



**INTELLECTUAL
PROPERTY INDIA**
PATENTS | DESIGNS | TRADE MARKS
GEOGRAPHICAL INDICATIONS



सत्यमेव जयते

भारत सरकार
GOVERNMENT OF INDIA

पेटेंट कार्यालय
THE PATENT OFFICE

पेटेंट प्रमाणपत्र
PATENT CERTIFICATE
(Rule 74 Of The Patents Rules)

फ़ार्मक : 022106609
SL No :



पेटेंट सं. / Patent No. : 325554
आवेदन सं. / Application No. : 201721040727
फाइल करने की तारीख / Date of Filing : 15/11/2017
पेटेंटी / Patentee : MGM Institute Of Health Sciences (MGMIHS), Deemed University u/s 3 of UGC Act, 1956

प्रमाणित किया जाता है कि पेटेंटी को उपरोक्त आवेदन में प्रकाशित QUANTUM DOT POWERED IP-10 ANTIBODY BASED KIT FOR LATENT TB AND TB ANTIGEN DETECTION नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख 15th day of November 2017 से बीस वर्ष की अवधि के लिए पेटेंट अनुदान किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled QUANTUM DOT POWERED IP-10 ANTIBODY BASED KIT FOR LATENT TB AND TB ANTIGEN DETECTION as disclosed in the above mentioned application for the term of 20 years from the 15th day of November 2017 in accordance with the provisions of the Patents Act,1970.

**INTELLECTUAL
PROPERTY INDIA**
PATENTS | DESIGNS | TRADE MARKS
GEOGRAPHICAL INDICATION



अनुदान की तारीख : 22/11/2019
Date of Grant :

OK Gupta
पेटेंट नियंत्रक
Controller of Patent

टिप्पणी - इस पेटेंट के नवीकरण के लिए फीस, यदि इसे बनाए रखा जाना है, 15th day of November 2019 को और उसके बाद हर वर्ष में जारी किए गए लेगी।
Note - The fees for renewal of this patent, if it is to be maintained will fall / has fallen due on 15th day of November 2019 and on the same day in every year thereafter.

(12) PATENT APPLICATION PUBLICATION

(21) Application No.1948/MUM/2015 A

(19) INDIA

(22) Date of filing of Application :18/05/2015

(43) Publication Date : 05/06/2015

(54) Title of the invention : METHOD FOR THE SYNTHESIS OF BIFUNCTIONAL CERIUM OXIDE NANOPARTICLE WITH ENHANCED ANTIOXIDANT AND CARBONIC ANHYDRASE INHIBITORY ACTIVITY

(51) International classification :A61K33/24,A61K9/51
(31) Priority Document No :NA
(32) Priority Date :NA
(33) Name of priority country :NA
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)Name of Applicant :

1)MGM Institute Of Health Sciences (MGMIHS)
Address of Applicant :Sector -1, Kamothe, Navi Mumbai-410209, MAHARASHTRA, INDIA.

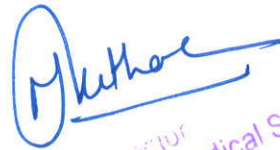
(72)Name of Inventor :

1)YADAV, Raman Prasad
2)KADAM, Sudhirchandra Nanasaheb
3)BHAGIT, Amita Anant
4)MHATRE, Sveeta Vishnu

(57) Abstract :

The present invention discloses a method for synthesis of cerium oxide nanoparticles (CeO₂NP) with highly efficient anti-oxidant property and carbonic anhydrase inhibitory activity by subjecting the cerium oxide solution to aqueous extract of Cicer arietinum plants or proteome of Cicer arietinum .These bifunctional cerium nanoparticles thus produced find potential applications in various domains of biomedical applications especially in ocular disease.

No. of Pages : 26 No. of Claims : 10



Director
MGM School of Biomedical Science
Kamothe, Navi Mumbai

(12) PATENT APPLICATION PUBLICATION

(21) Application No.1949/MUM/2015 A

(19) INDIA

(22) Date of filing of Application :18/05/2015

(43) Publication Date : 05/06/2015

(54) Title of the invention : PREPARATION COMPRISING A PANCREATIC LIPASE INHIBITORY FRACTION AN ANTI-OBESITY PRINCIPLE OBTAINED FROM DIETARY SPICE MESUA FERREA

(51) International classification

:A61K36/00,
A61K9/00

(31) Priority Document No

:NA

(32) Priority Date

:NA

(33) Name of priority country

:NA

(86) International Application No

:NA

Filing Date

:NA

(87) International Publication No

: NA

(61) Patent of Addition to Application Number

:NA

Filing Date

:NA

(62) Divisional to Application Number

:NA

Filing Date

:NA

(71)Name of Applicant :

1)MGM Institute Of Health Sciences (MGMIHS)

Address of Applicant :Sector -1, Kamothe, Navi Mumbai-410209, MAHARASHTRA, INDIA.

