# Certificate of Lubricant Lubricant Competence 2019

A complete basic lubricant training programme devised and developed by leading industry experts.

DEVISED
AND DEVELOPED BY
INDUSTRY LEADING
EXPERTS

# Modules include:

- 1. Exploration & Refining
- 2. Base Oil Types and Characteristics
- 3. Basic Tribology
- 4. Lubricant Additives
- 5. Industrial Lubricants
- 6. Automotive Lubricant
- 7. Greases
- 8. Metalworking
- 9. Health, Safety & Environment
- 10. Certification Session

Attend 9 modules and the final certification session is *free*.















## **COURSE SUMMARY**

UKLA is offering the opportunity to enrol in a oneyear course of up to 10 modules which will provide an excellent foundation in the lubricants industry.

Certification is achieved only on completion of the whole course: candidates attending all 9 taught modules over one or two consecutive years will be eligible to sit the final exam and achieve certification. Attendance of specific individual modules is also always available.

#### THE COURSE CONTENT

Covering the fundamentals of exploration, manufacture and formulation of lubricants and greases together with their uses and final disposal of the used lubrication products, including the Health, Safety and Environmental issues lubricants and greases create.

Each module looks at the application, regulation and market developments affecting each area of lubrication. Modules are led by an industry expert in that particular field. We are in the privileged and unique position to be able to offer you the best industry experts for each module keeping the course relevant and up to date with current legislation and market developments. Please see below for a detailed outline of each module.

# **WHO SHOULD ATTEND?**

This course is primarily aimed at those who want to gain a thorough grounding in lubricants and lubrication. Plus, those who need to improve their skills and understanding by being brought up-to-speed on all the relevant information pertinent to the UK & European lubricants markets. It also provides a perspective on the global lubricant market.

This course would especially benefit newcomers and recently promoted lubricants personnel, or those who feel they would like to broaden their knowledge, e.g. technical and non-technical personnel, sales and marketing, customer support, legal and lubricants distribution staff.

## **COURSE DETAILS**

There is an end of unit test for each of the nine modules; candidates wishing to gain certification may also attend a free of charge final exam –so long as all nine modules have been completed in a period of two consecutive years or less.

The exams are held on 'an open book exam' basis, with delegates being evaluated on understanding rather than recall and memorisation.

# THE CERTIFICATE

The pass mark for Certification is 50%, with 'Distinction' set at 75% or above. Marks are weighted equally from attendance, individual module test marks and the final examination mark. Full briefing notes are provided and we can also arrange catch-up sessions to enable delegates to stay on track for Certification.

# REGISTERED LUBRICANT PROFESSIONAL

On successful completion of the course, delegates working in UKLA member companies are eligible to apply for Registered Lubricant Professional status. This professional designation is awarded to those individuals who are committed to aspiring to the highest standards of lubricant practice and commits the individual to undertaking 35 hours of structured Continuing Professional Development each year to maintain their designation. For 2019 we are offering all delegates completing the full certification course one year's complimentary membership of the Registered Lubricant Professional programme.

For more information visit www.ukla.org.uk/registered-lubricant-professional-cpd/

# **COURSE FEES**

Fees are payable in advance and cover attendance and delegates' notes for each module. Please note, travel and accommodation costs are not included in the fees.

# **UKLA Member Prices**

Single Module £295 excl. VAT 10 Module Course £2,645 excl. VAT

# **Non-UKLA Member Prices**

Single Module £379 excl. VAT 10 Module Course £3,385 excl. VAT

(Attend 9 modules and the final certification session is **free**)

## THE TRAINERS

#### Mr. Rod Pesch, CChem, MRSC.

Rod has a long service history in the oil industry, amounting to 50 years and still counting! Starting in 1965 with "Regent Oil" (forerunner of Texaco), Rod has worked in Technology, Marketing, Sales, Chemicals/Additives, OEM Liaison, Global Product Line Management and Global Marketing.

#### Dr. Ted Wright.

Following a period of research at Cambridge, Ted joined the Esso Research Centre and was responsible for electron microscopy and all aspects of elemental analysis. Moving into lubricants his positions within Esso included quality control, marketing and procurement. For a number of years he was on assignment as Technical Manager at Comma Oil. Ted is still very much involved in the lubricants industry especially with training and consults on problem solving. He also serves on the Technical Review Panel of the VLS scheme.

