

## **Punyashlok Ahilyadevi Holkar Solapur University**

### **Criterion III - Research, Innovations and Extension**

3.4 Research Publications an	nd Awards
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Metric No.	
3.4.3	Number of Patents published/awarded during the last five years
	Any additional information
	• List of patents and year it was awarded (Data Template)

3.4.3.1: Total number of Patents published/awarded year wise during the last five years

Year	2015-16	2016-17	2017-18	2018-19	2019-20
Number	01	01	02	01	05

(12) PATENT APPLICATION PUBLICATION (19) INDIA	(21) Application No.201721007606 A	
(22) Date of filing of Application :03/03/2017	(43) Publication Date : 20/12/2019	
(54) Title of the invention : AMMONIA SENSOR		
<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:C02F(71)Name of Applicant :1/001)VIKAS BABURAO PATIL:NAAddress of Applicant :FLAT.NO.11 NATI:NAAPARTMENT, 142 SOUTH SADAR BAZAI:NASOLAPUR-413003 MAHARASHTRA, Maha:NA(72)Name of Inventor ::NA1)VIKAS BABURAO PATIL: NA:NA:NA:NA	H PARAGON R, LASHKAR, Irashtra India

### (57) Abstract :

ABSTRACT AMMONIA SENSOR The present invention relates to ammonia sensors and a process for preparing the sensor. The sensors include hybrid nanocomposites having polyaniline (PANI) and tungsten trioxide (WO3) deposited on a polyethylene terephthalate (PET) substrateare. The sensors are selective for ammonia and are capable of detecting ammonia at room temperature. The sensors described herein have higher sensitivity to ammonia and are suitable for detection of ammonia where the concentration of ammonia ranges from about 1 ppm to about 100 ppm. The sensors provided herein are connected to circuitry that allows the sensor to provide direct input to the analog channel of a controller and generate a digital/ alarm output. FIG. 8 for publication

No. of Pages : 23 No. of Claims : 6

The Patent Office Journal No. 51/2019 Dated 20/12/2019





क्रमांक : 022109942 SL No :



भारत सरकार GOVERNMENT OF INDIA पेटेंट कार्यालय THE PATENT OFFICE पेटेंट प्रमाणपत्र PATENT CERTIFICATE (Rule 74 Of The Patents Rules)

पेटेंट सं. / Patent No.

आवेदन सं. / Application No.

346644

1

1

201921030831

31/07/2019

फाइल करने की तारीख / Date of Filing

VIKAS BABURAO PATIL

पेटेंटी / Patentee

प्रमाणित किया जाता है कि पेटेंटी को उपरोक्त आवेदन में यथाप्रकटित "A POLYPYRROLE-CERIUM OXIDE HYBRID NANOCOMPOSITE SENSORAND ASYSTEM CONTAINING THE SENSOR FOR DETECTION OF NITROGEN DIOXIDE" नामक आविष्कार के लिए, पेटेंट अधिनियम, १९७० के उपबंधों के अनुसार आज तारीख 31st day of July 2019 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 "A POLYPYRROLE-CERIUM OXIDE HYBRID NANOCOMPOSITE SENSORAND ASYSTEM CONTAINING THE SENSOR FOR DETECTION OF NITROGEN DIOXIDE" as disclosed in the above mentioned application for the term of 20 years from the 31st day of July 2019 in accordance with the provisions of the Patents Act, 1970.



अनुदान की तारीख : 13/09/2020 Date of Grant :

पेटेंट नियंत्रक Controller of Patent

टिप्पणी - इस पेटेंट के नवीकरण के लिए फीस, यदि इसे बनाए रखा जाना है, **31st day of July 2021** को और उसके पश्चात प्रत्येक वर्ष मे उसी दिन देय होगी। Note. - The fees for renewal of this patent, if it is to be maintained will fall / has fallen due on 31st day of July 2021 and on the same day in every year thereafter.