(72)Name of Inventor :

1)YADAV, Raman Prasad

2)KADAM, Sudhirchandra Nanasaheb


3)MHATRE, Sveceta Vishnu

4)BHAGIT, Amita Anant

(57) Abstract :

The present invention discloses herbal preparation/compositions comprising methanolic extract/fractions of Mesua ferrea having pancreatic lipase inhibitory activity, useful for the treatment/management of obesity and associated conditions. The invention further relates to process for preparing such extracts and fractions comprising pancreatic lipase inhibitory activity.

No. of Pages : 21 No. of Claims : 9


Director
MGM School of Biomedical Science
Kamothe, Navi Mumbai

(12) PATENT APPLICATION PUBLICATION

(21) Application No.2685/MUM/2015 A

(19) INDIA

(22) Date of filing of Application :15/07/2015

(43) Publication Date : 31/07/2015


(54) Title of the invention : BIOGENIC METHOD FOR GENERATION OF MONODISPERSE AND FLUORESCENT CERIUM OXIDE NANOPARTICLES WITH ENHANCED ANTIOXIDANT ACTIVITY

(51) International classification	:A61K35/12, A61K33/24, A61K9/14	(71)Name of Applicant : 1)MGM Institute Of Health Sciences (MGMIHS), Deemed University u/s 3 of UGC Act, 1956 Address of Applicant :Sector -1, Kamothe, Navi Mumbai- 410209, MAHARASHTRA, INDIA.
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	1)YADAV, Raman Prasad
(33) Name of priority country	:NA	2)KADAM, Sudhirchandra Nanasaheb
(86) International Application No	:NA	3)BHAGIT, Amita Anant
Filing Date	:NA	4)MHATRE, Sveeta Vishnu
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention disclose a very simple method for the synthesis of bioactive monodispersed cerium oxide fluorescent nanoparticles (quantum dots)/nanoparticles using aqueous extract of Justicia adhatoda leaf under mild environment at ambient temperature. The synthesis of cerium oxide fluorescent nanoparticles (quantum dots) generated by this method were found to be in the range of 2-4 nm in size characterized by transmission electron microscopy (TEM). Extraordinary monodispersity of cerium oxide fluorescent nanoparticles (quantum dots) was observed. Generated cerium oxide fluorescent nanoparticles (quantum dots) showed enhanced antioxidant activity and also mimic catalase which can be utilized in various domains of biomedical applications including diagnostics.

No. of Pages : 30 No. of Claims : 10


-Director
MGM School of Biomedical Science
Kamothe, Navi Mumbai

(12) PATENT APPLICATION PUBLICATION

(21) Application No.3616/MUM/2015 A

(19) INDIA

(22) Date of filing of Application :23/09/2015

(43) Publication Date : 09/10/2015

(54) Title of the invention : BIOGENIC METHOD FOR GENERATION OF MULTIPLE NANOPARTICLES (ZN, FE, MG, CA, CE, SI, AG)

(51) International classification

:A61K
31/74

(31) Priority Document No

:NA

(32) Priority Date

:NA

(33) Name of priority country

:NA

(86) International Application No

:NA

Filing Date

:NA

(87) International Publication No

:NA

(61) Patent of Addition to Application Number

:NA

Filing Date

:NA

(62) Divisional to Application Number

:NA

Filing Date

:NA

(71)Name of Applicant :

**1)MGM Institute Of Health Sciences (MGMIHS), Deemed
University u/s 3 of UGC Act, 1956**

Address of Applicant :Sector -1, Kamothe, Navi Mumbai-
410209, Maharashtra, India. Maharashtra India

(72)Name of Inventor :

1)YADAV, Raman Prasad

2)KADAM, Sudhirchandra Nanasaheb


3)BHAGIT, Amita Anant

4)MHATRE, Sveeta Vishnu

(57) Abstract :

The present invention disclose a simple biogenic method for the synthesis of multiple nanoparticles(Fe, Mg, Ca, Ag) and Zn, Ce, Si (quantum dots)/nanoparticles using aqueous extract of Cajanus cajan leaf under mild environment at ambient temperature. The sizes of synthesized nanoparticles which include quantum dots generated by this method were characterized by transmission electron microscopy (TEM). The generated nanoparticles reaction mixture including quantum dots showed enhanced antioxidant activity as compared to extract of Cajanus cajan most probably due to formation of antioxidant nanoparticles. The synthesized quantum dots also mimic catalase and hence can be utilized in various domains of biomedical applications including diagnostics.