#### Alan Outhwaite, Base Oil Business Development, Chevron

Alan joined Chevron International Oil Company, in the UK in 1994 as a product engineer responsible for automotive and industrial lubricants, supporting Chevron's business in Russia, CIS and East Europe. Following Chevron's merger with Texaco, Alan moved to the commercial side of the business. In 2005 he joined Chevron's Global Base Oil team as Business Development Manager, responsible for Chevron's base oil strategy in Europe, a role he continues whilst supporting growth objectives in Asia.

# Aimilia Neroutsou, Field Engineer, Total Lubricants UK.

Aimilia holds a BSc & a MSc in Chemistry, as well as a Mechanical Engineering degree and joined Total UK in July 2017. She is responsible for providing technical expertise and training to Total clients across the UK.

#### Caroline Slinn MChem, Italmatch Chemicals Ltd.

After graduating from York University with a degree in Chemistry including a year in Europe (Münster, Germany) Caroline joined Polartech Ltd. as a technical service and then later development chemist, focusing on metalworking fluids. After a period working for Batoyle Freedom Group, Caroline joined Afton Chemical in a laboratory based role as

a Customer Technical Service Specialist within the metalworking team supporting the customers and sales team, particularly in the Germany region. Caroline also sits on the UEIL HSE committee that meets three times a year and provides regular feedback to the UKLA European Policy Update meetings.

#### Dr Julian Wilkinson RS Clare Ltd.

Julian has worked in the field of lubrication since 2002 when he studied the oxidation of engine oils for his PhD in chemistry at York University. Since then, he has worked at Lubrizol in the Applications department and most recently at RS Clare for nearly 10 years working in grease product development and testing, and now leads the development of products for the oil and gas industry and providing technical support to the Sales team worldwide.

#### lan Harris - Application Specialist, Houghton

After starting out as a Metallurgist, Ian began his 40 year association with the oil industry as an Analytical Chemist then progressing through various Midland's oil companies before settling at Houghton, then Houghton Vaughan. This journey involved analysis of re-refined oils and solvents, QC testing, formulation and development of products, improving production methods and plant design, H & S and CPL Regulations, BS 5750 Quality Improvements, plant and laboratory management, waste management and customer technical support. At Houghton, Ian managed Houghton's technical service laboratory before and after the transition to the current Trafford Park site before moving wholly into a technical customer support and training role for Houghton's staff and Global customer base.

# **Steve Rushton**, *Product Manager Metalworking Fluids at Houghton International PLC*.

Steve has accumulated over 35 years' experience in the application and formulation of all types of production and metalworking fluids, and is also widely experienced in the lubrication requirements of their associated production processes and machine tools. Steve has worked for a number of the UKs leading lubricant companies in the technical support field, and has a wealth of experience in many of the world's major industrial markets.

**Module 1** 

21st February 2019

#### **EXPLORATION & REFINING**

Covering the basic geology and formation of oil bearing strata, the geographical distribution of known oil reserves, the history of exploration, the formation of the Major Oil companies and a brief Industry history, refining and the progression of refinery technology from initial techniques through to current trends in modern technology.

Presented by Rod Pesch

Module 2

28th March 2019

#### **BASE OIL TYPES & CHARACTERISTICS**

Concentrating on the way refining and crude oil origin defines the characteristics and properties of the resulting base oil and their subsequent best use. Covering areas such as Pour Point, Volatility, Oxidation Stability and the advantages and disadvantages of base oil's various properties to different types of blended lubricants.

Presented by Alan Outhwaite, Chevron Base Oils & Rod Pesch

#### **BASIC TRIBOLOGY**

This course module is designed to give a basic understanding of concepts such as ElastoHydroDynamic Lubrication, Boundary Lubrication and Extreme pressure conditions. This module also covers Anti-Wear, Fretting Corrosion and Tool Life in the context of the later course elements. *Presented by Dr. Ted Wright* 

**Module 4** 

23rd May 2019

## **LUBRICANT ADDITIVES**

An explanation of the basic additives used in the various categories of lubricants, their chemistry at a simplistic level, their function and their performance in respect of the Tribology covered in the previous element. This should not only relate to additives used in Automotive and basic Industrial lubricants, but should draw parallels with specialist areas such as Grease and Metalworking.

