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The October Issue of *SLAS Technology* Highlights an Experimental Device for Generating Temperature Gradients on a Microtiter Plate

Oak Brook, IL – The October issue of *SLAS Technology* is now available Open Access on ScienceDirect.

When it comes to biological studies of living cells, temperature is a fundamental parameter that can be challenging when attempting to test different temperature conditions concurrently. This is especially true when testing the effects of different temperatures on a single microtiter plate. Solving this temperature control issue could unlock new possibilities in studying cellular growth.

Featured in the October issue of *SLAS Technology,* the technical brief "Development of a device that generates a temperature gradient in a microtiter plate for microbial culture" by Shibai, et al, demonstrates a potential temperature control solution. The device, derived from previously established techniques, proved to be capable of maintaining a temperature gradient of 38.2 to 43.1˚C across the wells of a single 96-well microtiter plate in an incubator. Shibai and team conducted several different types of assays using *Escherichia coli* to demonstrate the potential of this device, including laboratory evolution experiments and two-dimensional cell growth assays.

Learn more about this temperature controlling device and other research articles in this month's issue of *SLAS Technology.*

The October issue of *SLAS Technology* includes these additional articles:

- Creating Custom Digital Assistants for the Scientific Laboratory using the HelixAI Platform
- Research of control method for pneumatic control of pneumatic microchips
- Buildout and integration of an automated high-throughput CLIA laboratory for SARS-CoV-2 testing on a large urban campus
- Establishment of low-cost laboratory automation processes using AutoIt and 4-axis robots
- Data driven health monitoring of Peltier modules using machine-learning-methods
- Inflammatory mediators, lipoproteins and apolipoproteins in early diagnosis of amyotrophic lateral sclerosis
- Life sciences discovery and technology highlights

Access to the October issue of *SLAS Technology* is available at https://www.slas-technology.org/issue/S2472-6303(22)X0006-X

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SLAS Technology reveals how scientists adapt technological advancements for life sciences exploration and experimentation in biomedical research and development. The journal emphasizes scientific and technical advances that enable and improve:

- Life sciences research and development
- Drug delivery
- Diagnostics
- Biomedical and molecular imaging
- Personalized and precision medicine

SLAS (Society for Laboratory Automation and Screening) is an international professional society of academic, industry and government life sciences researchers and the developers and providers of laboratory automation technology. The SLAS mission is to bring together researchers in academia, industry and government to advance life sciences discovery and technology via education, knowledge exchange and global community building.

SLAS Technology: Translating Life Sciences Innovation, 2021 Impact Factor 2.813. Editor-in-Chief Edward Kai-Hua Chow, Ph.D., National University of Singapore (Singapore).

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