



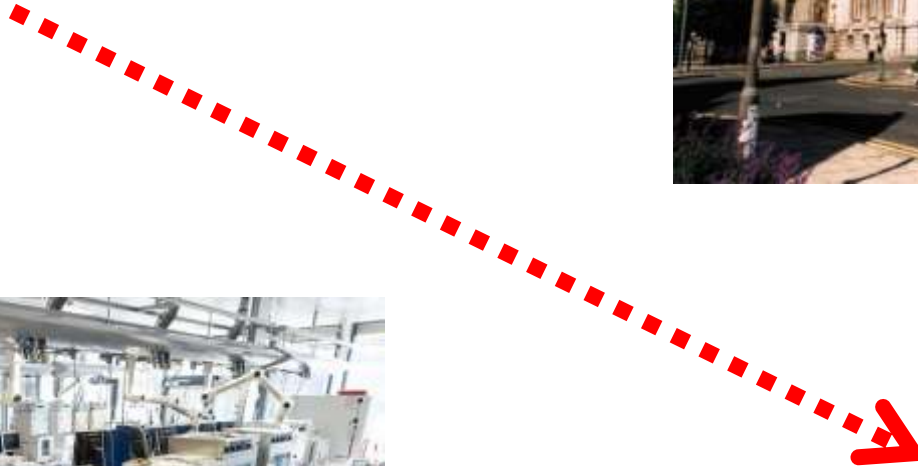
# CAREER PROGRESSION: ENGINEER TO PETROCHEMICAL INDUSTRY



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



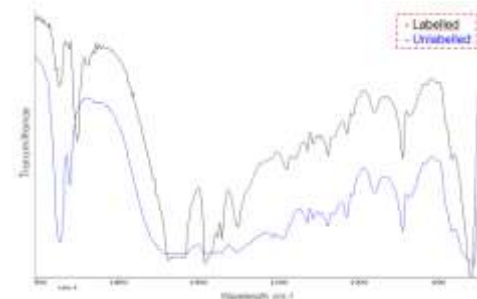
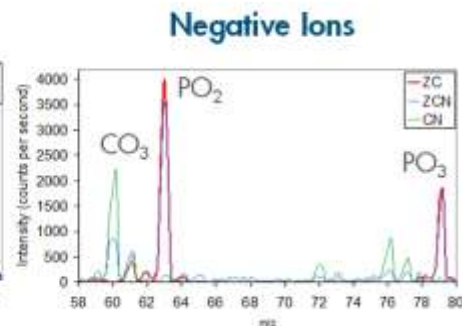
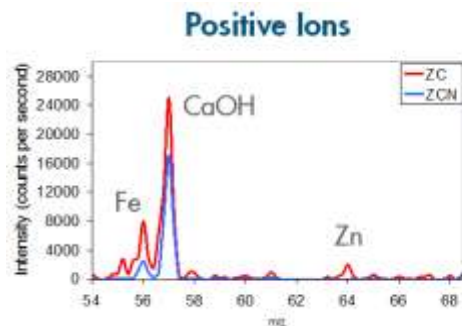
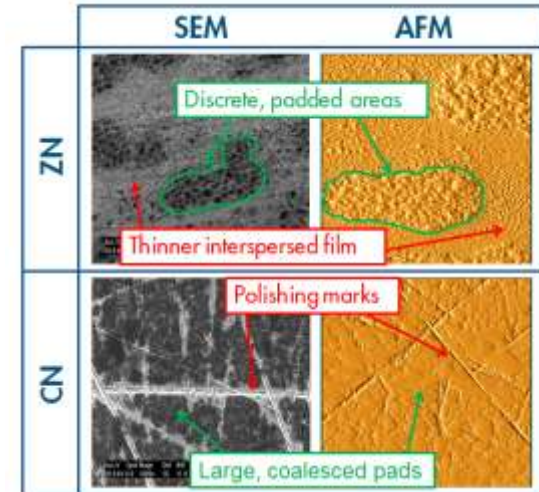
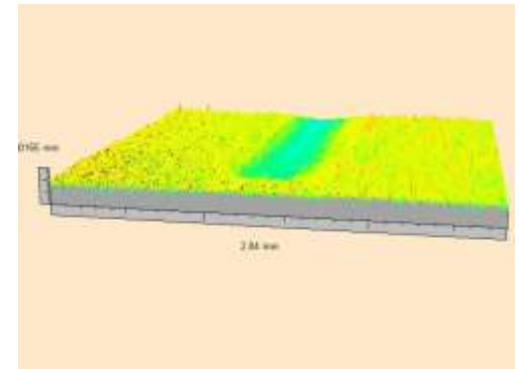
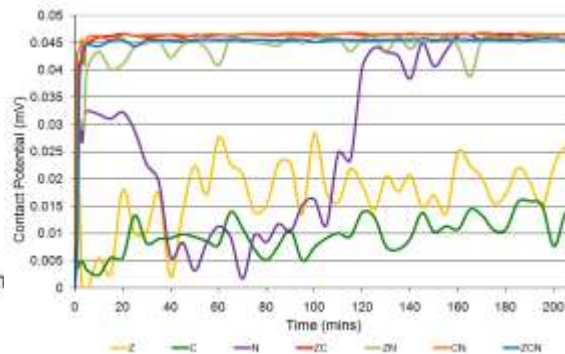
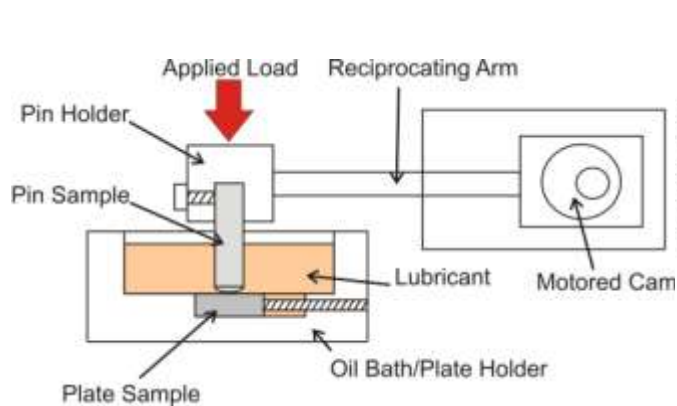
- **Tribology** : Friction, Wear & Lubrication
- Surface Science
- Advanced coatings - how they're applied, how they interact with one another, wear rates, friction etc.

