



Heritage Institute of Technology

(An Autonomous Institution)

Ph.D. Certificates

University of Kalyani

Kalyani-741235, Nadia, West Bengal



Prof Debansu Ray
Registrar

Phone : (O) 2582-8750/8378/8293/
8478/8889/9356/8478
(D) 2502-5762
(F) 00-91-33-2582-2505
registrar@klyuniv.ac.in
E-mail : registrarklyuniv@gmail.com

ESTD. : 1960

Provisional Ph.D. Certificate

No.Ph.D./Com.Sc. & Engg./LD/291(30)/2021

August 23, 2021

This is to certify that on the recommendation of the Board of Examiners, the thesis submitted by **Smt. Lopamudra Dey** for the award of **Ph.D. Degree** of this University and on the performance of his/her Ph.D. Open Viva vide Reg.13 (D.D.) & Reg.14 (D.D.) (as per Regulation 2016, K.U.), he/she has been admitted to the aforesaid degree on **06.08.2021** in **Computer Science & Engg.** under the faculty of **Engineering, Technology & Management.**

The Ph.D. Degree has been awarded in accordance with the provisions of UGC (Minimum Standards and Procedure for Awards of M.Phil./Ph.D. Degree) Regulation, 2009.

Title of the Thesis:

"Developing Computational Tools and Databases for Prediction and Analysis of Disease-Associated Protein Interactions"

His/Her Degree will be conferred by the Hon'ble Chancellor at the next Convocation of this University.


Registrar
REGISTRAR
University of Kalyani
Kalyani, Nadia-741235
West Bengal
23/8/21

Registrar
University of Calcutta



20F14110103X881

University of Calcutta

Senate House

87/1, College Street

Kolkata - 700 073

Phone : +91-33-2241-0071/4984

Fax : +91-33-2241-3222/88

eMail : phdcaluni@yahoo.co.in

Letter: 01733/Ph.D.(Tech.)

Dated: 5th March 2021

To

Sri Sujay Saha

'Rsarovila', Flat No.-S/5, Chandangarh,

Madhyamgram, Kolkata-700129.

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 4.8 Regulation for the Degree of Doctor of Philosophy (Ph.D.), C.U., framed under UGC Guidelines, 2009, and on the results of the viva-voce examination, you have been admitted to the aforesaid degree on March 5, 2021 in Computer Science and Engineering.

Yours faithfully,

Debasis Das 03
05/21

Registrar

REGISTRAR

UNIVERSITY OF CALCUTTA

Title of Thesis : **Computational Methods To Analyze Microarray Gene Expression Data.**



Ref. No. D-7/E/77/21

Date: 4 March 2021

৪

To,
Nilina Bera
Flat-3A
67A Ashoke Road
Ganguly Bagan
Kolkata-700084

Sub: PROVISIONAL PH.D. (ENGINEERING) CERTIFICATE.

Dear Madam,

With reference to your thesis entitled "Studies in Algorithms and Architectures for Sample Preparation with Digital Microfluidics" the undersigned is pleased to inform you that the Executive Council of the approved of Vice Chancellor of the University declared you eligible for admission to the degree of Doctor of Philosophy (Engineering) in accordance with the University Grants Commission Regulations, 2009 including successful completion of course work with effect from 07.01.2021 (Date of Viva-Voce).

You may please note that the degree will be conferred on you at the next annual convocation of the University.

Yours faithfully,

[Signature]
5.3.21

REGISTRAR

Copy: Secretary, FET (File No. 65/15/Engg.)

Records- 2

Sl. No. : 72

3860

Ref. No. :

UNIVERSITY OF CALCUTTA



Provisional Certificate

This is to certify that

.....*Sayantani... Mitra*.....
has completed the prescribed procedure for the degree of Doctor
of Philosophy (*Technology*) in *Radio Physics and Electronics*
.....) and has been admitted to the
aforesaid degree on *31st* December, 2020,
under this University in the year *2020*.....

Senate House,

The *13th* July, 2021.

.....*[Signature]*.....
Jt. Secy./Asst./Controller of Examinations.

2020256077



Jadavpur University

Certified that

Shib Sankar Ghoshmick

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 18.11.2020 and that the degree was conferred on him/her with all the Rights and Privileges thereto appertaining.

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



JADAVPUR UNIVERSITY
The 24th December, 2020



Sumanjan Das

Vice-Chancellor

UNIVERSITY OF GABRIETA



This is to certify that

Abhyuday Mallick

obtained the degree of **Doctor of Philosophy**

in Chemical Engineering under the

Faculty of Engineering & Technology of

this University in the year 2020 .

Admitted to the degree on November 11, 2020 .

Sonal Chakravarti Banerjee
Vice-Chancellor.

2020256139



Jadavpur University

Certified that

Sri Ashesh Paul

was admitted to the Degree of Doctor of Philosophy in Science of this University on 24.08.2020 and that the degree was conferred on him/her with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of Jadavpur University is herewith affixed.



JADAVPUR UNIVERSITY
The 24th December, 2020



Sulanjana Das
Vice-Chancellor

G2D000103



Jadavpur University

Certified that

Sabyasachi Chatterjee

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 27.11.2019 and that the degree was conferred on him/her at the Convocation held in December 2019 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of Jadavpur University is herewith affixed.

JADAVPUR UNIVERSITY
The 24th December, 2019



Saranjit Das
Vice-Chancellor

Indian Institute of Technology Bhubaneswar

13MA9903



upon the recommendation of the Senate hereby confers the degree of

Doctor of Philosophy

in

Basic Sciences (Mathematics)

on

Souvik Ghosh

for his research work on

"Computational analysis of single server queues with non-renewal batch arrivals and renewal /non-renewal service under different service disciplines"

Given under the seal of the Institute at Bhubaneswar

on

the twenty first day of September, two thousand and nineteen.


