

Researchers address the importance of measurement in synthetic biology

September 19 2016

Dr Michael Adeogun and Dr Max Ryadnov from the National Physical Laboratory (NPL) have written an expert view for Bio-Based World News on the importance of measurement science in synthetic biology, highlighting the vital work that NPL has already undertaken in this field.

Synthetic biology is a growing field which seeks to develop solutions to major global challenges, such as the generation of sustainable and affordable materials and chemicals, and the use of bio-engineered organisms as products. The UK aims to achieve a £10bn market in synthetic biology by 2030.

Since the publication of the government-commissioned [Synthetic Biology Roadmap in 2012](#), the UK has become the second largest investor in synthetic biology, having developed a national network of research centres, doctoral training programmes and knowledge facilities to drive growth in the commercial sector.

As commercial products become more widely available, the need for reproducibility and material characterisation increases, to ensure manufacturers and users have confidence in the products and services developed.

In their article, Adeogun and Ryadnov showcase NPL in its unique role as the UK's National Measurement Institute (NMI). With over a hundred years of measurement expertise, in conjunction with its world-leading research in synthetic biology, NPL has been an invaluable player in the

standardisation of new bio-technologies. This is crucial for the rapid commercialisation of biotechnology, and allows the UK to become more competitive internationally.

The importance of NPL's contribution to [synthetic biology](#) is demonstrated by our partnership with Ingenza Ltd, a Scottish biotechnology SME. NPL is providing a measurement platform which will enable the discovery and commercialisation of antibiotics: crucial in the fight against antimicrobial resistance, a problem which could potentially cost millions of lives and billions of pounds.

More information: Expert View: The importance of metrology in realizing our synthetic biology potential:

www.biobasedworldnews.com/expert-view-the-importance-of-metrology-in-realizing-our-synthetic-biology-potential

Provided by National Physical Laboratory

Citation: Researchers address the importance of measurement in synthetic biology (2016, September 19) retrieved 17 July 2024 from <https://phys.org/news/2016-09-importance-synthetic-biology.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--