No. of Pages : 46 No. of Claims : 11


Director
MGM School of Biomedical Science
Kamothe, Navi Mumbai

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201721018037 A

(19) INDIA

(22) Date of filing of Application :23/05/2017

(43) Publication Date : 16/06/2017

(54) Title of the invention : BIOREACTOR FOR VERY FAST GENERATION OF MULTIFUNCTIONAL FLUORESCENT NAN PARTICLES•

(51) International classification

:B82Y

5/00

(31) Priority Document No

:NA

(32) Priority Date

:NA

(33) Name of priority countr

:NA

(86) International Application No

:NA

Filing Date

:NA

(87) International Publication No

: NA

(61) Patent of Addition to Application Number

:NA

Filing Date

:NA

(62) Divisional to Application Number

:NA

Filing Date

:NA

(71)Name of Applicant :

1)MGM Institute Of Health Sciences (MGMIHS), Deemed

University u/s 3 of UGC Act, 1956

Address of Applicant :Sector -1, Kamothe, Navi Mumbai-
410209, Maharashtra, India. Maharashtra India

(72)Name of Inventor :

1)YADAV, Raman Prasad

2)KADAM, Sudhirchandra Nanasaheb

3)BHAGIT, Amita Anant

(57) Abstract :

BIOREACTOR FOR VERY FAST GENERATION OF MULTIFUNCTIONAL FLUORESCENT NANOPARTICLES•

ABSTRACT The invention discloses plant protein/proteome of *Cajanus cajan* beads/matrix which comprises protein/proteome of *Cajanus cajan* immobilized on inert matrix/entrapped in inert matrix selected from the group consisting of calcium alginate, river sand or any other suitable matrix that can entrap the plant protein. The invention further discloses a bioreactor which comprises an apparatus having a controlled inlet and outlet system packed with plant protein/proteome of *Cajanus cajan* beads for use in the faster generation of multifunctional silicon dioxide, zinc sulfide fluorescent nanoparticles (quantum dots) which can be utilized in various domains of biomedical applications including diagnostics. The invention also discloses method of producing metal nanoparticles using the bioreactor of the invention.

No. of Pages : 55 No. of Claims : 16


•Director
MGM School of Biomedical Science
Kamothe, Navi Mumbai

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201721040727 A

(19) INDIA

(22) Date of filing of Application :15/11/2017

(43) Publication Date : 01/12/2017


(54) Title of the invention : QUANTUM DOT POWERED IP-10 ANTIBODY BASED KIT FOR LATENT TB AND TB ANTIGEN DETECTION

(51) International classification	:C07K 16/00	(71)Name of Applicant :
(31) Priority Document No	:NA	1)MGM Institute Of Health Sciences (MGMIHS), Deemed University u/s 3 of UGC Act, 1956
(32) Priority Date	:NA	Address of Applicant :Sector -1, Kamothe, Navi Mumbai-
(33) Name of priority country	:NA	410209, Maharashtra, India Maharashtra India
(86) International Application No	:NA	(72)Name of Inventor :
Filing Date	:NA	1)YADAV, Raman Prasad
(87) International Publication No	: NA	2)KADAM, Sudhirchandra Nanasaheb
(61) Patent of Addition to Application Number	:NA	3)KADAM, Nitin Nanasaheb
Filing Date	:NA	4)BHAGIT, Amita Anant
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides an antibody quantum dot complex comprising Mycobacterium tuberculosis anti-IP10 antibody and biogenic quantum dots for detection of Latent tuberculosis (LTB) antigens and TB antigens and a process for the synthesis thereof. Further, the present invention provides a diagnostic kit comprising the anti-IP10 antibody for detection of LTBI antigens and active tuberculosis antigens, and a method of assaying the concentration of the M. tuberculosis IP-10 antigen in an individual recovering from tuberculosis or exhibiting symptoms thereof.

No. of Pages : 31 No. of Claims : 15


Director
MGM School of Biomedical Science
Kamothe, Navi Mumbai