# A County Oniversity.

SILCHAR : ASSAM : INDIA

(A Central University Constituted By an Act of Parliament)

### DOCTOR OF PHILOSOPHY

	This is to certify that
DEBAJYOTI MISA	<b>M</b>
bearing University Registration No. 43-150	0078348 of 2015-2016
was admitted to the Degree of Do	octor of Philosophy in
Electronics & Communication Engineering under	Triguna Sen School
of Technology	having qualified for
the same on 27.07.2021	
The Degree is conferred in the 19th Con	vocation of the University
held on	
Given under the seal of Assam University t	his 5th day of <u>May</u>
2022	
	Leine
Silchar, Assam (India)	Vice Chancellor

<sup>•</sup> The Degree is awarded in accordance with the UGC Regulations-2009 for Ph.D / M.Phil

# EAE STAN

This is to certify that

### **DIA GHOSH**

obtain	red the degree	e of <b>Doctor</b> of	Philosophy
in	Radio Phys	ics and Electronics	_ under the
Facus	lty of	Technology	of
this C	University is	n the year 2022.	a and a second
Admi	itted to the de	September	r 20, 2022

Senate House,

January 18, 2023

Asis Kumar Chattapadlyy

Vice-Chancellor.



सीनेट की अनुशंसा पर

### भारतीय अभियांत्रिकी विज्ञान एवं प्रौद्योगिकी संस्थान, शिबपुर

का शासी मंडल

### मानस कुमार पराई

co

इंजीनियरिंग

H

### डॉक्टर ऑफ फिलॉसफी

की उपाधि प्रदान करता है।

इन्होने नियमों के तहत 22 नवंबर 2022 में निर्धारित पाठ्यक्रम सफलतापूर्वक पूरा कर लिया है। भारतीय गणराज्य के अंतर्गत शिबपुर में यह संस्थान-मुद्धांकित उपाधि आज दिनांक 16 दिसंबर 2022 को प्रदान की गई।

### The Board of Governors

of the

### Indian Institute of Engineering Science and Technology, Shibpur

upon the recommendation of the Senate hereby confers the degree of

Doctor of Philosophy

in

Engineering

on

### Manas Kumar Larai

on his having successfully completed the prescribed requirements of the degree on November 22. 2022

Given this day, under the seal of the Institute, at Shibpur in the Republic of India, the 16th day of December 2022.

कुलसचिव Registrar



निर्देशक पुर्व अध्यक्ष, सीनेट Director and Chairman, Senate



University of Carcuita

Senate Heuse 87/1, College Street Kolkata - 700 073

Phone: +91-33-2241-0071/4984 Fax: +91-33-2241-3222/88

eMail: phdcaluni@yahoo.co.iii

Dated: 8th February 2023

Letter: 00956/Ph.D.(Tech.)

To **Sri Asit Barman** Vill.-Rangamati, PO-Ramthenga, via-Falakata, Dist.-Coochbehar, Pin-735211.

Dear Sir,

I am to inform you that on the recommendation of the Board of Examiners on their adjudication of the undernoted thesis submitted by you for the Ph.D.(Tech.) Degree of this University in terms of 6.6 Regulation for the Degree of Doctor of Philosophy (Ph.D.), C.U., framed under UGC Guidelines, 2016, and on the results of the viva-voce examination, you have been admitted to the aforescial degree on February 8, 2023 in Information Technology.

Yours faith, ully,

Debasio Din 02 Registrar 08 2023

Title of Thesis: Some Studies On Human Emotion Recognition From Face Images.

Ant 2/04/23



### राष्ट्रीय प्रौद्योगिकी संस्थान मिजोरम NATIONAL INSTITUTE OF TECHNOLOGY MIZORAM (An Institution of National Importance under Ministry of Education, Gov.L of India)

CHALTLANG, AIZAWL, MIZORAM-79601Z

### PROVISIONAL CERTIFICATE

for

Degree of Doctor of Philosophy (Ph.D.)

This is to certify that Mr. Dipankar Saha bearing Enrollment No.:

DT17ME006 has submitted the thesis entitled, "Assessing the Potential of
Emulsified Plastic Oil for CI Engine with Emphasis on Performance
Improvement and Emission Reduction".

He has successfully completed all prescribed requirements for the award of Degree of Doctor of Philosophy (Ph.D.) in Mechanical Engineering.

He appeared before the Oral Examination Board constituted as per Regulations of the Institute on 12.05.2023.

The Degree shall, however, be conferred at the next Convocation of this Institute upon the recommendation of Senate and with the approval of the Board of Governors.

Date: 26 May. 2023

Registrar

N.B: This Provisional Certificate is valid till the degree is awarded

Air MS TI. 187. TI. 187. TI. 187.

2000 100 Boy on 02/0



Certified that

### Asit Aich

was admitted to the Degree of Boctor of Philosophy in Engineering of this University on 28.08.2018 and that the degree was conferred on him her at the Convocation held in December 2018 with all the Rights and Privileges thereto appertaining.

