



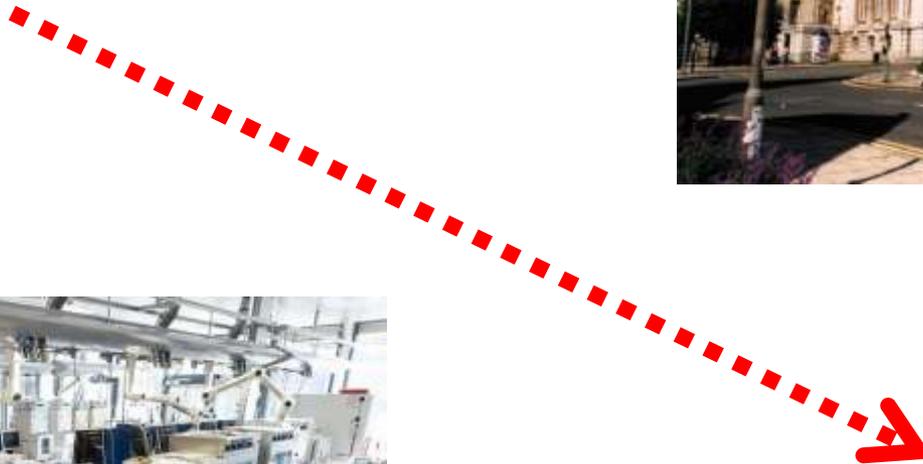
CAREER PROGRESSION: ENGINEER TO PETROCHEMICAL INDUSTRY



Andy Greenall

MY CAREER PROGRESSION

**Automotive Engineering, MEng
University of Leeds, UK**



**Project Leader –
Motorsports Lubricant Development
Shell Technology Centre Hamburg, Germany**

WHAT DID I WANT TO DO?

What I wanted to do



What I did instead



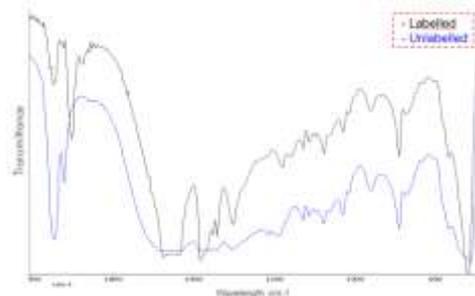
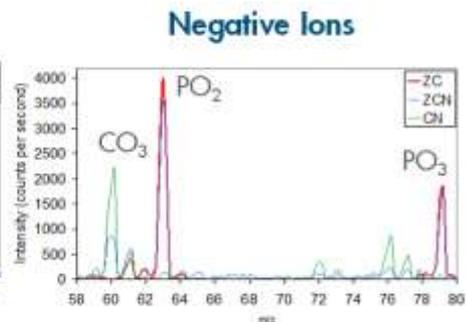
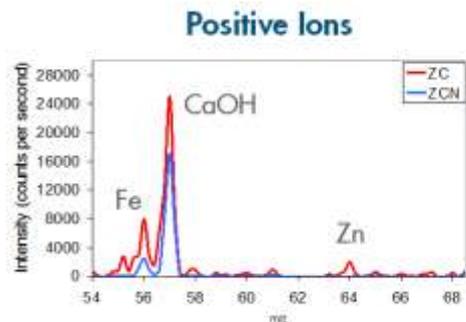
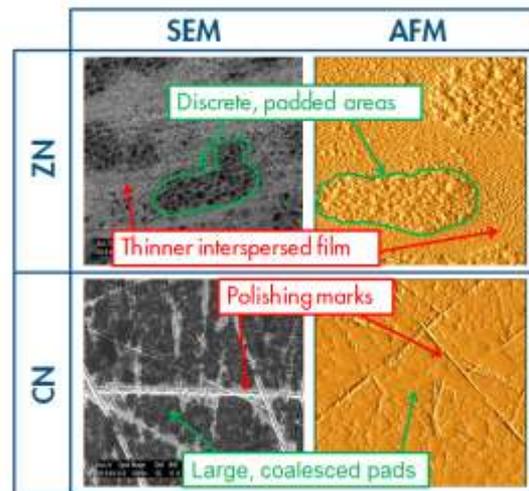
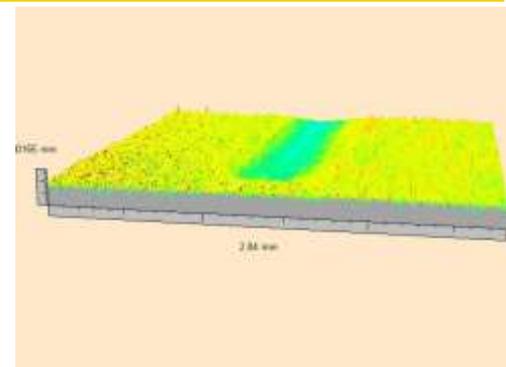
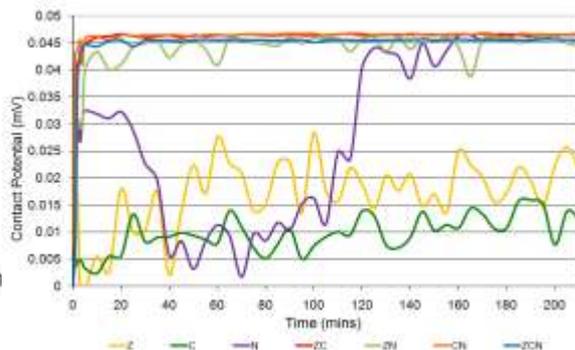
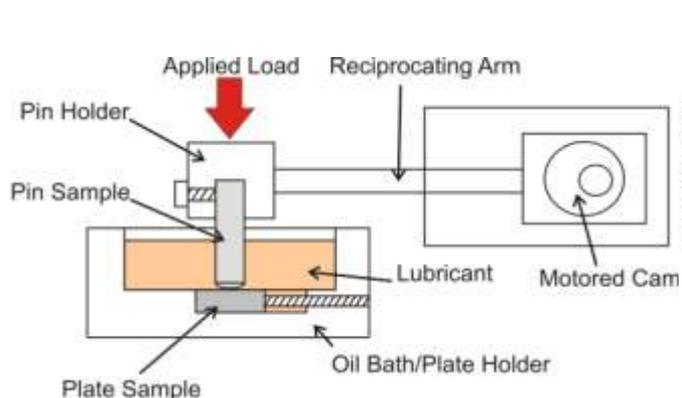
- **Tribology** : Friction, Wear & Lubrication
- Surface Science
- Advanced coatings - how they're applied, how they interact with one another, wear rates, friction etc.