PROPERTY INDIA PATENTS   DESIGNS   TRADE MARKS GEOGRAPHICAL INDICATIONS	सत्यगेव नयते GOVERNMENT OF INDIA	Controller General of Patents,Designs and Trademarks Department of Industrial Policy and Promotion Ministry of Commerce and Industry
	Application Details	
APPLICATION NUMBER	201921033128	
APPLICATION TYPE	ORDINARY APPLICATION	
DATE OF FILING	16/08/2019	
APPLICANT NAME	1 . SACHIN PANDURANG SHIRA 2 . RAKHI GAJANAN GAWALI 3 . MAHESH GORAKHNATH HU 4 . RAGHUNATH BIKAJI BHOSAI	ME BLIKAR LE
TITLE OF INVENTION	"A PROCESS FOR PREPARING SU QUINOXALINE DERIVATIVES"	JBSTITUTED 1, 2, 3-TRIAZOL-1-YL
FIELD OF INVENTION	CHEMICAL	
E-MAIL (As Per Record)	mailbox@lexregia.in	
ADDITIONAL-EMAIL (As Per Record)	royak777@gmail.com	
E-MAIL (UPDATED Online)		
PRIORITY DATE		
REQUEST FOR EXAMINATION DATE	16/08/2019	
PUBLICATION DATE (U/S 11A)	30/08/2019	
FIRST EXAMINATION REPORT DATE	28/02/2020	
Date Of Certificate Issue	11/11/2020	
POST GRANT JOURNAL DATE	13/11/2020	
REPLY TO FER DATE	03/08/2020	
	Application Status	
APPLICATION STATUS	Granted Application: 351376	on, Patent Number
E-Register	Order(s)/Dec	tision(s) View Documents

PROPERTY INDIA PATENTS   DESIGNS   TRADE MARKS GEOGRAPHICAL INDICATIONS	सत्यगंग जयते GOVERNMENT OF INDIA	Controller General of Patents,Designs and Trademarks Department of Industrial Policy and Promotion Ministry of Commerce and Industry
	Application Details	
APPLICATION NUMBER	201921033132	
APPLICATION TYPE	ORDINARY APPLICATION	
DATE OF FILING	16/08/2019	
APPLICANT NAME	1 . RAKHI GAJANAN GAWALI 2 . RAGHUNATH BHIKAJI BHOS 3 . SACHIN PANDURANG SHIRA 4 . NAGESH NARAYANRAO NAR	SALE AME RAYANA
TITLE OF INVENTION	A PROCESS FOR PREPARING 2- DIHYDRO-1H-NAPHTHO[1,2-E]	PYRIMIDYL SUBSTITUTED-2,3- [1,3] OXAZINES
FIELD OF INVENTION	CHEMICAL	
E-MAIL (As Per Record)	mailbox@lexregia.in	
ADDITIONAL-EMAIL (As Per Record)	royak777@gmail.com	
E-MAIL (UPDATED Online)		
PRIORITY DATE		
REQUEST FOR EXAMINATION DATE	16/08/2019	
PUBLICATION DATE (U/S 11A)	30/08/2019	
FIRST EXAMINATION REPORT DATE	17/03/2020	
Date Of Certificate Issue	15/10/2020	
POST GRANT JOURNAL DATE	23/10/2020	
REPLY TO FER DATE	07/09/2020	
	Application Status	
APPLICATION STATUS	Granted Application: 349355	on, Patent Number
E-Register		View Documents

chkCert.html

CBR Number : 4167

CBR date: 09-03-2018

Application Type: ORDINARY APPLICATION Priority Number: Priority Date: Priority Country: Not Selected

To,

Ravindra Siddappa Hegadi

Department of computer science, Solapur University, Solapur

Received documents purporting be to an application for patent numbered 201821008703 dated 09-03-2018 by Ravindra Siddappa Hegadi of Department of Computer science, Solapur University, Solapur relating to METHODS FOR OFFLINE HANDWRITTEN MARATHI CHARACTER RECOGNITION together with the Complete and fee(s) of 1760 (One Thousand Seven Hundred & Sixty only).