Registrar


Director



सीनेट की अनुशंसा पर
भारतीय अभियांत्रिकी विज्ञान एवं प्रौद्योगिकी संस्थान, शिवपुर

का शासी मंडल

दीपांकर चक्रवर्ती

को

साइंस

में

डॉक्टर ऑफ़ फिलॉसफी

की उपाधि प्रदान करता है।

इन्होंने नियमों के तहत 02 अगस्त 2019 में निर्धारित पाठ्यक्रम सफलतापूर्वक पूरा कर लिया है।
भारतीय गणराज्य के अंतर्गत शिवपुर में यह संस्थान-मुद्रांकित उपाधि आज दिनांक 31 जनवरी 2020 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

Science

on

Dipankar Chakraborty

on his having successfully completed the prescribed requirements of the degree on

02 August 2019.

*Given this day, under the seal of the Institute, at Shibpur in the Republic of
India, the 31st day of January 2020.*

कुलसचिव
Registrar



निदेशक एवं अध्यक्ष-सीनेट
Director & The Chairman-Senate



INDIAN INSTITUTE OF TECHNOLOGY BHUBANESWAR

PROVISIONAL CERTIFICATE

for the degree of

DOCTOR OF PHILOSOPHY

Certified that Mr. Souvik Ghosh, of School of Basic Sciences has successfully completed all the prescribed requirements for the degree of DOCTOR OF PHILOSOPHY of the Institute.

He has successfully defended his thesis in the viva-voce examination held on 19th February 2019.

The title of the Ph.D. Thesis is "Computational analysis of single server queues with non-renewal batch arrivals and renewal/non-renewal service under different service disciplines"

This certificate is issued this day, the 03rd March 2019 with the approval of the authorities.


(Academic Section)




Assistant Registrar (Academic Affairs)

Note: Validity of this certificate will expire after the degree is awarded in the next convocation.



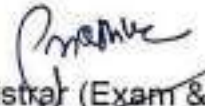
भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ) धनबाद
INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD
धनबाद-826004, झारखण्ड, भारत
DHANBAD-826004, JHARKHAND, INDIA

No. 812/Exam/2199/Ph.D/EE/SB/17

Dated: 04th July, 2019

PROVISIONAL CERTIFICATE

This is to certify that Mr. Surajit Bagchi (Regn. No. 2014/DR/1169) has been awarded Doctor of Philosophy (Ph. D.) Degree on the basis of thesis entitled **"DEVELOPMENT OF SIMPLE SENSORS FOR EXHALED BREATH ANALYSIS FOR POSSIBLE ROUTINE DIAGNOSIS OF HUMAN RESPIRATORY DYSFUNCTION"** submitted under the guidance of Dr. Sanjoy Mandal (Guide), Indian Institute of Technology (Indian School of Mines), Dhanbad and Dr. Subhabrata Sengupta (External Guide), HIT Kolkata vide result notification No. Exam/219905/Ex.Bd/2007-08 (Vol. III) dated 28th February, 2019.


Joint Registrar (Exam & Acad)

Joint Registrar (Exam & Academic)
Indian Institute of Technology
(Indian School of Mines), Dhanbad

1926 से राष्ट्र की सेवा में

In service of the Nation since 1926

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD
Phone: (0326) 2296-559 to 562 (4 Lines); Fax: (0326) 2296563
Email: exam@iitism.ac.in Website: www.iitism.ac.in

A3D000109



Jadavpur University

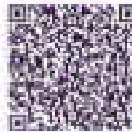
Certified that

Anindita Kundu

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 06.12.2018 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 Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is herewith affixed.*

JADAVPUR UNIVERSITY
The 24th December, 2018



Sulanjon Das
Vice-Chancellor

A3D000099



Jadavpur University

Certified that

Arindam Mandal

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 30.11.2018 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 Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is hereto affixed.*

JADAVPUR UNIVERSITY
The 24th December, 2018



Sumanjan Das
Vice-Chancellor

A3D000061



Jadavpur University

Certified that

Pradip Saha

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 14.09.2018 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 Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is hereunto affixed.*

JADAVPUR UNIVERSITY
The 24th December, 2018



Sumanjan Das
Vice-Chancellor



सीनेट की अनुशंसा पर

भारतीय अभियांत्रिकी विज्ञान एवं प्रौद्योगिकी संस्थान, शिवपुर

का शासी मंडल

शौभिक बसु

को

इंजीनियरिंग

में

डॉक्टर ऑफ़ फिलॉसफी

की उपाधि प्रदान करता है।

इन्होंने नियमों के तहत 13 सितम्बर 2018 में निर्धारित पाठ्यक्रम सफलतापूर्वक पूरा कर लिया है।
भारतीय गणराज्य के अंतर्गत शिवपुर में यह संस्थान-मुद्रांकित उपाधि आज दिनांक 23 दिसंबर 2018 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

Souvik Basu

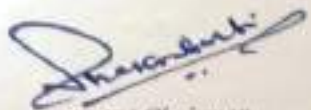
on his having successfully completed the prescribed requirements of the degree on

13 September 2018.

*Given this day, under the seal of the Institute, at Shibpur in the Republic of
India, the 23rd day of December 2018.*


कुलसचिव
Registrar




MEYAL / Chairman
सीनेट एवं शासी मंडल
The Senate and the Board of Governors



National Institute of Technology Durgapur

The Board of Governors of the Institute upon the recommendation of the Senate hereby confers the degree of

Doctor of Philosophy

in

Department of Computer Science & Engineering

on

Mohuya Byabartta Kar

who has submitted a thesis entitled

"Some Soft Computing Methods for Decision-Making Problems in Uncertain Paradigm"

and successfully completed the requirement as prescribed under the regulations on 21.07.2018