WHAT MY FRIENDS DID AFTER UNI

Career Options after MEng

- F1/Motorsports team
- Car Manufacturer/OEM
- Specialist Engineering Firm
- Petrochemical Industry
- Mathematical based careers – banking, statistics etc.
- PhD 

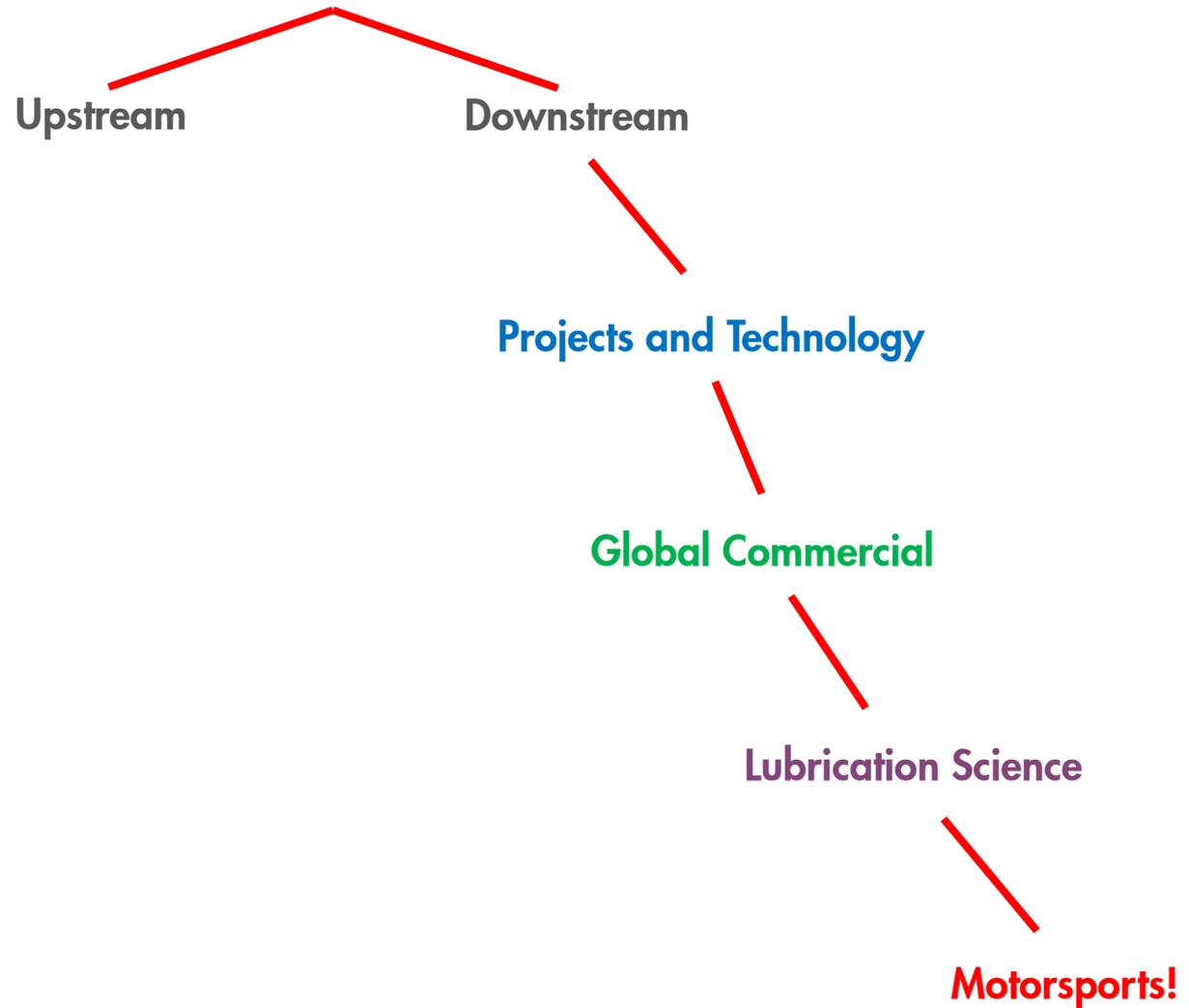
LIFE AS A PHD STUDENT IN TRIBOLOGY/TRIBOCHEMISTRY



JOB APPLICATION AFTER PHD

- Job offer from PhD sponsor
- PhD supervisor had links to specific engineering firms in industry
- Applied for 'big name' oil companies
- Shell Recruitment Process
 - Online application – upload CV, standard interview type assessment questions
 - Telephone Interview – typical interview type questions then analytical case study
 - Shell Recruitment Day – one day at Shell location tested on problem solving, teamwork, critical thinking and technical presentation
 - 'Get to know you' interview at work location

WHAT TO DO IN SHELL



WHAT JOB I DO NOW



SHELL & FERRARI

Formula 1, GT & Challenge Cup
Fuels and Lubes



SHELL & ACO/LE MANS

FIA WEC, 24h Le Mans, ELMS
Fuels Technology Partnership
Fuels & Consultancy, e.g. Climate Effects



SHELL & DUCATI

Moto GP, World Superbike
Fuels and Lubes



SHELL & HYUNDAI

FIA World Rallye Car WRC
Lubes



SHELL & PENSKE

NASCAR & Australian V8 Supercars
Lubes



SHELL & PENSKE

Indycar
Lubes



SHELL & BMW

DTM, USCC & Endurance
Lubes

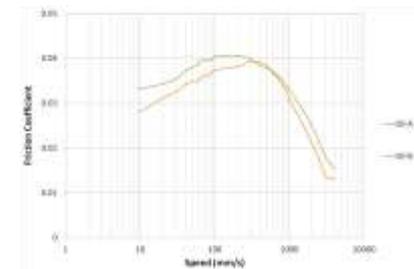
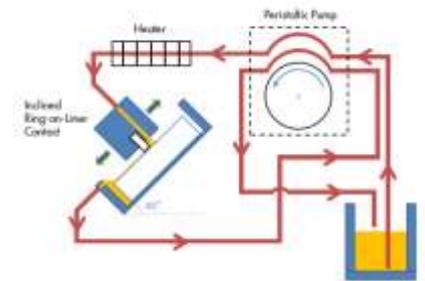