#### Note:

- 1. In case of Patent Application accompanied by a Provisional Specification, a complete Specification should be filed within 12 months from the date of filing of the Provisional Specification, failing which the application will be deemed to be abandoned under Section 9(1) of the Patent Act, 1970.
- 2. You may withdraw the application at any time before the grant of patent, if you with so. If, in addition to withdrawal, you also wish to pravent the publication of application in the Patent Office Journal, the application should be withdrawn within fifteen months from the date of priority of date of filing, whichever earlier.
- 3. If not withdrawn, your application will be published in the Patent Office Journal after eighteen months from the date of priority of date of filing, whichever is earlier.
- 4. If you with to get your application examined, you should file a request for examination in Form-18 within 48 months from the date of priority or date of filing, whichever is earlier, failing which the application will be treated as withdrawn by the applicant under Section 11(B)(4) of the Patent Act, 1970.

(For Controller of Patents)

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### Extracts from the Register of Copyrights

Dated : 02/08/2019



- 1. **Registration Number**
- Name, address and nationality of the applicant 2.
- 3. Nature of the applicant's interest in the copyright of the work
- 4. Class and description of the work
- 5. Title of the work
- 6. Language of the work
- Name, address and nationality of the author and if the author is deceased, date of his decease 7.
- 8 Whether the work is published or unpublished
- 9. Year and country of first publication and name, address and nationality of the publisher
- Years and countries of subsequent publications, if any, and names, addresses and nationalities of the publishers 10.
- Names, addresses and nationalities of the owners of various rights comprising the copyright in the work and the extent of rights held by each, together with particulars of assignments and licences, if any 11.
- 12. Names, addresses and nationalities of other persons, if any, authorised to assign or licence of rights comprising the copyright
- If the work is an 'Artistic work', the location of the original work, 13. including name, address and nationality of the person in possession of the work. (In the case of an architectural work, the year of completion of the work should also be shown).
- If the work is an 'Artistic work' which is used or capable of being used in relation to any goods or services, the application should include a certification from the Registrar of Trade Marks in terms of the provision to Sub-Section (i) of Section 45 of the Copyright Act, 1957. 14.
- 15. If the work is an 'Artistic work', whether it is registered under the Designs Act 2000 if yes give details.
- If the work is an 'Artistic work', capable of being registered as a design under the Designs Act 2000, whether it has been applied to an article though an industrial process and , if yes , the number of times it is reproduced. 16

17. Remarks, if any

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7847/2019-CO/L 23/05/2019

23/05/2019

#### L-84469/2019

PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, DNYANTEERTH NAGAR, KEGAON, SOLAPUR-PUNE NATIONAL HIGHWAY, SOLAPUR, MAHARASHTRA, INDIA-413255 INDIAN

OWNER

LITERARY/ DRAMATIC WORK

'PURSUING THE PAST' - EXCAVATION AT KARKAL (DIST: SOLAPUR, MAHARASHTRA)

ENGLISH

HISTORY, CULTURE & ARCHAEOLOGY,SCHOOL OF SOCIAL SCIENCES, PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, DNYANTEERTH NAGAR, KEGAON, SOLAPUR-PUNE NATIONAL HIGHWAY, SOLAPU-413255 INDIAN

UNPUBLISHED

N.A.

N.A

PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, DNYANTEERTH NAGAR, KEGAON, SOLAPUR-PUNE NATIONAL HIGHWAY, SOLAPUR, MAHARASHTRA, INDIA-413255 INDIAN

N.A

N.A

N.A

N.A

N.A

DEPUTY REGISTRAR OF COPYRIGHTS



G.A.R.6 [See Rule 22(1)] RECEIPT INTELLECTUAL PROPERTY INDIA PATENTSI DESIGNSI TRADE MARKS GEOGRAPHICAL INDICATIONS

Date/Time 2020/01/24 21:13:39

Userld: uguha

Controller General of Patents, Designs & Trade Marks

Docket No 4782

To USHOSHI GUHA

246 GANDHI NAGAR, OPP SHIVAJI SCETTING GROUND

### CBR Detail:

Sr. No.	Ref. No./Application No.	App. Number	Amount Paid	C.B.R. No.	Form Name	Remarks
1	R20202002635	202021003401	4000	1926	FORM 18	
2	202021003401	TEMP/E- 1/3614/2020- MUM	1600	1926	FORM 1	AN INTELLIGENT SYSTEM AND A METHOD FOR SYSTEMATIC DISTRIBUTION OF AGRICULTURAL GOODS
3	E- 12/131/2020/MUM	202021003401	2500	1926	FORM 9	