# 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 

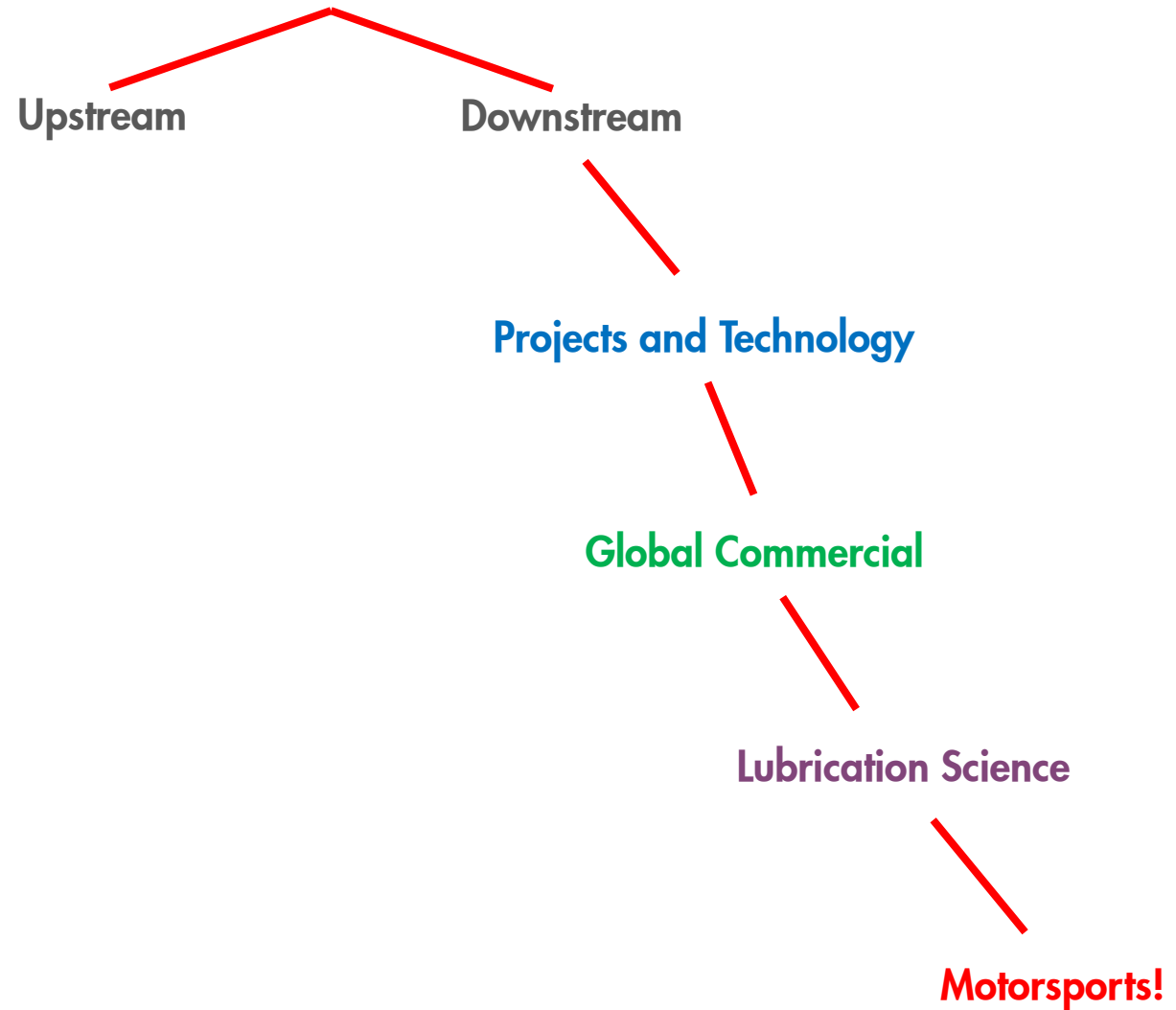
# LIFE AS A PHD STUDENT IN TRIBOLOGY/TRIBOCHEMISTRY



# 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



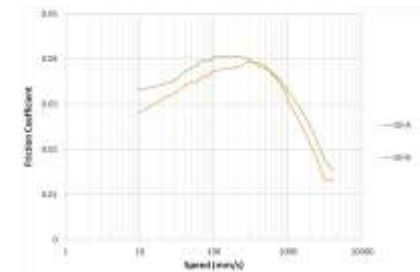
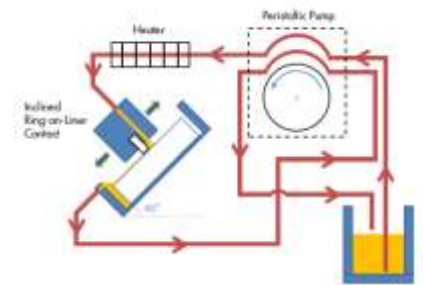