राष्ट्रीय प्रौद्योगिकी संस्थान दुर्गापुर

अभिषद् की अनुशंसा से संस्थान का अभिशासक परिषद्

Mohuya Byabartta Kar

को

कंप्यूटर सायन्स एंड इंजीनियरिंग विभाग

में

डॉक्टर ऑफ़ फिलोसोफी

की डिग्री प्रदान करता है।

इन्होंने 21.07.2018 को अपना शोध-प्रबंध

"Some Soft Computing Methods for Decision Making Problems in Uncertain Paradigm"

को सफलतापूर्वक प्रस्तुत किया है एवं नियमों के तहत निर्धारित अध्ययनों के पाठ्यक्रम को पूरा कर लिया है।



Durgapur, India / दुर्गापुर, भारत

November 11, 2018 / 11 नवंबर 2018

Chairman / अध्यक्ष

Senate & Board of Governors

अभिषद् एवं अभिशासक परिषद्

National Institute of Technology



Durgapur, India

*The Board of Governors of the Institute upon the
recommendation of the Senate hereby confers the
degree of*

Doctor of Philosophy

in English, Department of Humanities & Social Sciences

on

Aditi Bhunia Chakraborty

who submitted a thesis entitled

*Whose Power is perpetuated at the Expense of Whom: An Exploration into the
Linguistic Function of Cultural and Literary Texts in Depiction Gender Images in Bangla*

*and successfully completed the requirement as prescribed
under the regulations on 19.08.2018*



Xampan Banerji
*Chairman
Senate and
Board of Governors*

UNIVERSITY OF CALCUTTA



This is to certify that

Kasturi Mukherjee

obtained the degree of Doctor of Philosophy
(Technology) in Radio Physics and Electronics
in this University in the year 2016 .

Sonali Chakravarti Banerjee

Vice-Chancellor

Senate House,
The 11th day of January, 2018

Prof. Dr. Soma Bandyopadhyay
Registrar (Acting)



20K13117564456
University of Calcutta

Senate House
87/1, College Street
Kolkata - 700 073
Phone : +91-33-2241 0071/4984

Fax : +91 33-2241 3222/88
eMail : phdcaluni@yahoo.co.in

Letter: 3958/Ph.D.(Tech.)

Dated: 2nd June 2016

To
Smt Kasturi Mukherjee
36, B K Paul Avenue,
Kolkata 700005

Madam,

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 and on the results of the viva-voce examination, you have been admitted to the aforesaid degree on **June 2, 2016** in **Radio Physics and Electronics**.

Yours faithfully,

Soma Bandyopadhyay
(Soma Bandyopadhyay)
Registrar (Acting)
22/06/16

Title of Thesis : **On Some Electronic And Optoelectronic Properties Of Multiple Quantum Wells In Presence Of Electric Field.**

H7D000096



Jadavpur University

Certified that

Arabinda Kumar Dal

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 09.10.2017 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 Jadavpur University is herewith affixed.

JADAVPUR UNIVERSITY
The 24th December, 2017



Sulagna Das
Vice-Chancellor



INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

upon the recommendation of the Senate hereby confers the degree of

Doctor of Philosophy

on

Rajashree Lodh

in recognition of the research work on

Wall-Wake Flows Downstream of Wall-Mounted and Near-Wall Horizontal Cylinders

Given under the seal of the Institute at Kharagpur on the Sixth day of August, Two Thousand and Seventeen


Registrar




Director

H7D000038



Jadavpur University

Certified that

Nabamita Roy

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 25.04.2017 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
Jadavpur University *is herewith affixed.*

JADAVPUR UNIVERSITY
The 24th December, 2017



Suman Das
Vice-Chancellor

Indian Institute of Engineering Science and Technology, Shibpur



Howrah-711103, West Bengal, India

This is to certify that

Arup Tyoti Bhowal

*obtained the degree of Doctor of Philosophy
(Engineering) in this Institute in the year 2017.*

M
Registrar

RAN
Director

The 4th March, 2018

G5D000066



Jadavpur University

Certified that

Sriparna Mitra

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 17.08.2016 and that the degree was conferred on him/her at the Convocation held in December 2016 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is herewith affixed.*

JADAVPUR UNIVERSITY
The 24th December, 2016



Sujanjan Das
Vice-Chancellor

G5D000043



Jadavpur University

Certified that

Atanu Kundu

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 08.07.2016 and that the degree was conferred on him/her at the Convocation held in December 2016 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is herewith affixed.*

JADAVPUR UNIVERSITY
The 24th December, 2016



Suranjan Das
Vice-Chancellor

G3D000100



Jadavpur University

Certified that

Sri Sandip Chatterjee

was admitted to the Degree of Doctor of Philosophy in Science of this University on 22.06.2016 and that the degree was conferred on him/her at the Convocation held in December 2016 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of Jadavpur University is herewith affixed.



JADAVPUR UNIVERSITY
The 24th December, 2016



Sulanjan Das
Vice-Chancellor

123456789



Jadavpur University

Certified that

Sri Arindam Chakraborty

was admitted to the Degree of Doctor of Philosophy in Science of this University on 23.05.2016 and that the degree was conferred on him/her at the Convocation held in December 2016 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is herewith affixed.*



JADAVPUR UNIVERSITY
The 26th December, 2016



Sujanjan Das
Vice-Chancellor

G3D000043



Jadavpur University

Certified that

Smt. Baisakhi Mal

was admitted to the Degree of Doctor of Philosophy in Science of this University on 14.03.2016 and that the degree was conferred on him/her at the Convocation held in December 2016 with all the Rights and Privileges thereto appertaining.

