore away at the project. I went on to other things and I never kept up with developments in nmr thereafter. I suppose you need big money to justify such projects, like the sort of money ir and uv were always producing.

Best regards,

Ernie

Please call if there are specifics you need I haven't  
covered ~~with~~ where a prompt might jog my memory

E.