

**Ryan Kurasaki**  
**College of Tropical Agriculture and Human Resources**  
***Department of Molecular Biosciences and Bioengineering***  
FTE Distribution: 70%I; 0%R; 30%E

**Education**

<u>Degree</u>	<u>University</u>	<u>Major</u>
Bachelors	University of Hawaii at Manoa	Biosystems Engineering
Masters	University of Hawaii at Manoa	Biosystems Engineering

**Professional Appointments**

<u>Title</u>	<u>Employer</u>	<u>Dates Employed</u>
Junior Specialist	University of Hawaii at Manoa	2017 to Present
Facilities Plan & Design	University of Hawaii at Manoa	2008 to 2017
Research Associate	University of Hawaii at Manoa	2005 to 2008

**Courses Taught**

<u>Course ID and name (credits)</u>	
BE 350	Dynamic Systems Modeling (3)
BE 350L	Dynamic Systems Modeling Lab (1)
BE/CEE 405	Engineering Economics (3)
BE 481	Senior Engineering Design I (3)
BE 482	Senior Engineering Design II (3)

**Publications**

Refereed Journal Publications

Ningyang, L., Han, Z., O'Donnell, T.J., Kurasaki, R., Kajihara, L., Williams, P.G., Tang, Y., Su, W.W. (2020) Production and excretion of astaxanthin by engineered *Yarrowia lipolytica* using plant oil as both the carbon source and the biocompatible extractant. *Applied Microbiology and Biotechnology*. 104. 10.1007/s00253-020-10753-2.

Jenkins, D.M. and Kurasaki, R. (2018). ABEVIEW: Android Interface for Wireless Data Acquisition and Control. *Sensors*. 18(8), 2647.

Nihous, G., Kuroda, K., Lobos-Gonzalez, J., Kurasaki, R., Masutani, S. (2010). An analysis of gas hydrate dissociation in the presence of thermodynamic inhibitors. *Chemical Engineering Science*. 65(5). 1748-1761.

Extension Publications

Kurasaki, R., Byrd, M., and Kobayashi, K. (2023). Low-Cost Light Sensors for Indoor Agriculture. *College of Tropical Agriculture and Human Resources Extension Publications*.  
<http://www.ctahr.hawaii.edu/oc/freepubs/pdf/FST-68.pdf>

Kurasaki, R. and Naruse, K. (2023). Calibration of Humidity Sensors for Agriculture. *College of Tropical Agriculture and Human Resources Extension Publications*.  
<https://www.ctahr.hawaii.edu/oc/freepubs/pdf/FST-70.pdf>

Kurasaki, R. and Amoroso, K. (2023). Automation of LED Grow Light Control. *College of Tropical Agriculture and Human Resources Extension Publications*.  
<http://www.ctahr.hawaii.edu/oc/freepubs/pdf/FST-71.pdf>

### Creative Works

Kurasaki, R. (2023). PAR Light Sensor. GITHUB. <https://github.com/ryan-ext/PAR-Light-Sensor>

Kurasaki, R. (2023). Humidity Sensor. GITHUB. <https://github.com/ryan-ext/Humidity-Sensor>

Kurasaki, R. (2023). LED Grow Light Controller. GITHUB. <https://github.com/ryan-ext/LED-Grow-Light-Controller>

### Leadership Roles (Committees, Boards, Advisory, etc.)

Hawaii Section Chair of the American Society of Agricultural and Biological Engineers (2021 – Present)

Excellence in Academic Advising (2018 – 2021)

Waipahu High School Natural Resources Advisory Board (2021 – Present)

Meeting Pattern Advisory Committee (2019 – 2020)

Biological Engineering Student Association – Advisor (2018 – Present)

Building Coordinator – Agricultural Engineering Institute (2017 – Present)

### **Research Support**

Jenkins, D., Arif, M., and **Kurasaki, R.** (Co-I) *Portable Scaled Sample Preparation Device for Concentration and Recovery of Bacterial Contaminants*.

- HEALTH & HUMAN SVC, DEPT-NIH-FED
- Amount \$259,553 (Subrecipient \$85,603); Years 2023-2024

### **Presentations at Conferences**

Title: Scaffolding and Assessing Engineering Design: Effecting Program Change from Course Innovations

Author: Kurasaki, R.\*

Name of Conference: Assessment for Curricular Improvement Poster Exhibit

Location: Honolulu, HI

Date of Presentation: 04/2019

Title: An investigation of ambient drying of Eucalyptus grandis logs.

Authors: Harris, D., Turn, S., Kurasaki, R., and Kinoshita, C.\*

Name of Conference: International Commission of Agricultural and Biosystems Engineering World of Congress Conference

Location: Antalya, Turkey

Date of Presentation: 04/2018