

Chapter 9

References

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List of Publications

Research Publications

1. **Singh, V., & Mishra, V.** (2020). Enhanced biomass production and nutrient removal efficiency from urban wastewater by *Chlorella pyrenoidosa* in batch bioreactor system: optimization and model simulation. *Desalination And Water Treatment*, 197, 52-66.
2. **Singh, V., & Mishra, V.** (2021). Exploring the effects of different combinations of predictor variables for the treatment of wastewater by microalgae and biomass production. *Biochemical Engineering Journal*, 174, 108129.
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1. An Integrated Continuously Operated Wastewater Treatment System with Microalgal Biomass Production, Application No. 201911031783, (Inventor: Dr. Vishal Mishra and **Vishal Singh**) Date of Filing: 6th August, 2019. (PUBLISHED 12/02/2021)

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IIT-BHU का रिसर्च : मशीन लर्निंग की मदद से सूक्ष्म शैवाल साफ करेंगे नदियों में गिरते नालों से 90 प्रतिशत अपशिष्ट जल

By S. Faiz Hashnain Sat, 4 Sep 2021







Micro-algae to treat wastewater of 90% impurity

Sep 5, 2021, 04:16 IST

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Varanasi: Researchers at the department of biochemical engineering of IIT-BHU claim that they have successfully applied micro-algae and machine learning to treat wastewater. Under this application, micro-algae in photo-bioreactor can clean up to 90% impurity of wastewater by setting appropriate temperature, light intensity, carbon dioxide content, pH level, which is better than the current bacterial-based water treatment process.

Microalgae, tech to treat water waste: IIT BHU research

By [HT Correspondent](#), Varanasi

Sep 05, 2021 12:26 AM IST



Decreasing the load of carbon dioxide in atmosphere by microalgae will resolve the issue of global warming to a great extent, says IIT-BHU research



The treated water generated from the microalgae-based treatment plant meets the criteria set by WHO and can be easily discharged in the rivers (HT file photo)

Researchers from the department of biochemical engineering, Indian Institute of Technology of Banaras Hindu University (IIT-BHU) have successfully applied microalgae and machine learning to treat wastewater.