

Request Information

Permalink

System And Method For Producing Polyhydroxyalkanoates From Organic Waste

Tech ID: 30554 / UC Case 2019-571-0

ABSTRACT

Researchers at the University of California, Davis have developed an efficient method for producing polyhydroxyalkanoates (PHA) from organic waste using a halophilic microorganism.

FULL DESCRIPTION

Production of conventional plastics is unsustainable because it requires the use of non-renewable fossil carbon feedstocks. Conventional plastics are also damaging to the environment because they release toxic contaminants when not properly recycled and litter the land and oceans.

Researchers at the University of California Davis have developed a novel method for producing polyhydroxyalkanoates (PHA), biodegradable alternatives to petroleum-based synthetic plastics, from organic waste. The use of a halophilic microorganism offers a simple and efficient PHA production method. Additionally, this method for producing high-quality PHA is more time and cost efficient than current PHA production systems.

APPLICATIONS

- ▶ Cost and time efficient production of sustainable and environmentally friendly alternative to conventional plastics

FEATURES/BENEFITS

- ▶ Reduces the quantity of waste that enters landfills and the natural environment
- ▶ Cost-efficient PHA production with high product yield
- ▶ Converts various waste into high-value PHA

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Published Application	20210403960	12/30/2021	2019-571

CONTACT

University of California,
Davis Technology Transfer
Office
techtransfer@ucdavis.edu
tel: 530.754.8649.



INVENTORS

- ▶ Wang, Ke
- ▶ Zhang, Ruihong

OTHER INFORMATION

KEYWORDS

Polyhydroxyalkanoate,
Organic waste, PHA,
Biodegradable plastic,
Halophile

CATEGORIZED AS

- ▶ **Biotechnology**
 - ▶ Industrial/ Energy
- ▶ **Environment**
 - ▶ Other
- ▶ **Materials & Chemicals**
 - ▶ Polymers

RELATED CASES

2019-571-0

University of California, Davis
Technology Transfer Office
1850 Research Park Drive, Suite 100, ,
Davis, CA 95618

Tel: 530.754.8649
techtransfer@ucdavis.edu
<https://research.ucdavis.edu/technology-transfer/>
Fax: 530.754.7620

© 2019 - 2024, The Regents of the University of California
[Terms of use](#)
[Privacy Notice](#)