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



JADAVPUR UNIVERSITY
The 24th December, 2016



Sulanjan Das
Vice-Chancellor

5D000014



Jadavpur University

Certified that

Bhaswati Chakraborty

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 10.03.2016 and that the degree was conferred on him/her at the Convocation held in December 2016 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is herewith affixed.*

Sulanjan Das
Vice-Chancellor

JADAVPUR UNIVERSITY
The 24th December, 2016



Indian Institute of Engineering Science and Technology, Shibpur

Howrah-711103, West Bengal, India



This is to certify that

Jhumpa Bhadra

*obtained the degree of Doctor of Philosophy
(Science) in this Institute in the year 2016.*

Hr
Registrar

RAN
Director

The 4th March, 2017

F7D00063



Jadavpur University

Certified that

Mousiki Kar (Nee Deb)

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 30.09.2015 and that the degree was conferred on him/her at the Convocation held in December 2015 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is hereto affixed.*

JADAVPUR UNIVERSITY
The 24th December, 2015



Sujanjan Das
Vice-Chancellor

F7D00049



Jadavpur University

Certified that

Aparna Sarkar

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 01.09.2015 and that the degree was conferred on him/her at the Convocation held in December 2015 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is herewith affixed.*

JADAVPUR UNIVERSITY
The 24th December, 2015



Sumanjan Das
Vice-Chancellor



INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

upon the recommendation of the Senate hereby confers the degree of

Doctor of Philosophy

on

SUBHA SANKAR CHOWDHURY

in recognition of the research work on

Experimental and Numerical Study of a Braced Excavation

Given under the seal of the Institute at Kharagpur on the Seventh day of August, Two Thousand and Fifteen


Registrar




Director

F9D00061



Jadavpur University

Certified that

Sri Ritayan Chatterjee

*was admitted to the Degree of **Doctor of Philosophy in Science** of this University on **09.06.2015** and that the degree was conferred on him/her at the Convocation held in December 2015 with all the Rights and Privileges thereto appertaining.*

*In Witness whereof the Signature of the Vice-Chancellor of **Jadavpur University** is herewith affixed.*

JADAVPUR UNIVERSITY
The 24th December, 2015



Suranjan Das
Vice-Chancellor



भारतीय प्रौद्योगिकी संस्थान गुवाहाटी

विद्या परिषद की अनुशंसा पर
रासायनिक अभियांत्रिकी में
विद्या वाचस्पति की उपाधि
अविजित घोष

को इस उपाधि के प्रदान हेतु विनियम विहित अपेक्षाएँ जून 2014 में सफलतापूर्वक पूर्ण करने पर
प्रदान करता है।

भारतीय गणराज्य के अंतर्गत गुवाहाटी में आज 8 जून 2015 को संस्थान की
यह मुद्रा अंकित उपाधि दी गई।

INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI

upon the recommendation of the Senate hereby confers the degree of

Doctor of Philosophy

in

Chemical Engineering

on

Avijit Ghosh

who has successfully completed in June 2014, the requirements prescribed under
the regulations for the award of this degree.

Given this day, under the seal of the Institute at Guwahati in the Republic of India,
the 8th day of June, 2015.

Thesis Title : Synthesis and Evaluation of Graphene for Polymer Electrolyte Membrane Fuel Cell
Components

निदेशक एवं
अध्यक्ष, विद्या परिषद
Director and
Chairman, Senate

कुलसचिव
Registrar

अध्यक्ष,
शासी मंडल
Chairman
Board of Governors

F7D00020



Jadavpur University

Certified that

Pramita Sen

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 13.05.2015 and that the degree was conferred on him/her at the Convocation held in December 2015 with all the Rights and Privileges thereto appertaining.

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

JADAVPUR UNIVERSITY
The 24th December, 2015



Sujan Das
Vice-Chancellor

F7D00008



Jadavpur University

Certified that

Anil Kumar Bag

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 13.05.2015 and that the degree was conferred on him/her at the Convocation held in December 2015 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of Jadavpur University is herewith affixed.

JADAVPUR UNIVERSITY
The 24th December, 2015



Sumanjan Das
Vice-Chancellor

Indian Institute of Engineering Science and Technology, Shibpur

Howrah-711103. West Bengal. India



This is to certify that

Samarpita Bhattacharya

obtained the degree of Doctor of Philosophy

(Science) in this Institute in the year 2015.


Registrar


Director

The 4th March, 2016

20140238



Jadavpur University

Certified that

Smt. Piyali Paul

was admitted to the Degree of Doctor of Philosophy in Science of this University on 31/07/2014 and that the degree was conferred on him/her at the Convocation held in December 2014 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is herewith affixed.*

JADAVPUR UNIVERSITY
The 24th December, 2014



A. Chandra
Vice-Chancellor

40077



Jadavpur University

Certified that

Sri Shounak Dasgupta

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 28/05/2014 and that the degree was conferred on him/her at the Convocation held in December 2015 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is herewith affixed.*



JADAVPUR UNIVERSITY
28 December 2015

[Signature]
Vice-Chancellor



*We, the Chancellors,
the Vice Chancellor and
the Members of the Management Council
and the Academic Council of the
University of Pune certify that*

*Sonjit Latta
Mother's Name : Alaka*

*having been examined and found duly
qualified for the degree of*

Doctor of Philosophy
(Mathematics)

The said degree has been conferred on him.

*In testimony whereof is set
the seal of the said University.*

**University
Of
Pune**
(Formerly
University of Poona)



**पुणे
विद्यापीठ**

आम्ही, पुणे विद्यापीठाचे कुलपति,
कुलगुरु आणि
व्यवस्थापन परिषद
व विद्या परिषद सदस्य,
प्रमाणित करितो की,
सोमजित दत्त
आईचे नाव : अलका

विद्यावाचस्पति
(गणित)

पदवीस पात्र झाल्याबद्दल त्यांना
ही पदवी प्रदान करण्यात येत आहे.
याची साक्ष म्हणून विद्यापीठाची अधिकृत मुद्रा
येथे अंकित करण्यात येत आहे.

