News story: Lord Duncan visits The HALO Kilmarnock

Lord Duncan today [4 December] saw work getting underway on the £65 million urban regeneration project, which is supported by £3.5 million of UK Government funding.

The funding will support a new Enterprise & Innovation Centre to foster the next generation of entrepreneurs, with strong focus on innovation, digital skills, and cyber security.

The HALO Kilmarnock, located on the site of the former Johnnie Walker bottling plant, is a multi-faceted brownfield regeneration scheme which will create an innovative, inspirational and imaginative urban park with a dynamic commercial, educational, cultural, leisure and lifestyle quarter. Its low carbon, renewable deep geothermal district heating network will address fuel costs on the site and have the capability of being extended to service other areas of the community – a first for the UK. The development will also include a light manufacturing facility and key worker private rental accommodation.

Lord Duncan said:

> Supported by a £3.5 million UK Government investment, The HALO Kilmarnock is an ambitious, important development that will create jobs, grow the economy and drive innovation. The project will attract international companies to locate in the town, benefiting from the excellent transport links and a local, well-trained workforce. The HALO Kilmarnock represents marks a fresh start for Kilmarnock and Ayrshire and I hope that the project is a catalyst for further regeneration in Scotland and beyond.

Marie Macklin, founder and director of The HALO Kilmarnock, said:

> The HALO will play an important role in the UK Government's UK Industrial Strategy, to which we contributed at its consultation stage. The economic benefits of this community led development will be felt not just in Kilmarnock and East Ayrshire, but across the whole of Scotland and driving down into the Northern Powerhouse, harnessing the power of the 4th Industrial Revolution – the digital revolution.
>
> We welcome the UK Government's support for The HALO Kilmarnock which is a major infrastructure project in its own right and we hope that it will prove to be a catalyst for other infrastructure projects, such as the improved road and rail links that will connect it with the rest of the UK.

News story: New bullet-proof material unveiled as Defence Minister visits MOD's research hub

On her visit to the Defence Science and Technology Laboratory (Dstl), she spoke with scientists who are creating a lighter, more flexible body armour for soldiers which uses a unique synthetically adjusted ceramic material that still stops bullets.

Defence Minister Harriett Baldwin said:

> We've spent millions on innovation this year, developing technologies like a new way to uncover insurgents' fingerprints to mini-drones that investigate chemical hazards. The goal is always to help our Armed Forces defend the UK, and this next generation of armour will make our troops even more alert and effective on the battlefield.

Research has indicated soldiers wearing ceramic armour could see a 35 per cent weight reduction, which could make them faster and more comfortable in a warzone, whilst maintaining a high level of protection.

The synthetic biology for the armour project has been running for four years and Dstl are now ready to put samples through hardness testing. They also confirmed that a scale-up process is underway to produce samples that can be used for live-fire testing.

£6 million has been invested in synthetic biology to date for novel materials research, reaching out to academia and industry via a series of competitions. In some cases these competitions have been run jointly with the Research Councils, in others they have been run independently using MOD organisations, such as the Defence Accelerator.

The MOD has committed 1.2% of the rising £36bn defence budget, supported by a dedicated £800m Innovation Fund, to cutting-edge science and technology. 2017 has seen a number of exciting projects developed as part of the drive, to name just a few:

- A pocket-sized drone and a mini-detector known as Snake Eyes are amongst the new high-tech gadgets set to investigate future chemical or bio-hazards.

- A world-first in the US saw British soldiers controlling 4x4s with Xbox-

style controllers and a UK driverless truck leading American trucks in an unmanned convoy, providing a glimpse into the future of getting much-needed supplies to the front line.

- Cutting-edge fingerprint technology aimed at targeting criminals.

- A Laser Directed Energy Weapon that is capable of acquiring, tracking and engaging aerial and surface targets at various ranges and in different weather conditions.

- A new lightning-fast protection system, Icarus, which will be able to detect and defeat threats to armoured vehicles within 100 milliseconds.

The Defence Accelerator funds the development of suppliers' innovative ideas and provides support through to potential application. The Accelerator also funds innovations for defence and security which support economic growth and prosperity in the UK.

