



HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY

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Coimbatore - 641 032

DEPARTMENT OF CHEMICAL ENGINEERING

LIST OF PATENTS PUBLISHED/GRANTED

2024-2025					
S.No	Inventor(S)Name	Title of the Patent	Patent Number	Date of Published	Status of Patent (Published / Granted)
1.	Ms. Induja P Mr. Rajkumar A	Wearable Air Pollution Monitoring Device	424806-001	26.07.2024	Published and Granted
2.	Dr.S. Kavitha, Dr.M. Seenuvasan, Dr.K. Sathish Kumar, K. Swathi,	Production of biodegradable plastic from organic flour and the method of preparation thereof	202041044700	21.08.2024	Granted
3.	Dr.M.P Murugesan Dr.R.Kalaivani Ms.Padma Priya Ms.Srinithi Dr.V.Santhosh Ms.Kalpana.V.P	IOT Based Wastewater Treatment system by solar Energy	430401-001	13.09.2024	Published



4.	Mr.Sathish.J, Dr.Palani.R, Dr.Kavitha.S, Dr.Sasireka.G	Development and Characterization of A Nano-Cellulose-Based Hydrogel for Improving Water Retention and Controlled Nutrient Release	202541018574 A	21.03.2025	Published
5.	Mr.Sathish.J, Dr.Palani.R	Optimization of Lignin Based Graphene from Black Liquor for Improved Conductivity in Solar Panel Applications	202541038080 A	09.05.2025	Published
6.	Mr.Naguldev.S Mr.Ramalingam R	Enhanced removal of ibuprofen from pharmaceutical effluent using novel tio2-coated multi-walled carbon nanotubes	202541040054 A	23.05.2025	Published
7.	Mr.Ramalingam R Mr.Naguldev.S	Fixed bed column adsorption study of remazol dye removal using activated carbon form phyllanthus emblica leaf	202541039969 A	16.05.2025	Published




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S.No	Inventor(S)Name	Title of the Patent	Patent Number	Date of Published	Status of Patent (Published / Granted)
1.	Mr. Nagul Dev S Mr. Sathish J Dr. Seenuvasan M Dr. Vivek M S	B9 vitamin extraction from romaine lettuce using soxhlet extraction method	202341042890 A	15/09/2023	Published
2.	Mr. Sathish J Dr. Seenuvasan M Dr. Vivek M S	Production of natural health drink using palmyra fruit	202341042892 A	15/09/2023	Published
3.	Dr. Seenuvasan M Ms. Induja P Mr. Rajkumar A Dr. Balasubramani K	Efficient Removal of acid and base dye from aqueous solution using a nanocomposite composed	202341066395 A	20/10/2023	Published
4.	Dr. Seenuvasan M Mr. Dineshkumar M Ms. Induja P	Synthesis of organic acid and catalyst in recovery of metals from e-waste through electro winning pro	202341066387A	20/10/2023	Published
5.	Dr. Seenuvasan M Ms. Induja P Mr. Rajkumar A Mr. Dineshkumar M Dr. Balasubramani K	Extraction of keratin from waste biomass of human hair and eggshell for the fabrication of bio plastic	202341066387A	20/10/2023	Published



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2022-2023					
S.No	Inventor(S)Name	Title of the Patent	Patent Number	Date of Published	Status of Patent (Published / Granted)
1.	Mr. Sathish J Mr. Nagul Dev S Dr. Vivek M S Dr. Seenuvasan M	A New Air Elutriator Coupled with ceramic filter membrane for separation of solid particles from Gas Mixture	202341000232A	27/01/2023	Published
2.	Mr. Nagul Dev S Mr. Sathish J Dr. Seenuvasan M	A Sustainable Approached Toy Vending Machine Converting Waste Plastics	2 02241072493	30/12/2022	Published
3.	Mr. Sathish J	A New Techniques For Solid Dust Removal Using Two Inlet Cyclone Separation	202241045857 A	19/08/2022	Published
4.	Dr. Seenuvasan M, Ms.Induja. P	Magnetite embedded biochar as nano-sorbent for effective adsorption of textile dye	202241028399 A	17/06/2022	Published and Granted