03rd March 2016

S-SC-00481

Vice Chancellor

कुलगुरु

20140054



Jadavpur University

Certified that

Smt. Sudipta Bery

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 20/02/2014 and that the degree was conferred on him/her at the Convocation held in December 2014 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of Jadavpur University is herewith affixed.

JADAVPUR UNIVERSITY
The 24th December, 2014




Vice-Chancellor

THE UNIVERSITY OF BURDWAN



2194

Jyotirmoy Ghosh

having submitted a thesis entitled

*"Modelling Intelligent System for
Medical Diagnosis"*

and having satisfied all the conditions prescribed in
this respect by the University, as per UGC
regulation-2009, was duly admitted to the degree of

Doctor of Philosophy in Science
(Computer Science)

in the year **2013**.

Rajbati, Burdwan

The 14th November, 2013.


Vice - Chancellor

20135099



Jadavpur University

Certified that

Sri Soumik Das

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 08/10/2013 and that the degree was conferred on him/her at the Convocation held in December 2013 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is herewith affixed.*



JADAVPUR UNIVERSITY
The 14th December, 2013

A. Chandra
Vice-Chancellor

CS Scan with
CAMERON

20135157



Jadavpur University

Certified that

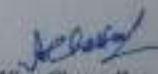
Sri Himadri Ghosh

was admitted to the Degree of Doctor of Philosophy in Science of the University on 12/03/2013 and that the degree was conferred on him/her at the Convocation held in December 2013 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is herewith affixed.*



JADAVPUR UNIVERSITY
The 24th December, 2013


Vice-Chancellor

UNIVERSITY OF KALCETTA



This is to certify that

Poulami Das

obtained the degree of **Doctor of Philosophy**
(**Technology**) in *Computer Science and Engineering*
in this University in the year 2013.

Senate House,
The 29th November, 2013

Sulanjan Das
Vice-Chancellor

20120135



Jadavpur University

Certified that

Sri Sumanta Banerjee

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 23/11/2012 and that the degree was conferred on him/her at the Convocation held in December 2012 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is herewith affixed.*



JADAVPUR UNIVERSITY
The 24th December, 2012


Vice-Chancellor

20120114



Jadaupur University

Certified that

Sri Diptendu Datta

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 10/10/2012 and that the degree was conferred on him/her at the Convocation held in December 2012 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of Jadaupur University is herewith affixed.

JADAVPUR UNIVERSITY
The 24th December, 2012.


Vice-Chancellor

20120086



Jadavpur University

Certified that

Sri Saibal Dutta

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 18/07/2012 and that the degree was conferred on him/her at the Convocation held in December 2012 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is herewith affixed.*



JADAVPUR UNIVERSITY
The 24th December, 2012

[Signature]
Vice-Chancellor

20120091



Jadavpur University

Certified that

Sri Dwaipayan Sen

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 18/07/2012 and that the degree was conferred on him/her at the Convocation held in December 2012 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is herewith affixed.*



JADAVPUR UNIVERSITY
The 24th December, 2012

[Signature]
Vice-Chancellor

20120088



Jadavpur University

Certified that

Sri Dinabandhu Bhandari

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 18/07/2012 and that the degree was conferred on him/her at the Convocation held in December 2012 with all the Rights and Privileges thereto appertaining.

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

JADAVPUR UNIVERSITY
The 24th December, 2012

S. K. Chy
Vice-Chancellor

ial No. 1542

THE UNIVERSITY OF BURDWAN



Provisional Certificate

Riddhi Goswami

having submitted a thesis entitled

*'Effects of Folic Acid, Beta-Carotene
and Curcumin against the
Cytotoxicity and Clastogenicity of
Arsenic in Albino Mice (Mus musculus)*

and having satisfied all the conditions prescribed in this respect by
the University, was duly admitted to the Degree of Doctor of
Philosophy in *Science* (*Zoology*)
in the year *2012*.

Rajbati, Burdwan

The *13th* January, 2012.


Registrar

20110308



Jadaupur University

Certified that

Sukanta Sarkar

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 08/12/2011 and that the degree was conferred on her/his at the Convocation held on December 2011 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of
Jadaupur University *is herewith affixed.*



JADAVPUR UNIVERSITY
The 24th December, 2011

P. N. Ghosh
Vice-Chancellor

20110289



Jadavpur University

Certified that

Smt. Enakshi Binda

was admitted to the Degree of Doctor of Philosophy in Science of this University on 01/12/2011 and that the degree was conferred on her/his at the Convocation held in December 2011 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is herewith affixed.*



JADAVPUR UNIVERSITY
The 24th December, 2011

P. N. Ghosh
Vice-Chancellor



INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

upon the recommendation of the Senate hereby confers the degree of

Doctor of Philosophy

on

Santanu Ghorai

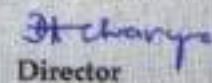
in recognition of the research work on

Learning with Proximal Kernel Classifiers

Given under the seal of the Institute at Kharagpur on the Twentysecond day of August, Two Thousand and Eleven


Registrar




Director

20110142



Jadavpur University

Certified that

Sri Anandalok Audhya

was admitted to the Degree of Doctor of Philosophy in Science of this University on 17/02/2011 and that the degree was conferred on him/her at the Convocation held in December 2011 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signature of the Vice-Chancellor of Jadavpur University is herewith affixed.



