

## **Winogradsky column used at the Ecosystems Center** <sup>[1]</sup>

By: Vallino, Joseph

Image not found

<https://hpsrepository.asu.edu/bitstream/handle/10776/8176/EcosystemsCenter023.jpg>

This is a Winogradsky column that Joseph Vallino uses in a SES course on Methods in Microbial Ecology. Almost every bacterial metabolic process that occurs on Earth also occurs in these columns that are simply constructed by placing freshwater or marine sediments augmented with a carbon source (such as saw dust) and fertilizer (N and P) in a column and topping it off with either fresh or sea water. Julie Huber is a co-instructor in the course.

### **Topic**

[Tools](#) <sup>[2]</sup> [Centers and Programs](#) <sup>[3]</sup>

### **Publisher**

The Ecosystems Center, Marine Biological Laboratory, Woods Hole, MA Arizona Board of Regents

### **Rights**

Licensed as Creative Commons Attribution-NonCommercial-Share Alike 3.0 Unported.  
<http://creativecommons.org/licenses/by-nc-sa/3.0/>

### **Format**

[Photographs](#) <sup>[4]</sup>

### **Last Modified**

Thursday, August 20, 2015 - 20:48

### **DC Date Accessioned**

Friday, August 29, 2014 - 15:34

### **DC Date Available**

Friday, August 29, 2014 - 15:34

### **DC Date Issued**

Friday, August 29, 2014

## Dspace Image

<https://hpsrepository.asu.edu/bitstream/handle/10776/8176/EcosystemsCenter023.jpg.jpg>

- [Contact us](#)
- [RSS](#)
- [Log in](#)

© 2013 Marine Biological Laboratory and Arizona Board of Regents

---

**Source URL:** <https://history.archives.mbl.edu/archives/items/winogradsky-column-used-ecosystems-center>

### Links:

- [1] <https://history.archives.mbl.edu/archives/items/winogradsky-column-used-ecosystems-center>
- [2] <https://history.archives.mbl.edu/archives/topics/tools>
- [3] <https://history.archives.mbl.edu/archives/topics/centers-and-programs>
- [4] <https://history.archives.mbl.edu/archives/formats/photographs>