Presented by Rod Pesch

**Module 5** 

20th June 2019

#### **INDUSTRIAL LUBRICANTS**

A comprehensive look at Hydraulic and Circulatory, Gear Oils, Open Gears, Slideway Oils etc. including particularly the importance of viscosity, and additive selection and relating strongly to both the Tribology and Additive elements. Basic guidance on selection of the correct lubricant and the importance of the Lubrication Survey and Rationalisation are included.

Presented by Aimilia Neroutsou, Total Lubricants UK

**Module 6** 

18th July 2019

# **AUTOMOTIVE LUBRICANTS**

An enormous topic covering not only engine oils for both gasoline and diesel engines, but transmission and hydraulic applications in addition. Following on from the additive module this session will highlight the application of the different additive chemistries, relating both types and treat rates to levels of performance and specifications. The history of specifications up to and including the latest ACEA performance levels will be covered.

Presented by Dr. Ted Wright

# **GREASES**

**Module 7** 

A science in itself, the use of grease, its different manufacturing considerations, additive types and the basic terminologies of Consistency, Penetration, Drop Point etc. are covered.

Presented by Dr. Julian Wilkinson, R S Clare

**Module 8** 

17th October 2019

#### **METALWORKING**

Metalworking Fluids have become an increasingly important part of the product portfolio of most lubricant companies. This element explores the basic differences in chemistry and application between neat and watermix fluids, explains emulsions and emulsifiers at a simplistic level, covers the additive technology and different tribological implications when related to the previous modules. It provides a thumbnail sketch of the industries, which form the potential customer base. *Presented by Ian Harris & Steve Rushton, Houghton International* 

Module 9

21st November 2019

#### **HEALTH, SAFETY & ENVIRONMENTAL**

This module covers the evolution of the Health and Safety of ingredients, risk assessment and a hands-on workshop to practice the technique. Risks from heavy metals, such as lead, together with the associated risks of using certain chemical components in formulations, such as sodium nitrite etc. in various categories of lubricants are addressed. It will also cover other issues such as biocides, middle order metals and discussing environmental legislation and trends. During this session other aspects are also covered relating to biodegradable lubricants, vegetable and ester basestocks and fluids used in the environment.

Presented by Caroline Slinn, Italmatch Chemicals & Rod Pesch

Module 10

5th December 2019

#### **FINAL SESSION**

The final module includes a one and half-hour comprehensive examination, covering all the work covered in each module and an industry related final lecture, by a senior industry presenter. The day concludes with a formal presentation to students of the UKLA Certificate of Lubricant Competence. Two levels of pass are provided, 'Pass' and 'Distinction'.

# Certificate of

# **Lubricant Competence** 2019

**Application Form** 

Name(s) of Delegate(s):	(Pi	lease complete using Block letters)
Forename	Surname	
1		
2		
3		
Company:		
Address:		
Country:	Post Code:	
Telephone:	Fax:	
Contact E-Mail:		

#### **PAYMENT**

Module	UKLA/UEIL Member Price	Non Member Price	Please Tick
1. Exploration & Refining	£295 + VAT	£379 + VAT	
2. Base Oil Types & Characteristics	£295 + VAT	£379 + VAT	
3. Basic Tribology	£295 + VAT	£379 + VAT	
4. Lubricant Additives	£295 + VAT	£379 + VAT	
5. Industrial Lubricants	£295 + VAT	£379 + VAT	
6. Automotive Additives	£295 + VAT	£379 + VAT	
7. Greases	£295 + VAT	£379 + VAT	
8. Metalworking	£295 + VAT	£379 + VAT	
9. Health, Safety & Environment	£295 + VAT	£379 + VAT	
10. Ten Module Certification Course  Pay for nine modules and the Certificate Session is free	£2,645 + VAT	f3,385 + VAT	

Please send a VAT invoice	My Purchase Order No is:
_	

Please note payment in advance is required. Bookings will only be confirmed upon receipt of monies. Unconfirmed bookings will lose their priority if the course is over-subscribed. In the event of a delegate's withdrawal from the course, named substitutes are acceptable, but in the case of the Certification course, Certification may be jeopardised.

This booking is subject to our terms and conditions, and data protection policy. Please see the UKLA website for more details.