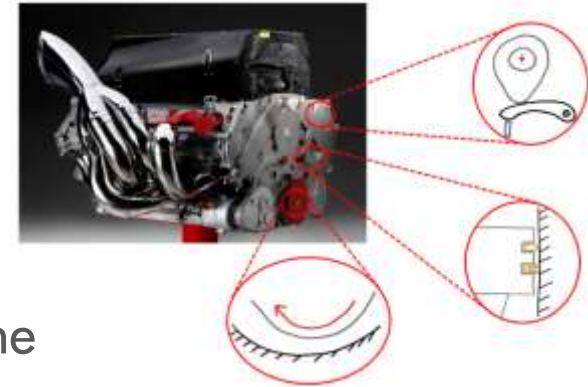
## SHELL & MAN REINERT

FIA EU Truck Racing  
Lubes

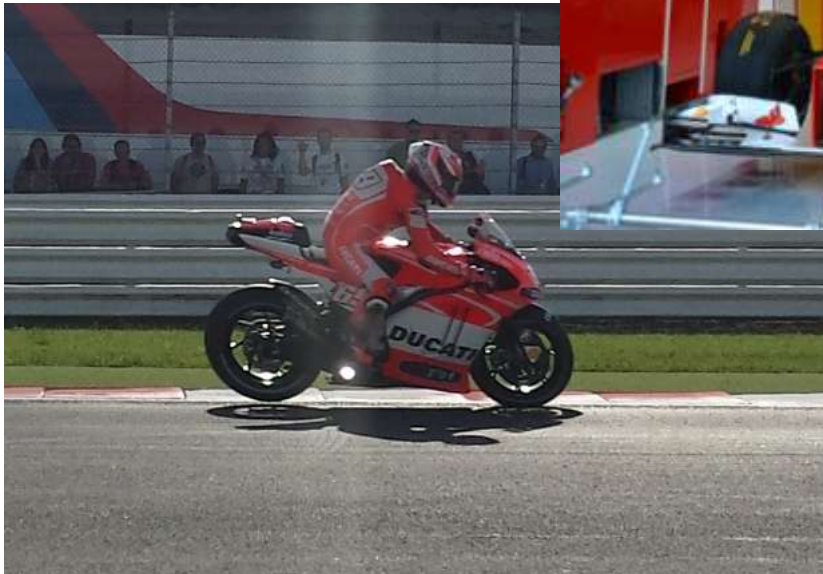


# DAY IN THE LIFE

- 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



# 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