JADAVPUR UNIVERSITY
The 24th December, 2011

P. B. Ghose
Vice-Chancellor

20100395



Jodhpur University

Certified that

Sri Rajarshi Sen Gupta

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 02/12/2010 and that the degree was conferred on him/her at the Convocation held in December 2010 with all the Rights and Privileges therein pertaining.

In Witness whereof the Signature of the Vice-Chancellor of Jodhpur University is herewith affixed.

JODHPUR UNIVERSITY
The 24th December, 2010

Pradiy Mangun Satrio
Vice-Chancellor

20090010



Jadavpur University

Confid. Seal

Sri Anant Kumar Ray

was admitted to the Degree of Doctor of Philosophy in Engineering of the University on 29/07/2009 and that the degree was conferred on him/her at the Convocation held in December 2009 with all the Rights and Privileges thereto pertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor of Jadavpur University are hereto affixed.

P. N. Ghosh
Vice-Chancellor



Chandrabati
Chancellor

20090246



Jadavpur University

Certified that

Sri Dibyendu Mal

was admitted to the Degree of Doctor of Philosophy in Science of the University on 17/06/2009 and that the degree was conferred on him/her at the Convocation held in December 2009 with all the Rights and Privileges thereof appurtenant.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor of Jadavpur University are herewith affixed.

P. N. Ghosh

Vice-Chancellor

The 24th December 2009



A handwritten signature in blue ink, located below the signature of the Vice-Chancellor.

Chancellor

THE UNIVERSITY OF BURDWAN



Madhumita Das (Chanda)

*having submitted a thesis entitled
"Trends in Translation in the East and the
West in the Twentieth Century: A Comparative
Study".*

*and having satisfied all the conditions
prescribed in this respect by the University, was
duly admitted to the degree of **Doctor of Philosophy**
in **Arts (English)**
in the year 2009.*

*Rajlata Bardwan
The 5th October, 2009.*

Vice-Chancellor

20080175



Jadaupur University

Certified that

Smt. Ruplekha Chatterjee

was admitted to the Degree of Doctor of Philosophy in Science of this University on 28/03/2008 and that the degree was conferred on him / her at the Convocation held in December 2008 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor of Jadaupur University are hereunto affixed.

P. N. Saha

Vice-Chancellor

The 24th December, 2008



[Signature]
Principal
Heritage Institute of Technology

[Signature]
Principal
Heritage Institute of Technology
Chancellor's,
Chowhaga Road, Anandapur,
Kolkata - 700 107

UNIVERSITY OF CALCUTTA



This is to certify that

Liabanti Basu

obtained the degree of **Doctor of Philosophy**
(Science) in *Biochemistry*
in this University in the year 2012.

Senate House,
The 28th January, 2003

A. K. Banerjee

Vice-Chancellor.

[Signature]
Principal
Heritage Institute of Technology

Heritage Institute of Technology
256, Habashatla,
Chowringhee Road, Anandapur,
Kolkata - 700 107

20070071



Jadaupur University

Certified that

Smt. Sarmila Sahoo (Nee Chongdar)

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 03/10/2007 and that the degree was conferred on him / her at the Convocation held in December 2007 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor of Jadaupur University are hereunto affixed.

P. N. Ghosh
Vice-Chancellor
The 24th December, 2007



[Signature]
Chancellor

20060104



Jadavpur University

Certified that

Smt. Sangita Bhattacharjee (nee Ghosal)

was admitted to the Degree of Doctor of Philosophy in Engineering of the University on 06/12/2006 and that the degree was conferred on her / her at the Convocation held in December 2006 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor of Jadavpur University are herewith affixed.


Vice-Chancellor
The 20th December, 2006




Chancellor

20060110



Jadaupur University

Certified that

Sri Subhashis Majumder

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 22/11/2006 and that the degree was conferred on him / her at the Convocation held in December 2006 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor of Jadaupur University are herewith affixed.

Subhashis Majumder
Vice-Chancellor
The 24th December, 2006



Subhashis Majumder
Chancellor

छत्रपति शाहू जी महाराज विश्वविद्यालय कानपुर

CHHATRAPATI SHAHUJI MAHARAJ UNIVERSITY KANPUR



विद्या-वाचस्पति

प्रमाणित किया जाता है कि
(कुमारी) कस्तूरी घोष को इस विश्वविद्यालय
के २००५ के दीक्षान्त समारोह में अंग्रेजी
विषय पर विद्या-वाचस्पति की उपाधि प्रदान की गई।

उक्त उपाधि के लिए आपने निम्नांकित विषय पर शोध प्रबन्ध प्रस्तुत किया।

Doctor of Philosophy

This is to certify that (Kum.) Kasturi Ghosh
has been admitted to the Degree of **Doctor of Philosophy** in this
University in English at the convocation of 2005.

The subject on which he/she presented a thesis for the Degree was
Feminist Perspectives in the Novels of Paule Marshall, Toni Morrison and
Alice Walker

20050074



Jadavpur University

Certified that

Smt. Siuli Roy (Nee Ghosh)

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 04/07/2005 and that the degree was conferred on him / her at the Convocation held in December 2005 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor of Jadavpur University are herewith affixed.

[Signature]
Vice-Chancellor
The 24th December, 2005



[Signature]
Chancellor

20050204



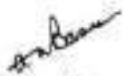
Jadaupur University

Certified that

Smt. Ruma Karmakar

was admitted to the Degree of Doctor of Philosophy in Science of this University on 04/07/2005 and that the degree was conferred on him / her at the Convocation held in December 2005 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor of Jadaupur University are herewith affixed.


Vice-Chancellor
The 24th December, 2005


Chancellor

20040202



Jadavpur University

Certified that

Smt. Kakali Mukherjee (nee Banerjee)

was admitted to the Degree of Doctor of Philosophy in Science of this University on 25/08/2004 and that the degree was conferred on him / her at the Convocation held in December 2004 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor of Jadavpur University are herewith affixed.