In Wilness whereof the Signature of the Vice-Chancellor of

Indaupur University is hereunto affixed.

JADAVPUR UNIVERSITY The 24th Documber, 2018





Sularjan De Vice-Chancellor

Asil-1

### राष्ट्रीय प्रौद्योगिकी संस्थान पटना National Institute of Technology Patna



SI No.

001515

अभिषद् की अनुशंसा पर विश्वाजित राय को निर्धारित अर्हताएँ सफलतापूर्वक पूर्ण करने पर

विद्या वाचस्पति संगणक विज्ञान एवं अभियांत्रिकी की उपाधि आज दिनांक २५ दिसम्बर २०२१ को प्रदान की गई।

शोध प्रबन्ध शीर्षकः मशीन लर्निंग फॉर रेनफॉल-रनऑफ मॉइलिंग युजिंग ऑस्ट्रिमाइजेशन टेपिनक्स्

> On the recommendation of the senate BISHWAJIT ROY

having successfully completed the prescribed requirements of

Doctor of Philosophy

Computer Science & Engineering

is being awarded the Degree on this day of 25th of December 2021.

Thesis Title: Machine Learning for Rainfall-Runoff Modeling using Optimization Techniques

निदेशक एवं अध्यक्ष, अस्मिद् Director & Chairman, Senate

State, Huide tied Chalman Board of Governors



### भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

धनबाद -826004 झारखंड, भारत DHANBAD-826004, JHARKHAND, INDIA

No. 2123/EXAM/2199/PhD/CSE/PKR/22

Dated: 08.06.2023

### PROVISIONAL CERTIFICATE

This is to certify that Prasanta Kumar Roy (Regn. No. 18DR0099) successfully passed the viva-voce examination on 29.05.2023 and fulfills the requirement(s) for the award of Doctor of Philosophy (Ph. D.) Degree on the basis of thesis entitled "DESIGN AND ANALYSIS OF AUTHENTICATION PROTOCOLS FOR HETEROGENEOUS SCENARIOS OF LOCATION-BASED SERVICES" submitted under the guidance of Prof. Ansuman Bhattacharya (Guide); Indian Institute of Technology (Indian School of Mines), Dhanbad vide result notification No. Exam/219905/Ex.Bd/2007-08 (Vol. III) dated 08.06.2023.

Peputy Registrar (Academic) उप कुलसचिव (शैक्षणिक)

भारतीय प्रोधोगिकी संस्थान (भारतीय खनि विधापीठ), धनवाद Deputy Registrar (Academic)

INDIAN DISTITUTE OF TECHNOLOGY (NDIAN SCHOOL OF MINES), DRANBAD

Congo Marions 11.

### BENGAL OF NORTH UNIVERSITY

Accredited by NAAC with Grade A

Deputy Registrar Raja Rammohunpur P.O. North Bengal University Dist. Darjeeling, West Bengal PIN 734 013



Phone: (0)153) 2776331172699099 (6) (0353) 2776313, 2699061

Visit os at a http://www.neurac.in fimall - regaminanta ac in

rounbucosmeharrest.in regintrophdzianou se in

Date: 16/03/2021

No. Ph.D/Chem. / 3/3 /R-2021

### PROVISIONAL CERTIFICATE

To. Sri Rabindranath Singha, C/o. Prof. P. Ghosh, Dept. of Chemistry, NBU.

Sir.

This is to certify that based on adjudication reports of the Board of Examiners, and on the basis of the recommendation of Board of examiners on the Viva-voce Examinations of the undernoted thesis, you have been awarded the Degree of Doctor of Philosophy in Chemistry (Faculty of Science) of University of North Bengal on 15/03/2021 as per UGC Regulations, 2009 relating to Ph.D. and in accordance with the provisions of the Ordinances of the University relating to Ph.D.

You shall be provided with the ceremonial certificate in the immediately next Convocation of the University.

Yours faithfully,

### TITLE OF THE THESIS:

"Chemical transformation of Carbocyclic Compounds and Development of Novel Reaction Protocols"

Deputy Registrar

University of North Bengal

Let attested by Rabindranath, Singly

### Indian Institute of Technology Bhubaneswar





upon the recommendation of the Senate hereby confers the degree of

### **Doctor of Philosophy**

in

### **Basic Sciences (Mathematics)**

OI

### Samit Ghosh

for his research work on

"A Numerical Investigation of Fully Non-Linear Magnetohydrodynamic Flows with Heat Transfer around Bluff Bodies"

Given under the seal of the Institute at Bhubaneswar on

the twentieth day of October, two thousand and twenty one

Registrar Rahi

Minay

GU-P-A 051549

GU-P-A 051549

Doctor of Philosophy(Ph.D.), 2018 (Provisional Certificate)

This is to certify that

Debasmriti Bhattacharjee

(Registration No 005089 of 2003-04)

qualified for the Degree of Doctor of Thilosophy

(Th.D.) of this University in the faculty of

Science (Mathematics) in the year 2018 for

his/her thesis - A Graph Theoretic Terspective on

Teriodicity and Limit cycle Behaviour of some

Nonlinear Systems.