The Accelerator is approaching its first anniversary and has enjoyed great success, including:

- Launching 8 themed competitions
- Running 18 competition events
- Assessing over 630 proposals
- Funding 147 proposals with an investment of £17.3m

Press release: Change of Governor of Montserrat in January 2018

Mr Andrew Pearce OBE has been appointed Governor of Montserrat in succession to Ms Elizabeth Carriere who will be leaving the Diplomatic Service. Mr Pearce will take up his appointment during January 2018.

CURRICULUM VITAE

Full name: Andrew John Pearce OBE

Married to: Pornpun Pearce

Children: Two

2017 – present Vilnius, Chargé d'Affaires

2015 – 2016 FCO, Director of Security, FCO Services

2009 – 2015 FCO, Head of Security, Estates and Security Directorate

2004 – 2008 Bangkok, Deputy Head of Mission and Political Counsellor

2000 – 2003 Bucharest, Deputy Head of Mission and Political Counsellor

1996 – 2000 Pretoria, Head, Economic and Trade Policy Team

1992 – 1996 Tel Aviv, Head, Press and Political Section

1990 – 1992 FCO, Head, Gibraltar and Iberian Section, Southern European Department, Europe Directorate

1988 – 1990 FCO, Head, Chemical and Biological Weapons Negotiating Team, Arms Control and Disarmament Department

Further information

News story: Government Chemist at the APA Conference

Who are the Public Analysts?

Public Analysts are highly skilled scientists who carry out chemical analysis and related testing for public protection enforcement purposes. In Scotland, Public Analysts are also responsible for microbiological examination of food. Public Analysts are required to hold an MChemA (Mastership of Chemical Analysis), as prescribed by the Food Safety Regulations 2013. The Association of Public Analysts holds an annual conference, which includes recognising newly MChemA qualified candidates.

Annual APA conference – October 2017

The conference, set in the precincts of Canterbury Cathedral, was an informative and enjoyable occasion. Michael Walker, from the Government Chemist team, chaired a session of the conference and updated delegates on referee casework. Talks ranged widely from the contributions of George Wigner, a 19th Century Public Analyst to the preservation of Cleopatra's Needle (Mr Chris Elliott, University of Southampton) to aquatic animal health (Dr Stephen Feist, Cefas, Weymouth Laboratory). Dr Jacqui McElhiney (Food Standards Scotland), discussed developing new food surveillance models in Scotland and Robbie Beattie (Edinburgh Scientific Services) described the molecular biology and microbiology of shigatoxigenic and verotoxigenic

‘Escherichia coli’. Key insights on global control measures for mycotoxins were given by Professor Ray Coker.

At the conference dinner the APA President, Jon Griffin MChemA, welcomed three new MChemA holders, Emma Downie (PASS Ltd), Micheal Kierszten (Dundee Scientific Services) and Bharathi Reddy (Lancashire Scientific Services). These scientists are looking forward to their first appointments as Public Analysts. The APA also awarded honorary membership to Professor Duncan Thorburn Burns FRSE MRIA in recognition of his lifetime research into food analysis and significant contributions to the Journal of the Association of Public Analysts.

Professor Duncan Thorburn with Jon Griffin

For more information about the work the Government Chemist does contact:

News story: GC contributes to special edition of international journal

The Government Chemist has been invited to contribute to a special edition on food allergen analysis in the highly respected journal of the AOAC INTERNATIONAL

AOAC INTERNATIONAL (formerly Association of Official Analytical Chemists) is a not-for-profit association founded in 1884 as a forum for microbiological and chemical standard methods used globally to promote trade and to facilitate public health and safety.

The J AOAC Int special edition on food allergens is being guest edited by Bert Popping and Carmen Diaz-Amigo and will contain three papers from the Government Chemist. Michael Walker, Malcolm Burns and colleagues describe the science behind the ground breaking analysis for allergens by ELISA, Molecular Biology, and Protein Mass Spectrometry during the investigation of the almond and mahaleb incidents in 2015. Michael and co-authors Hazel Gowland and John Points discuss managing food allergens in the UK retail supply chain in a second paper. Milena Quaglia, Kate Groves and Adam Cryar assess recovery of food allergens from solid processed matrices applying SI (International System of Units) traceably quantified milk protein solutions and a novel extraction method in a third paper in the special edition.

The special edition will span the globe with contributions from five continents on topics as diverse as food allergen labelling and regulation, quantitative ELISA, targeted and novel mass spectrometry approaches to allergen analysis and analytical devices for use by consumers. The edition will be open access and is expected to be available on the J AOAC

International website in December.