

In conversation with...

Andrew Gelder, Technical Product and Sales Development Manager -
Lubricants, IMCD UK Limited



When I joined the industry in March 2022, I bumped into Andrew Gelder and Emma Guthrie from IMCD at ChemUK and we have been firm friends ever since. As I continue my series of personal interviews, who better to ask than Dr Gelder himself! Always a joy to see, I hope you enjoy this brief window into Andrew's career and life.

Where/when were you born & bit about family/early years?

I was born in 1966, just before England lifted the football World Cup and I was hopeful that we might have been able to repeat that feat this year, but sadly it was not meant to be. I was born in a town called Guiseley, which is near Leeds in West Yorkshire and its main claim to fame is that it hosts the original, famous, Harry Ramsden's Fish and Chip shop. I lived there with my parents, who have since moved to Derbyshire, and my sister 3 years my junior. It was a normal childhood and I progressed through the normal state schools before completing my 'O' and 'A' Levels.

What did you want to be growing up? (If it helps, I wanted to be an international showjumper).

I was fascinated with aircraft growing up and we lived very close to Leeds / Bradford airport and whilst my peers were listening to the latest chart hits, I listened to Air Traffic Control on my radio. I wanted to be a Pilot originally and then an Air Traffic Controller. At the time you needed perfect vision and hearing to go into these professions and as I had neither, I needed to seek out another path.

Education – where did you go, what subjects did you choose and why?

I went to Guiseley School for my secondary education and chose Maths, Physics and Chemistry for my 'A' Levels. It was a choice between the new, up and coming, Computer Science and Chemistry and my career could have been a lot different if I had taken the other subject.

What was your path to higher education?

My path to university was the standard way in the UK, applied for various Universities and settled on 2 options before sitting my exams. By this point my career direction was heading towards Chemical Engineering. It came to pass that my 'A' Level results were not quite as good as I had hoped and, in the end, I made a last-minute decision to change direction and studied Applied Chemistry at Aston University in Birmingham instead. I had a real love of polymer chemistry and kinetics and tried to steer my work in that direction, but fate had a strong guiding hand on me, and I spent my Industrial year working for company providing services to the foundry industry. This turned out to be very much in my favour as I was the first to secure a Ph.D. contract in my peer group. I successfully completed my Ph.D. in inorganic chemistry in 1992.

First job – where and when, what did you like about it and what did you not?

After an applied Ph.D. I needed an applied job, and this is where I stepped into the world of lubricants. I started as a Development Chemist in the Metalworking team at Castrol. My Ph.D. was very

applied in nature. Whilst everyone else was producing micrograms of novel chemistries, I was dipping ground glass stoppers in ceramic slurries and pouring molten aluminium alloys from jewellery makers crucibles. This suited my role at Castrol where it was all about oily mixtures and friction testing in the early days. I learnt an amazing amount on the chemistries required for creating the ideal lubricant for each application and that stood me in good stead for the future. I spent 10 years in total at the Castrol Development Centre, in which time I developed, hydraulic oils, industrial gear oils, neat and milky metalworking fluids and many driveline products. I also did some Technical Support for the South American and Africa regions which was mainly on Engine oil products. All in all, I covered a lot of bases in my time at Castrol. I loved being able to get involved, blending the oils, and running a lot of the testing myself. It really built a good strong knowledge base. What I found frustrating was the total reliance on the additive companies as they would provide black boxes for the testing programs, particularly in Driveline and engine oils, and I like to be in control of what I am doing so not knowing the chemistry behind the formulation was very difficult for me and helped frame my next career move.

Career mapping how has it lead to where you are now?

So if you can't beat them....join them and from Castrol I took a job at Lubrizol in 2003, the largest lubricant Additive manufacturer where I worked as a program manager in the Engine Oils team. I worked closely with the Technology Managers developing Engine additives specifically for TOTAL and other French oil companies. It was another great chemistry learning experience. I then used my Castrol Driveline experience to move into the Global Technology Manager role for Manual Transmission Fluids (MTFs). Now I really got to play with all the different chemistries, and it was both fun and frustrating trying to navigate your way through all the different OEM specifications to create an ideal additive to meet the multitude of different requirements. Every day was a technical challenge, but ultimately very fulfilling.