TransactionID	Payment Mode	Challan Identification Number	Amount Paid	Head of A/C No
N-0000607818	Online Bank Transfer	2401200007066	8100.00	1475001020000001

### Total Amount : DRs. 8100

Amount in Words: Rupees Eight Thousand One Hundred Only

Received from USHOSHI GUHA the sum of ₹ 8100 on account of Payment of fee for above mentioned Application/Forms. \* This is a computer generated receipt, hecnce no signature required.

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(19) INDIA



Controller General of Patents,Designs and Trademarks Department of Industrial Policy and Promotion Ministry of Commerce and Industry

### (12) PATENT APPLICATION PUBLICATION

(21) Application No. : 3390/MUM/2015

(22) Date of filing of Application :03/09/2015

(43) Publication Date : 18/09/2015 Journal No. - 38/2015

# (54) Title of the invention : ECOLOGICAL SANITATION APPROACH IN A CONSTRUCTED WETLAND USING ANGULAR HORIZONTAL SUBSURFACE FLOW AND ANGULAR HORIZONTAL SUBSURFACE ZIGZAG FLOW PILOT PLANT NOVEL MODELS

(51) International classification	:F01D 11/12	(71)Name of Applicant :
(31) Priority Document No	:NA	1)PROF. (DR). SATISH S. PATIL
(32) Priority Date	:NA	Address of Applicant :DEPARTMENT OF
(33) Name of priority country	:NA	ENVIRONMENTAL SCIENCE, DR. B.A.M.
(86) International Application No	:NA	UNIVERSITY, AURANGABAD Maharashtra
Filing Date	:NA	India
(87) International Publication No	: NA	2)VINAYAK POPAT DHULAP
(61) Patent of Addition to Application	·NIA	(72)Name of Inventor :
Number	.INA	1)PROF. (DR). SATISH S. PATIL (India)
Filing Date	INA	2)VINAYAK POPAT DHULAP (India)
(62) Divisional to Application Number	::NA	
Filing Date	:NA	

### (57) Abstract :

In one of the important aspect of the invention it is provided that a method for phytoremediation of waste water is provided, the macrophytes used for the purpose of the phytoremediation includes Typha latifolia, Cana indica, Phragmites karka, Colocasia esculenta, Pennisetum purpureium, Panicum maximum, Eichhornia crassipes which is grown in the flow bed; the flow bed is constructed according to fig.l having the layers of pebble, gravel and soil on the top on which the macrophytes is grown, the water flow through the inlet is regulated on the flow bed in angular or zigzag manner provided an appropriate time to residence so that the impurities present in the water is absorbed/ adsorbed on the flow bed, further to provide flow of water the flow be is provided predetermined angle to maintain the flow of waste water, the impurities present in untreated water and the treated water is determined in conventional manner;