Gopinath Bardoloi Nagar Guwahati - 781014 (Assam) Registrar

### Indian Institute of Technology Kharagpur

Upon the recommendation of the Senate hereby confers the degree of

### Doctor of Philosophy

on

### Susanta Kumar Saha

who has successfully completed the prescribed requirements in the Department of Chemistry

Given under the seal of the Institute at Kharagpur in the Republic of India on the Fifteenth day of June, One thousand nine hundred and ninetysix.

Shandle Registrar Director

09 OF NORTH BENEVILLE



ENLIGHTENMENT TO PERFECTION Accredited by NAAC with 'A' Grade

This is to certify that

Jayanta Dutta

obtained the

Degree of Doctor of Philosophy (Science) in Computer Science & Application from this University in the year 2016 according to the U.G.C. Regulations 2009.

The Title of his, her Ph.D. thesis is

"Computational aspects of some mathematical and numerical problems"

Raja Rammohunpur

Darjeeling 734013 June 02, 2017

Somnath - Ghish Vice Chancellor

I Injugacity of North Rangal



Certified that

### Manas Saha

was admitted to the Degree of Boctor of Philozophy in Engineering of this University on 24.10.2017 and that the degree was conferred on him her at the Convocation held in December 2017 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of Indupur University is hereunto affixed.

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JADAVPUR UNIVERSITY The 24th December, 2017



Swanjan Das Vice-Chancellor Arither dity Of North Bensel



This is to	certify that Banani Adhikari
has this do	ay been admitted to the degree of Doctor of Philosophy
(Ph.D.)	in
Science	in recognition of the thesis,
	"STUDY OF PHYSICAL PROPERTIES OF SOME LIQUID
	CRYSTALS - HAVING NEMATIC AND SMECTIC PHASES ".

Raja Rammohunpur Dist. Darjeeling

The 15th March, 1997.

R. G. Muraj Vice-Chancellor

### UNIVERSITY OF NORTH BENGAL



REGISTRAR (Offg.)

**Enlightenment to Perfection** 

Phone: (0353) 2699-008 (office) Fax: (0353) 2776-313 Visit us at http://www.nbu.ac.in e-mail: regnbu@sancharnet.in

regnbu@nbu.ac.in

P.O.North Bengal University Raja Rammohunpur, Dt. Darjeeling West Bengal, India, PIN – 734 013

Date: 23/11/2015

Ref. No. Ph.D/ 2073 /R-2015

### TO WHOM IT MAY CONCERN

This is to certify that **Sri Shuvendu Dey** has been admitted to the Ph.D. (**Commerce**) Degree in **Commerce** (as per New Ordinances) (framed as per UGC regulation, 2009) as per decision of the Executive Council, University of North Bengal held on 15/10/2015. The title of his thesis is "Store Loyalty Behavior of Urban Shoppers: A Comparative Study between Organized and Unorganized Retail". This provisional certificate is being issued as the Annual Convocation for the year 2016 is yet to take place.

Registrar (Offg.)



### MIZORAM UNIVERSITY मिज़ोरम विश्वविद्यालय

A Central University Established by Parliament Act No 8 of 2000

### विद्या वाचस्पति

**अभियांत्रिकी** विषय में विद्या वाचस्पति की उपाधि (यू.जी.सी. एम.फिल./ पीएच.डी. उपाधि के लिए न्यूनतम मानक प्रमाणित किया जाता है कि श्री/श्रीमती/कु. सुदीप कुमार घोष पंजीयन संख्या 1702110 ने वर्ष 2022 में इस विश्वविद्यालय के अभियांत्रिकी तथा प्रोद्योगिकी संकाय के अंतर्गत इलेक्ट्रोनिक और सूचना एवं प्रक्रिया) विनियम, 2016 के अनुरूप प्राप्त की।

# DOCTOR OF PHILOSOPHY

has obtained the Degree of Doctor of Philosophy in Electronics & Communication Engineering This is to certify that Shri/Smt/Kum. Sudip Kumar Ghosh bearing Registration Ro 1702110 शोध प्रबंध का शीर्षक/ Title of Thesis: Qualitative and Quantitative Analysis on some Characteristics of under the School of Engineering & Technology in this University in the pear 2022 as per USC (Minimum Standards and Procedure for Award of M. Phil. / Ph.B. Begrees) Regulations, 2016 Circular Sector Microstrip Antennas

Sl. No/ 京. 75

आइज़ोल/धां३abl

दिनांक/Bate: 30% अक्रु से 2022

कुलपति/भांce Chancellor Mess x