



**ANNUAL REPORT ON SDG 9**  
**LINCOLN UNIVERSITY COLLEGE**  
**MALAYSIA**  
**2023**



**Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation**

Lincoln University College (LUC) has invested in a plethora of scientific and research and innovation activities to facilitate sustainable and resilient infrastructure development among the university staff and students through enhanced financial, technological and technical support. LUC also committed to promote foster innovation among the local community as well. The researchers of Lincoln University College have conducted a number of research projects related to SDG 9 (Industry, Innovation & Infrastructure) and results of the projects have also been published as research papers in various international reputed peer reviewed and Scopus indexed journals. The summary of the research publications related to SDG 9 are given below:

**Waste-derived Stable Carbon Electrodes for Capacitive Deionization Using Poly (vinyl alcohol)-Glutaraldehyde as Binde**

<https://link.springer.com/article/10.1007/s13399-023-04982-4#citeas>

**Analysing Economic Feasibility of Recycling End-of-Life Solar Photovoltaic Modules of Bangladesh**

<https://link.springer.com/article/10.1007/s10098-023-02613-0>

**Study on Particle Size and Field Effect with sp<sup>2</sup>/sp<sup>3</sup> Ratio of Hydrogenated Diamond-like Carbon**

<https://www.icevirtuallibrary.com/doi/10.1680/jnaen.23.00065>

**Predictive Diagnosis through Data Mining for Cancer Detection and Treatment**

<http://www.onomazein.com/index.php/onom/article/view/126>

**Comparison of the Number of Bacterial Colonies Before and After the Use of Natural Hand Sanitizers Mixed With Betel Leaf Decoction (Piper Batle L) and Lemongrass (Cymbopogon Nardus L)**

**Retraction Note: A Meta-Heuristic Multiple Ensemble Load Balancing Framework for Real-Time Multi-Task Cloud Scheduling Process**

<https://www.scopus.com/record/display.uri?eid=2-s2.0-85139712973&doi=10.1007%2fs13198-022-01779-y&origin=inward&txGid=1a36d3e9c16a69cf8cdb7d64d5567431>

**Medchain for Securing Data in Decentralized Healthcare System Using Dynamic Smart Contracts**

[https://www.scopus.com/record/display.uri?eid=2-s2.0-85135864825&doi=10.1007%2f978-3-031-12413-6\\_45&origin=inward&txGid=9be559a20788912c27c242ba9e28f724](https://www.scopus.com/record/display.uri?eid=2-s2.0-85135864825&doi=10.1007%2f978-3-031-12413-6_45&origin=inward&txGid=9be559a20788912c27c242ba9e28f724)

## FILLED AND GRANTED PATENTS

Lincoln University College have patents as the outcome of the research findings with respective to innovation and infrastructure. Some of the patents filled and granted are as follows.

Title : Virzicaine Gel

5/16/23, 9:33 AM ipindiaservices.gov.in/VerifyChkCert.aspx?pm1=FzcJYOYg6oleyk7gV58IQ==&pm2=W56CYEXULZRD1HcRXZ7SQ==&pm3=r...




**Application Filing Receipt**

**Government of India  
Patent Office**  
Intellectual Property Office Building,  
CP-2, Sector V, Salt Lake City,  
Kolkata- 700091  
Phone- 033-2367145-46,87  
Fax: 033-2367198  
e-mail: kolkata-patent@nic.in

**CBR Number : 4166**      **CBR date: 14-03-2023**

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

To,  
LINCOLN UNIVERSITY COLLEGE  
C/O MR. SRIKRISHNA BANERJEE 19/1, P.C. BANERJEE ROAD, DAKSHINESWAR, KOLKATA-700076

Received documents purporting to be an application for patent numbered 202331016941 dated 14-03-2023 by LINCOLN UNIVERSITY COLLEGE of 19/1, P.C. BANERJEE ROAD, DAKSHINESWAR, KOLKATA-700076 relating to VIRZICAINE GEL together with the Complete and fee(s) of ₹1750 (One Thousand Seven Hundred & Fifty only).

**Note:**

- 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.
- You may withdraw the application at any time before the grant of patent, if you wish so. If in addition to withdrawal, you also wish to prevent the publication of application in the Patent Office Journal, the application should be withdrawn within fifteen months from the date of priority date of filing, whichever is earlier.
- If not withdrawn, your application will be published in the Patent Office Journal after eighteen months from the date of priority date of filing, whichever is earlier.
- If you wish 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 11B(4) of the Patent Act, 1970.