K. N. Banerjee
Vice-Chancellor
24th December, 2004

[Signature]
Principal
Heritage Institute of Technology

[Signature]
Chancellor
Heritage Institute of Technology
1970, Kankardaha,
Chowrasta Road, Anandapur,
Kolkata - 700 157

UNIVERSITY OF CALCUTTA



This is to certify that

Soma Bandyopadhyay

obtained the degree of **Doctor of Philosophy**
(Science) in *Microbiology*
in this University in the year 2004.

Principal
Heriace Institute of Technology

Senate House,

Heriace Institute of Technology
29, Heriace Road,
Chandernagar, Anandapur,
Pin - 700 107

A. K. Banerjee

Vice-Chancellor

The University of Utah

Upon the Recommendation of the Faculty
has conferred on

Sudepto Sen

the Degree of

Doctor of Philosophy

Materials Science and Engineering

with all its Rights, Honors and Responsibilities

Given at Salt Lake City in the State of Utah,
on the fourteenth day of December two thousand one

ExcP3
PW1
09/08/2016

Cecilia H. Folley
Commissioner of Higher Education

[Signature]
Chair, Utah State Board of Regents



J. Brent Matheson
President of the University

James A. Mansel
Chair, Board of Trustees

20010064




Badaupur University


Certified that

Sri Debrajjan Sarkar

was admitted to the Degree of Doctor of Philosophy in Engineering of the University on 23/05/2001 and that the degree was conferred on him / her at the Convocation held in December 2001 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor of Badaupur University are herewith affixed.


Vice-Chancellor
The 14th December 2001


Chancellor

2000227



Jadaupur University

Certified that

Sri Nirmalya Prasun Nayak

was admitted to the Degree of Doctor of Philosophy in Science of the University on 22/11/2000 and that the degree was conferred on him / her at the Convocation held in December 2000 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor of Jadaupur University are herewith affixed.

[Signature]

Vice-Chancellor
The 24th December, 2000

[Signature]

Chancellor

990158



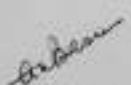
Jadavpur University

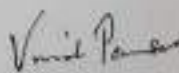
Certified that

Smt. Ajanta Das

was admitted to the Degree of Doctor of Philosophy in Science of this University on 14.07.1999 and that the degree was conferred on him / her at the Convocation held in December 1999 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor of Jadavpur University are hereunto affixed.


Vice-Chancellor
The 24th December, 1999


Chancellor

UNIVERSITY OF CABUL



This is to certify that

Nandankumar Jana

obtained the degree of **Doctor of Philosophy**
 (Science) in *Biochemistry*
 in this University in the year 1998.

Heritage Institute of Technology
 230, Sanderdaha,
 Chhatnaga Road, Anandapur,
 Kolkata - 700 107

Senate House,

The 16th March 2000

A. K. Chatterjee

Vice-Chancellor.

[Signature]
 Principal
 Heritage Institute of Technology

The Regents of the
UNIVERSITY OF MINNESOTA

on recommendation of the faculty
have conferred upon

Anindya Sen

the degree of

Doctor of Philosophy

with all its privileges and obligations

Given at Minneapolis, in the State of Minnesota,
this twenty-seventh day of November, nineteen hundred and ninety-six.

Steven Bracker
SECRETARY



Nils Hasselmo
PRESIDENT



THE UNIVERSITY OF TEXAS
AT AUSTIN

has conferred on
Sulagna Chatterjee
the degree of
Doctor of Philosophy

and all the rights and privileges thereto appertaining.
In Witness Whereof, this diploma duly signed has
been issued and the seal of the University affixed.

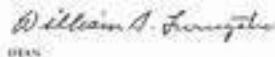
Issued by the Board of Regents upon Recommendation of the Faculty.

AWARDED ON THE TWENTIETH DAY OF DECEMBER, 1991


CHAIRMAN, BOARD OF REGENTS


PRESIDENT


CHANCELLOR


DEAN

Indian Institute of Technology Kharagpur

*Upon the recommendation of the Senate
hereby confers the degree of*

Doctor of Philosophy

on

Tapan Kumar Ghosh

*who has successfully completed the prescribed requirements in the
Department of Chemical Engineering*

*Given under the seal of the Institute at Kharagpur in the
Republic of India on the Third day of August, One thousand nine
hundred and ninetythree.*

Heritage Institute of Technology
9th, Anandapala,
Chhatrapati Road, Anandapur,
Kharagpur - 751 007

Shanku
Registrar

[Signature]
Principal
Heritage Institute of Technology

[Signature]
Director

THE REGENTS OF THE
University of California

ON THE NOMINATION OF THE
GRADUATE COUNCIL OF THE DAVIS DIVISION
HAVE CONFERRED UPON

DIPANKAR CHAUDHURI

HAVING DEMONSTRATED ABILITY BY ORIGINAL RESEARCH
IN CHEMISTRY
THE DEGREE OF DOCTOR OF PHILOSOPHY
WITH ALL THE RIGHTS AND PRIVILEGES THERETO PERTAINING

GIVEN AT DAVIS
THIS THIRTEENTH DAY OF SEPTEMBER IN THE YEAR
NINETEEN HUNDRED AND NINETY-ONE

Madras Institute of Technology
Chennai-600 036,
Saidapet Road, Anandapur,
Tel. No. - 200 157

Pete Wilson
GOVERNOR OF CALIFORNIA AND
PRESIDENT OF THE REGENTS

David P. Terhune
PRESIDENT OF THE UNIVERSITY



Theodore G. Huller
CHANCELLOR AT DAVIS

John M. C. Greenwood
DEAN OF THE GRADUATE DIVISION
AT DAVIS

Principal
Institute of Technology

We, the Chancellor, Vice-Chancellor,
and Members of the Executive Council
of the University of Bombay, certify

Basab Chaudhuri that the withensigned

Basab Chaudhuri of
the University Department of Chemical
Technology

having presented in the month of August
in the year 1989, a Thesis for the Degree of
Doctor of Philosophy (Technology) which has
been accepted by the Examiners, the Degree of

Doctor of Philosophy

(Technology)

has been conferred on him at **Bombay**, on the
twentysecond day of the month of December
in the year one thousand nine hundred and
eightynine.