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2021-2022					
S.No	Inventor(S)Name	Title of the Patent	Patent Number	Date of Published	Status of Patent (Published / Granted)
1.	Dr. Seenuvasan M	Polyester Resin loaded Nano Composite Material for Carbon Dioxide Sequestration and the Method of Preparation Thereof	202041044250	08.06.2022	Granted
2.	Dr. Seenuvasan M	Medication Dose Preparation and Transfer System Using Artificial Intelligence Mechanism Scope of	202022100927	02/06/2022	Granted
3.	Ms. Induja. P	The Effects of Blending Cow Milk With Soymilk on Yogurt Quality	202241034935A	17/06/2022	Published
4.	Dr. Seenuvasan M	Production of A Biochemical Solution for Ginger Peel Removal By Citric Acid Blend from Food Waste	202241030415 A	03/06/2022	Published



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GEOGRAPHICAL INDICATIONS



सत्यमेव जयते



पेटेंट कार्यालय, भारत सरकार

The Patent Office, Government Of India

पेटेंट प्रमाण पत्र

Patent Certificate

(पेटेंट नियमावली का नियम 74)

(Rule 74 of The Patents Rules)

पेटेंट सं. / Patent No.

548225

आवेदन सं. / Application No.

202041044700

फाइल करने की तारीख / Date of Filing

14/10/2020

पेटेंटी / Patentee

S. KAVITHA

प्रमाणित किया जाता है कि पेटेंटी को, उपरोक्त आवेदन में यथाप्रकरित **PRODUCTION OF BIODEGRADABLE PLASTIC FROM ORGANIC FLOUR AND THE METHOD OF PREPARATION THEREOF** नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख अक्टूबर 2020 के चौदहवें दिन से बीस वर्ष की अवधि के लिए पेटेंट अनुदत्त किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled **PRODUCTION OF BIODEGRADABLE PLASTIC FROM ORGANIC FLOUR AND THE METHOD OF PREPARATION THEREOF** as disclosed in the above mentioned application for the term of 20 years from the 14th day of October 2020 in accordance with the provisions of the Patents Act, 1970.



इकांत की रांजित
पेटेंट नियंत्रक

Controller of Patents

अनुदान की तारीख / Date of Grant : 21/08/2024

टिप्पणी - इस पेटेंट के नवीकरण के लिए फीस, यदि इसे बनाए रखा जाना है, अक्टूबर 2022 के चौदहवें दिन को और उसके पश्चात प्रत्येक वर्ष में उसी दिन देय होगी।
Note. - The fees for renewal of this patent, if it is to be maintained, will fall / has fallen due on 14th day of October 2022 and on the same day in every year thereafter.



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सत्यमेव जयते



पेटेंट कार्यालय, भारत सरकार

The Patent Office, Government Of India

पेटेंट प्रमाण पत्र

Patent Certificate

(पेटेंट नियमावली का नियम 74)

(Rule 74 of The Patents Rules)

पेटेंट सं. / Patent No.

540759

आवेदन सं. / Application No.

202241028399

फाइल करने की तारीख / Date of Filing

17/05/2022

पेटेंटी / Patentee

Hindusthan College of Engineering and Technology

प्रमाणित किया जाता है कि पेटेंटी को, उपरोक्त आवेदन में यथाप्रकरित **MAGNETITE EMBEDDED BIOCHAR AS NANO-SORBENT FOR EFFECTIVE ADSORPTION OF TEXTILE DYE AND THE METHOD THEROF**

नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख मई 2022 के सत्रहवें दिन से बीस वर्ष की अवधि के लिए पेटेंट अनुदत्त किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled **MAGNETITE EMBEDDED BIOCHAR AS NANO-SORBENT FOR EFFECTIVE ADSORPTION OF TEXTILE DYE AND THE METHOD THEROF** as disclosed in the above mentioned application for the term of 20 years from the 17th day of May 2022 in accordance with the provisions of the Patents Act, 1970.



इकांत की दंडित

अनुदान की तारीख : 04/06/2024

Controller of Patents

टिप्पणी - इस पेटेंट के नवीकरण के लिए फीस, यदि इसे बनाए रखा जाना है, मई 2024 के सत्रहवें दिन को और उसके पश्चात प्रत्येक वर्ष में उसी दिन देय होगी।

Note. - The fees for renewal of this patent, if it is to be maintained, will fall / has fallen due on 17th day of May 2024 and on the same day

in every year thereafter.