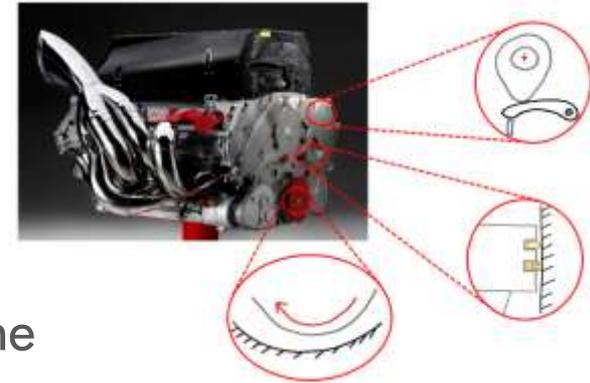


SHELL & MAN REINERT

FIA EU Truck Racing
Lubes

DAY IN THE LIFE

- Discuss with team engineers to understand engine development, conditions, ideas to generate performance
- Develop specific tests to mimic behaviour of oil in the engine
- Investigate new and novel additives and chemistries and how they work under extreme conditions
- Utilise analysis techniques to understand how oil and engine age together
- Respond to urgent (everything!) requests for analysis, feedback, logistics, problems, regulation changes...
- Work with commercial team to build a 'track-to-road' mechanism



PERFORMANCE UNDER PRESSURE



Experts choose Shell Helix Ultra

Special Low Friction, anti-wear additives (ZDDP) protect your engine from wear for the longest drive duration.

Shell HELIX ULTRA with PUREPLUS Technology



THE PERKS OF MY JOB



WHY CHOOSE TO WORK IN THE PETROCHEMICAL INDUSTRY?

- Perfect for technical minded people (apply what you know in interesting/challenging areas) – engineering, chemistry, physics, geology, mathematics.... But also many other types of job
- Encouraged to experience different roles – never get bored!
- Opportunities to travel – have technology centres in US, Germany, China, India, Japan, Netherlands and many other operational locations
- Build large network of professional and social contacts
- Competitive pay

Q & A

