

A bridge with our customers **USER'S VOICE** Developing new organisms that replace technology with biology

Ginkgo Bioworks Nexera X2 UHPLC



Andrew Shurer, M.S.
Test Engineer
Ginkgo Bioworks

Ginkgo Bioworks is the organism company. We design custom microbes for customers across multiple markets. We build our foundries to scale the process of organism engineering using software and hardware automation. Organism engineers at Ginkgo learn from nature to develop new organisms that replace technology with biology.

Please tell us about your work and your role in the organization/company.

At Ginkgo Bioworks we design custom microbes for customers across multiple markets. Our foundries are designed to scale the process of organism engineering using software and hardware automation with the aim of developing new organisms to replace technology with biology. As part of my role in the Test team, I develop methods for the production of compounds and blends for prospective Ginkgo products, as well as analytical methods that support and accelerate process development efforts.

What is the main purpose of using Shimadzu instruments in your lab?

We use Shimadzu UHPLC instruments (RID or FL) for quantitation of key metabolites in microbial fermentation samples. We also have a preparative HPLC (UV/Vis) system that is used for purification of products or key metabolic intermediates.

How many people in your lab use Shimadzu instruments? How often?

Our Shimadzu LC systems are used daily by 1-2 members of the Test team and by an additional 1-2 team members on a weekly basis.

What were the main reasons that your organization chose Shimadzu instruments?

Due to the variety of work that we do in the Test group at Ginkgo (multiple projects/products/organisms), we chose the Shimadzu LC

systems for their modularity. We rely on the flexibility to adapt an instrument to a particular use (e.g. switch a pump, add a detector, etc.) with little effort.

Having used Shimadzu instruments so far, what are your thoughts on the advantages and benefits of using them?

While I have found the instruments to be fairly robust, when we have run into issues I have found the service and support we have received to be excellent. With few exceptions, our technical issues have been resolved quickly by Shimadzu.

In your opinion, was there a discrepancy in expectations before and after the actual use of Shimadzu instruments?

No, I would say that my expectations for Shimadzu instruments have been met.

Please suggest features or functionalities which you would like to see improved, added and enhanced for your Shimadzu Instrument?

As our sample volume increases, we may look to add additional capacity to our auto-samplers (>2 384-well plates).

Please tell us your "wish list" for Shimadzu technology, products and services.

I am currently considering adding an MS detector to our preparative system.



Ultra High Performance Liquid Chromatograph

Nexera X2

Meet the Nexera X2, the most advanced UHPLC available today. The flexible system design achieves a true fusion between UHPLC and HPLC technologies, enabling the Nexera X2 to be used for a much broader range of applications. This completely new UHPLC system not only offers maximum speed, sensitivity, resolution, stability, and reliability, it also features a revolutionary *i*-PDeA separation technology and an *i*-DReC function that extends the dynamic range so that both concentrated and trace components can be quantitated simultaneously.

For more details



Please let us know your perception of "Shimadzu Corporation".

I perceive Shimadzu as equal to or better than its competitors in the liquid chromatography space with service and support being a key factor.

Comments About the Interview

The Nexera UHPLC was developed according to the three pillars of "Maximizing Throughput", "Maximizing Performance", and "Maximizing Expandability". These pillars allow researchers to use the system in many different ways and for many different analyses. In this interview, we learned again how important service and support is to helping customers achieve their goals. We can make wonderful instruments, but if the customer struggles, then it will not help them. It's important to provide customers a great overall "Shimadzu Experience" that consists of top-of-the-line instruments and top-of-the-line support.



QR code link to this contents.
<http://www.shimadzu.com/an/bridge/bridge44.html>

Nexera X2



Shimadzu Corporation
www.shimadzu.com/an/

For Research Use Only. Not for use in diagnostic procedures.

This publication may contain references to products that are not available in your country. Please contact us to check the availability of these products in your country.

Company names, products/service names and logos used in this publication are trademarks and trade names of Shimadzu Corporation, its subsidiaries or its affiliates, whether or not they are used with trademark symbol "TM" or "®".

Third-party trademarks and trade names may be used in this publication to refer to either the entities or their products/services, whether or not they are used with trademark symbol "TM" or "®".

Shimadzu disclaims any proprietary interest in trademarks and trade names other than its own.

The contents of this publication are provided to you "as is" without warranty of any kind, and are subject to change without notice. Shimadzu does not assume any responsibility or liability for any damage, whether direct or indirect, relating to the use of this publication.