ORIGINAL

क्रम सं/ Serial No.: 183024



पेटेंट कार्यालय, भारत सरकार

The Patent Office, Government Of India

डिजाइन के पंजीकरण का प्रमाण पत्र

Certificate of Registration of Design

डिजाइन सं. / Design No.

424806-001

तारीख / Date

26/07/2024

पारस्परिकता तारीख / Reciprocity Date*

देश / Country

प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो **WEARABLE AIR POLLUTION MONITORING DEVICE** से संबंधित है, का पंजीकरण, श्रेणी 10-04 में 1.Mr.K. Janardhanan 2. Mr. M. Praveen 3.Ms. Divya Rajeev 4.Mr.A. Rajkumar 5.Ms.P.Induja के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 10-04 in respect of the application of such design to **WEARABLE AIR POLLUTION MONITORING DEVICE** in the name of 1.Mr.K. Janardhanan 2. Mr. M. Praveen 3.Ms. Divya Rajeev 4.Mr.A. Rajkumar 5.Ms.P.Induja.

डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अधधीन प्रावधानों के अनुसरण में।

In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

जारी करने की तिथि :

Date of Issue

18/10/2024



डिजाइन की पंजीकरण

महानियंत्रक पेटेंट, डिजाइन और व्यापार चिह्न
Controller General of Patents, Designs and Trade Marks

*पारस्परिकता तारीख (यदि कोई हो) जिसकी अनुमति दी गई है तथा देश का नाम। डिजाइन का स्वत्वाधिकार पंजीकरण की तारीख से दस वर्षों के लिए होगा जिसका विस्तार, अधिनियम एवं नियम के निबंधनों के अधीन, पाँच वर्षों की अतिरिक्त अवधि के लिए किया जा सकेगा। इस प्रमाण पत्र का उपयोग विधिक कार्यवाहियों अथवा विदेश में पंजीकरण प्राप्त करने के लिए नहीं हो सकता है।

The reciprocity date (if any) which has been allowed and the name of the country. Copyright in the design will subsist for ten years from the date of Registration, and may under the terms of the Act and Rules, be extended for a further period of five years. This Certificate is not for use in legal proceedings or for obtaining registration abroad.



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SL No :



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GOVERNMENT OF INDIA
isVsaV dk;kZy;
THE PATENT OFFICE
isVsaV çekoki=
PATENT CERTIFICATE
(Rule 74 of The Patents Rules)

isVsaV la- / Patent No. : 398788
vkosnu la- / Application No. : 202041044259
Qkby djus dh rkjh[k / Date of Filing : 12/10/2020
isVsaVh / Patentee : HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY

çekfokr fd;k tkrk gS fd isVsaVh dks] mijksä vkosnu esa ;FkkçdfVr POLYESTER RESIN LOADED NANOCOMPOSITE MATERIAL FOR CARBON DIOXIDE SEQUESTRATION AND THE METHOD OF PREPARATION THEREOF uked vkfo"dkj ds fy,] isVsaV vf/kfu;e] 1970 ds mica/kksa ds vuqlkj vkt rkjh[k vDVwcj 2020 ds ckjgosa fnu ls chl o"kZ dh vof/k ds fy, isVsaV vuqnÜk fd;k x;k gSA

It is hereby certified that a patent has been granted to the patentee for an invention entitled POLYESTER RESIN LOADED NANOCOMPOSITE MATERIAL FOR CARBON DIOXIDE SEQUESTRATION AND THE METHOD OF PREPARATION THEREOF as disclosed in the above mentioned application for the term of 20 years from the 12th day of October 2020 in accordance with the provisions of the Patents Act, 1970.

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vuqnku dh rkjh[k : 08/06/2022
Date of Grant :

isVsaV fu;a-d
Controller of Patent

fVIokh & bl isVsaV ds uohdjok ds fy, Qhl] ;fn bls cuk, j[kk tkuk gS] vDVwcj 2022 ds ckjgosa fnu dks vkSj mlds iepkr çR;sd o"kZ es mlh fnu ns; gksxhA

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The Patent Office, Government Of India

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पेटेंटी / Patentee

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इकांत की दंडित

अनुदान की तारीख : 04/06/2024

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