(For Controller of Patents)

Application No.: 202331016941

Filing Date : 14/03/2023

Country : India

Applicant-Lincoln  
University College

Inventors & Applicant  
Name : Natarajan  
Kannan, Amiya Bhaumik,  
Sandeep Poddar

Status : Submitted

Title : A Novel Study of  
Psychological Problems of  
Students at Primary Level

Application No.:  
202311013843 A

Filing Date : 01/03/2023

Country : India

Inventors & Applicant Name : Prof(Dr.) Nidhi Agarwal, Dr. Judith J. Sugay, Christian Jay L. Subaste, Dr. Jocelyn B. Hipona, Dr. Maria Teresa R. Fajardo

Published Date :17/03/2023

(12) PATENT APPLICATION PUBLICATION	(21) Application No.:202341023886 A
(19) INDIA	
(22) Date of filing of Application :30/03/2023	(43) Publication Date : 07/04/2023
(54) Title of the invention : IDENTIFICATION OF LEARNING STYLE USING AI FOR PERSONALIZED LEARNING PLAN	
(51) International classification :A61B 341000, G06N 070000, G06Q 502000, G10L 150600, G10L 150700	(71)Name of Applicant : 1)Prof (Dr) NIDHI AGARWAL Address of Applicant :Professor Lincoln university College S56/12 Petaling Jaya Selangor Malaysia ----- 2)DR. JOCELYN B. HIPONA 3)Dr. Maria Teresa R. Fajardo 4)DR. QUIJENCIO, WILFREDO 5)Dr. Alfonso, Anna Liza R.
(86) International Application No :NA	Name of Applicant : NA
Filing Date :01/01/1900	(72)Name of Inventor : 1)Prof (Dr) NIDHI AGARWAL Address of Applicant :Professor Lincoln university College S56/12 Petaling Jaya Selangor Malaysia ----- 2)DR. JOCELYN B. HIPONA Address of Applicant :Associate professor Mariano Marcos State University Faculty, College of Health Sciences Philippines ----- 3)Dr. Maria Teresa R. Fajardo Address of Applicant :PHINMA Education Dean, College of Allied Health Sciences Philippines ----- 4)DR. QUIJENCIO, WILFREDO Address of Applicant :Faculty institute of Nursing Far eastern University Manila, Philippines ----- 5)Dr. Alfonso, Anna Liza R. Address of Applicant :Faculty Institute of Nursing Far eastern University Manila, Philippines -----
(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 : Personalized learning with AI is a technique that concentrates on improves productivity to meet the specific needs of each student. One way to see its full potential is by means of the lens of customised training. Customized education is an educational process that is personalised to each student's specific needs. On a very basic level, each style of learning defines the kind of learning it reflects. Visual learners learn best by seeing, Auditory learners learn best by hearing or speaking, Reading/Writing learners learn best by	

Status : Published

Title : Identification of Learning Style Using Ai for Personalized Learning Plan

Application No.: 02341023886 A

Filing Date : 03/03/2023

Country : India

Inventors & Applicant Name : Prof. (Dr.) Nidhi Agarwal, Dr. Jocelyn B. Hipona, Dr. Maria Teresa R. Fajardo, Dr. Quijencio, Wilfredo, Dr. Alfonso, Anna Liza R

Published Date : 07/04/2023

Application Details	
APPLICATION NUMBER	202011055450
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	21/12/2020
APPLICANT NAME	1 . DR. PARSUN CHAKRABARTI 2 . DR. SUBHRENDU GUHA NEOGI 3 . DR. TULIKA CHAKRABARTI 4 . DR. RICHA MISHRA 5 . DR. BUI THANH HUNG 6 . DR. UTKU KOSE 7 . SENA CELIK GORAL 8 . DR. FAPIYA DEBNATH 9 . DR. PINAKI PRATIM ACHARIYA 10 . DR. M MADHUSUDHANA SUBRAMANYAM 11 . ROHINI NAVNATH TEMKAR 12 . AMIT GUPTA 13 . DR. SANDEEP PODDAR 14 . DR. AYIJIT BHOWMICK 15 . DR. SYED KHASIM 16 . DR. SHILADITYA PUJARI
TITLE OF INVENTION	METHODS TO COMPUTE HUMAR THOUGHT PROCESS AND DISORDER
FIELD OF INVENTION	COMPUTER SCIENCE
E-MAIL (As Per Record)	
ADDITIONAL-EMAIL (As Per Record)	drprasun.cse@gmail.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	24/06/2022

Status : Published