Number of Pages = 35

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NTELLECTUAL PROPERTY INDIA ESIGNS   TRADE MARKS CAL INDICATIONS	सल्यांव ज GOVERNMEN	Controller General of Pater यते Department of Indu T OF INDIA Ministry	nts,Designs and Trademarks strial Policy and Promotion of Commerce and Industry
(12) PATENT APPLICATION PUBLICATIO	N	(21) Application No. : 201621010599	
(19) INDIA			
(22) Date of filing of Application :28/03/2016		(43) Publication Date : 13/05/2016 Journal No 20/2016	
THROUGH ANGULAR WITH ZIGZAG OR (	CIRCULAR HOF	AIZONTAL SUBSURFACE FLOW (AZHSSF) CONS	EIUM STRUCTED
(51) International absolution	CO2E2/20	(71)Name of Ambients	EIUM STRUCTED
(51) International classification (51) International classification (31) Priority Document No.	:C02F3/30	(71)Name of Applicant :	EIUM STRUCTED
(51) International classification (51) International classification (31) Priority Document No (32) Priority Date	CIRCULAR HOF :C02F3/30 :NA	(71)Name of Applicant : 1)PROF. (DR.) SATISH P. PATIL Address of Applicant :DEPARTMENT OF	EIUM STRUCTED
<ul> <li>(51) International classification</li> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> </ul>	CIRCULAR HOF :C02F3/30 :NA :NA :NA	(71)Name of Applicant : 1)PROF. (DR.) SATISH P. PATIL Address of Applicant :DEPARTMENT OF ENVIRONMENTAL SCIENCE, DR. B.A.M. UNIV	EIUM STRUCTED
<ul> <li>(51) International classification</li> <li>(51) International classification</li> <li>(51) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No</li> </ul>	:C02F3/30 :NA :NA :NA :NA :NA	(71)Name of Applicant : 1)PROF. (DR.) SATISH P. PATIL Address of Applicant :DEPARTMENT OF ENVIRONMENTAL SCIENCE, DR. B.A.M. UNIV AURANGABAD, MAHARASHTRA, INDIA. Maha	EUUM STRUCTED /ERSITY, urashtra
<ul> <li>(51) International classification</li> <li>(51) International classification</li> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> </ul>	:C02F3/30 :NA :NA :NA :NA :NA :NA :NA	<ul> <li>(71)Name of Applicant :</li> <li>(71)Name of Applicant :</li> <li>1)PROF. (DR.) SATISH P. PATIL Address of Applicant :DEPARTMENT OF ENVIRONMENTAL SCIENCE, DR. B.A.M. UNIV AURANGABAD, MAHARASHTRA, INDIA. Maha India</li> </ul>	EIUM STRUCTED /ERSITY, ırashtra
<ul> <li>(51) International classification</li> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> </ul>	:C02F3/30 :NA :NA :NA :NA :NA :NA :NA :NA :NA	<ul> <li>(71)Name of Applicant :</li> <li>(71)Name of Applicant :</li> <li>(71)PROF. (DR.) SATISH P. PATIL Address of Applicant :DEPARTMENT OF ENVIRONMENTAL SCIENCE, DR. B.A.M. UNIV AURANGABAD, MAHARASHTRA, INDIA. Maha India</li> <li>2)DR. VINAYAK POPAT DHULAP</li> </ul>	EIUM STRUCTED /ERSITY, rashtra
<ul> <li>(51) International classification</li> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number</li> </ul>	:C02F3/30 :NA :NA :NA :NA :NA :NA :NA :NA :NA :NA	<ul> <li>(71)Name of Applicant :</li> <li>(71)Name of Applicant :</li> <li>(71)PROF. (DR.) SATISH P. PATIL Address of Applicant :DEPARTMENT OF</li> <li>ENVIRONMENTAL SCIENCE, DR. B.A.M. UNIV AURANGABAD, MAHARASHTRA, INDIA. Maha India</li> <li>2)DR. VINAYAK POPAT DHULAP</li> <li>(72)Name of Inventor :</li> </ul>	EIUM STRUCTED /ERSITY, rashtra
<ul> <li>(51) International classification</li> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No <ul> <li>Filing Date</li> </ul> </li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number <ul> <li>Filing Date</li> </ul> </li> </ul>	:C02F3/30 :NA :NA :NA :NA :NA :NA :NA :NA :NA :NA	<ul> <li>(71)Name of Applicant :</li> <li>(71)Name of Applicant :</li> <li>(71)Name of Applicant :</li> <li>(71)PROF. (DR.) SATISH P. PATIL Address of Applicant :DEPARTMENT OF</li> <li>ENVIRONMENTAL SCIENCE, DR. B.A.M. UNIV AURANGABAD, MAHARASHTRA, INDIA. Maha India</li> <li>2)DR. VINAYAK POPAT DHULAP</li> <li>(72)Name of Inventor :</li> <li>1)PROF. (DR.) SATISH P. PATIL (India)</li> </ul>	EIUM STRUCTED /ERSITY, rashtra
<ul> <li>(51) International classification</li> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No <ul> <li>Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number</li> <li>Filing Date</li> <li>(62) Divisional to Application Number</li> </ul> </li> </ul>	:C02F3/30 :NA :NA :NA :NA :NA :NA :NA :NA :NA :NA	<ul> <li>(71)Name of Applicant :</li> <li>1)PROF. (DR.) SATISH P. PATIL Address of Applicant :DEPARTMENT OF ENVIRONMENTAL SCIENCE, DR. B.A.M. UNIV AURANGABAD, MAHARASHTRA, INDIA. Maha India</li> <li>2)DR. VINAYAK POPAT DHULAP</li> <li>(72)Name of Inventor :</li> <li>1)PROF. (DR.) SATISH P. PATIL (India)</li> <li>2)DR. VINAYAK POPAT DHULAP (India)</li> </ul>	EIUM STRUCTED /ERSITY, ırashtra

