

**Report on Engineering of Industrial Enzymes Held**  
**on 24.04.2021**

<b>Date of Event</b>	<b>24.04.2021</b>
<b>Name and Type of Event</b>	Engineering of Industrial Enzymes
<b>Conducted by</b>	Ms. Monalisa Hati
<b>No. Of Participant</b>	68

**Engineering of Industrial Enzymes**

There was a National webinar conducted by the Department of Computer Science & IT. The Activity was coordinated by Asst Prof. Monalisa Hati .

**About the Event:** 24 th April, 2021, the National webinar was on ” *Engineering of Industrial Enzymes*”. It was based on the study of Enzymes and their functionalities.

**About the Speaker:** For this event the Invited speaker was Dr. Jyoti Khurana (Asst Professor, Arka Jain University). The event was started by 11 am and continued till 1 pm. In this event more than 68 participants were joined. They were from different states in India. We were very glad to have the participants with different working professions like Assistant Professors, Research Scholars and Students

Poster of the Event:-

**JGI** | **ARKA JAIN**  
**University**  
Jharkhand (Jamshedpur)

**School of Engineering and IT**  
Presents National Webinar on

**Engineering of  
Industrial Enzymes**

**DATE : 24TH APRIL, 2021**  
**MODE : GOOGLE MEET**  
**TIME : 11:00 AM**

Coordinators: Prof. Arvind Pandey (HOD, CS & IT), Asst. Professor Monalisa Hati.

## Photos of Event:

# Industrial Uses of Enzymes

## Enzymes and other proteins are part of everyday life

Examples of enzymes and other commercial proteins

Category	Key Points	Market Size
Wastewater treatment	Environmentally-friendly treatment of organic and toxic waste	\$500mm <sup>+</sup>
Bio-based chemicals	Reduce use of petroleum-based products; Reduce pollution and improve product safety	\$10bn <sup>+</sup>
Cosmetics and personal care	Enhance quality/properties of toiletry products; Increase the perceived amount of ingredients in cosmetics; Reduce usage of chemical load	Active ingredient market size \$56m <sup>+</sup>
Pulp & paper	Used for bleaching, refining, deinking and the removal of adhesives; Enhance desired characteristics such as strength, bulk or softness; Reduce usage of water, energy	Enzyme market size \$50mm <sup>+</sup>
Biopharmaceuticals	Used to fight diseases such as rheumatoid arthritis and diabetes	Enzyme market size \$800mm <sup>+</sup>
Food and beverage	Improves flavor/quality; Facilitates digestion, improves nutritional value and reduces potential allergic reactions	Enzyme market size \$1bn
Detergents	Enhance detergents' characteristics such as cleaning ability, color fading prevention and performance at lower washing temperatures; Less energy needed for cleaning	Enzyme market size \$750mm
Textiles/Leather	Used in the production of fabrics for clothing, furniture and other household items; Replaces conventional chemical methods	Enzyme market size \$1.5bn
Nutraceuticals	Dietary supplements, herbal products, processed foods	Enzyme market size \$1.5bn
Biofuels	Reduce use of petroleum-based products; Large existing food-based ethanol market; Developing cellulosic/biofuel market positioned for rapid growth	Food-based market size \$400mm; Cellulosic market size \$5bn <sup>+</sup>
Animal health & nutrition	Improve the digestibility of dietary components	Enzyme market size \$600mm

Legend: Existing company markets with additional growth opportunities; Markets readily penetrable by company technologies

Source: Freedonia Group, Frost & Sullivan, Verulam press releases, equity research, company estimates  
Note: Market size numbers represent latest available current global estimates, unless otherwise indicated

## Registration Link

<https://forms.gle/VpN124SyHbAB3k2j7>

## Feedback about the Speaker:-

### Students Feedback Analysis