A subsequent move to arch-rivals, Afton Chemical, allowed me to experience a different additive company, a different culture, deepen my experience across both Driveline and subsequently Industrial Hydraulic. All of my roles at the additive companies and oil marketers were deeply technical and one thing

that was missing was a commercial understanding of the lubricants market and I jumped at the chance to join IMCD in 2020 and be able to combine my broad technical knowledge with a heavy commercial twist and this is where I now reside as a Technical Product and Sales Development Manager for Lubricants, providing deep technical support to our customers and my colleagues around the world on fuels and driveline projects and Sales and Product support to my team here in the UK.

Are you a lifer? If yes, how do you see your career panning out over the next 20/30/40 years?

Well, there are not 20 years left in this industry for me but suffice it to say I have been and will be a lifer. I love the lubricants industry and cannot see myself working in any other field.

How has the industry changed since you started?

The industry has changed so much in the last 30 years. When I started, emission control was still in its infancy and the drive to clean up what is pushed out of the tailpipe has had a profound effect on the development of engine oils. The advent of catalytic converters changed fundamentally how engine additives were formulated and the drive down in viscosity grade made fluids thinner which in turn makes meeting the performance requirements much more difficult. The move from Group I to Group II and Group III base oils has not only changed Engine oils but has had a knock-on effect in Driveline and Industrial.

There is now a massive push to cleaner, greener industry and in turn cleaner, greener lubricants. The fuel economy drive has pushed fluid viscosities down to levels I would not have imagined when I started in the industry. The advent of Wind Turbine fluids, the reliance on bio lubricants and of course the rise of the hybrid and electric vehicle has all emerged in my lifetime. These have been huge changes for our industry and the way we look at lubricant development now is a paradigm shift from how we did it 30 years ago.

What do you like/dislike about the industry? And what would you change if you could?

I love the technical challenge and the application diversity. Although encompassed by the word lubricant, a metalworking concentrate is considerably different to an Industrial hydraulic fluid which in turn

is nothing like an Automatic Transmission fluid. Every application has a different set of criteria to meet, and the resulting lubricants (and additives) can be very different from each other. You never stop learning in this field and I love that.

I don't like the fact that the barrier to entry is so high for many applications. To develop a fully approved engine oil additive system will cost many, millions of dollars and that is out of reach for so many companies and hence why there are so few additive companies in the market. This in my mind has two effects. Firstly, there is, on many occasions very little, if any competition for products with certain specifications and secondly it opens the door to lower quality and non-approved additive systems to be marketed, claiming to be something that they are not. This is difficult situation for oil companies and end users alike as it is often not clear what claims are real and what are not.

If there was some way of bringing the development costs down so it was a more level playing field, the products would be more transparent, and the competition would be healthier.

What challenges do you think the industry faces? In your role and as a whole?

We are moving to a world where we need to considerably (if not completely) reduce our reliance on fossil fuels and the lubricants industry has been built on their use for the last century. Really getting a grip on renewable and sustainable resources will be the biggest and a most steep challenge for the development chemists and engineers of the here, now and the foreseeable future.

How do you balance work life with home life?

For me, I really value my home life and time with my wife and daughter and therefore I am quite strict with my work life. I work from a home office but I am careful to not become a slave to it and I shutdown the laptop at a good time in the evening, leave the office, not to return until the following morning and avoid the phone... In all the 30 years there have been very, very few instances of events that can't wait until tomorrow.

What are your hobbies?

I am sporty by nature and love to run, swim and cycle. I have also recently retaken up hockey which I used

to play in my youth, and it is quite a challenge. I also have a home brewery and brew my own exciting craft ales.

Where do you like to holiday?

We love the sun but don't go mad, so we tend to stick to the Canary Islands or mainland Spain for our summer hols. We also like a lakes and mountain style of holiday, so Sierra Nevada or Alps are a great draw for us.

What is your perfect weekend?

Playing sport on Saturday, nice meal and a relaxing film with a couple of beers in the evening and a country walk with a great pub at the end on a Sunday.....

If you could meet anyone famous (dead or alive) who would that be and why?

I love clever word play and comedy writing and for me it would be a toss up between meeting Dr Seuss (The Cat in the Hat / Green Eggs and Ham) and Roald Dahl. Both are comedy writing geni.

Favourite quote?

"If you give a man a fish, you will feed him for a day. If you teach a man to fish, you will feed him for a lifetime" - Education is so important and providing a path for people to have self-belief and control of their own lives.

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