(57) Abstract :

In one of the important aspect of the invention it is provided that a method for phytoremediation of waste water is provided, the macrophytes used for the purpose of the phytoremediation includes Typha latifolia, Cana indica, Phragmites karka, Colocasia esculenta, Pennisetum purpureium, Panicum maximum, Eichhornia crassipes which is grown in the flow bed; the flow bed is constructed according to fig.l having the layers of pebble, gravel and soil on the top on which the macrophytes is grown, the water flow through the inlet is regulated on the flow bed in angular or zigzag manner provided an appropriate time to residence so that the impurities present in the water is absorbed/adsorbed on the flow bed, further to provide flow of water the flow be is provided predetermined angle to maintain the flow of waste water, the impurities present in untreated water and the treated water is determined in conventional manner;

Number of Pages = 36

Best View in Resolution of 1024x768 or later. Enable Javascript for Better Performance.



**IP** Australia

# CERTIFICATE OF GRANT INNOVATION PATENT

### Patent number: 2021102350

The Commissioner of Patents has granted the above patent on 16 June 2021, and certifies that the below particulars have been registered in the Register of Patents.

### Name and address of patentee(s):

Caroleena Ganesh Rane of Dept. of Chemistry, Jeevandeep College of Arts Science and Commerce, Goveli Thane, Maharashtra India

R. K. Seenivasan of Department of Chemistry, Government Arts College, Madurai Kamaraj University Melur Madurai, Tamilnadu 625106 India

Gaikar Vilas Bhau of Vice-Principal & Assoc. Prof. Economics, Smt. C. H. M. College, University of Mumbai Ulhasnagar Thane, Maharashtra 421003 India

Dipak Ramrao Tope of Department of Chemistry, HPT Arts and RYK Science College, (Savitribai Phule Pune University, Pune) Nashik Maharashtra 422005 India

D. Ragavan of Dept. of Chemistry, Raja Doraisingam Govt Arts College, (Alagappa University, Karaikudi) Sivagangai Tamilnadu India

Jaywant Ramdas Bhadane of Head, Dept. of Economics, Kar. Ramraoji Aher Arts, Science and Commerce College Deola Nashik, Maharashtra 423102 India

Rakesh Bharat Ghode of Asst. Professor in Economics, Kar. Ramraoji Aher Arts, Science and Commerce College Deola Nashik, Maharashtra 423102 India

Mukund G. Mali of Assistant professor, School of Chemical Sciences, PunyashlokAhilyadevi Holkar Solapur University, Kegaon, Solapur Maharashtra 413255 India

M. Muthaleswari of Department of Chemistry, Government Arts College for Women Ramanathapuram Tamilnadu 623501 India

A. Girija of Department of Chemistry, Velumanoharan Arts & Science College for, Women, (AlagappaUniversity) Marappalam Peravoor post, Ramanathpuram Tamilnadu 623504 India

### Title of invention:

A METHOD FOR INDUSTRIAL WASTE-WATER TREATMENT THROUGH UTILIZING LOW-COST ION EXCHANGERS

### Name of inventor(s):

Rane, Caroleena Ganesh; Seenivasan, R. K.; Bhau, Gaikar Vilas; Tope, Dipak Ramrao; Ragavan, D.; Bhadane, Jaywant Ramdas; Ghode, Rakesh Bharat; Mali, Mukund G.; Muthaleswari, M. and Girija, A.

### Term of Patent:

Eight years from 4 May 2021



Dated this 16<sup>th</sup> day of June 2021

**Commissioner of Patents**