In Testimony whereof are set the Seal of the
said University and the Signature of the said
Chancellor.

(Signature)

Chancellor



Jadavpur University

Certified that
Sri Jyotirmoy Saha

was admitted to the Degree of Doctor of Philosophy in Engineering of this University
on 7. 3. 1987 and that the degree was conferred on him/her at
the Convocation held in December 1987 with all the Rights and Privileges
thereto appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor
of Jadavpur University are hereunto affixed.


Vice-Chancellor
7th Dec 1987


Chancellor



Jadabpur University

Certified that

Smt. Jayali Datta (nee Sinha)

was admitted to the Degree of Doctor of Philosophy in Science of this University
on 26.12.1981 and that the degree was conferred on him/her at
the Convocation held in December 1982 with all the Rights and Privileges
thereof appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor
of Jadabpur University are hereunto affixed.

M. M. Ghosh
Vice-Chancellor
The 24th December, 1982

[Signature]
Chancellor



Jadabpur University

Certified that
Sri Binaki Bhattacharya

was admitted to the Degree of Doctor of Philosophy in Engineering of this University
on 29.12.79 and that the degree was conferred on him/her at
the Convocation held in February 1980 with all the Rights and Privileges
thereof appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor
of Jadabpur University are hereunto affixed.

M. M. Bhattacharya
Vice-Chancellor
The 7th February, 1980

T. N. Singh
Chancellor



যাদবপুর বিশ্ববিদ্যালয়
কলকাতা-৭০০ ০৩২, ভারত



JADAVPUR UNIVERSITY
KOLKATA-700 032, INDIA

Ref. No. : D-7/Sc./830/14

Dated : 07. 08. 2014.

To
Sri HIRAK KUMAR CHANDRA
C/O. – Prof. Dr. Priya Mahadevan
S. N. Bose National Centre for Basic Sciences
Block-JD, Sector-III, Salt Lake
Kolkata – 700098.

Sub.: Provisional Ph.D.(Sc.) Certificate.

Dear Sir,

With reference to your thesis entitled "*Magnetism in dilute magnetic semiconductors*", the undersigned is pleased to inform you that the **Executive Council** of the University at its meeting held on **31.07.2014** declared you eligible for admission to the degree of **Doctor of Philosophy (Science)** in accordance with the University Grants Commission Regulations, 2009, including successful completion of course work.

You may please note that the degree will be conferred on you at the **next annual convocation** of the University.

Yours faithfully,

Hirak K. Chandra
21.08.14


Registrar.

THE UNIVERSITY OF BURDWAN



*This is to Certify that Sri Ayan Mitra
having completed satisfactorily the Course Work
for getting registration to Ph.D. programme
passed the Course Work Examination
Physics in the year, required by the Regulations
of this University.*

Rajbati, Burdwan

The 3rd August, 2016

[Signature]
Registrar

*self Attested
Ayan Mitra
12/11/2020*



Reg. certificati

n. 3513

We certify herewith that Dr. **DAS GUPTA SHINJINEE**, born in Kolkata (India) on the 14th August, 1983, attended a three-year doctoral course in "Physics" (XXIII cycle) at the International School of Advanced Studies of the University of Camerino.

Dr. **DAS GUPTA SHINJINEE** has obtained the title of "Dottore di ricerca" (Research doctorate degree) in "Physics" on the 17th May, 2011 (thesis title: Electric monopole transition in ^{160}Er).

The instant certificate is issued on ordinary paper for every use permitted by law.

Camerino, 20th May, 2011



The Director
(Prof. Cristina Miceli)

UNIVERSITY OF CALCUTTA



This is to certify that

Moili Biswas

obtained the degree of Doctor of Philosophy
(Science) in *Physics*
in this University in the year 2009.

Haak

*attested
14/9/10*

Jhilam Sadhukhan
Scientific Officer
Government of India
Department of Atomic Energy
Variable Energy Cyclotron Centre
1/AF, Bidhan Nagar
Kolkata - 700 064

Sumanjan Das
Vice-Chancellor.

Senate House,
The 11th September, 2009

Prof. Dr. Soma Bandyopadhyay
Registrar (Acting)



20C14120017X46

University of Calcutta

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

Phone : +91-33-2241-0071/4984

Fax : +91-33-2241-3222/88
eMail : phdcaluni@yahoo.co.in

Letter: 6468/Ph.D.(Sc.)

Dated: 14th September 2016

To
Sri Dip Prakash Samajdar
Balaji Blessings, Flat-1C,
Bagpota Road, P.O.-Sarsuna, Kolkata-700061.

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.(Sc.)** Degree of this University and on the results of the viva-voce examination, you have been admitted to the aforesaid degree on **September 14, 2016** in **Electronic Science**.*

Yours faithfully,

Soma Bandyopadhyay
(Soma Bandyopadhyay)
Registrar (Acting)
15.09.16

Title of Thesis : **Experimental And Theoretical Investigation Of The Properties Of Group III-V- Bismide Semiconductors.**



Jadaupur University

Certified that

Smt. Bebarati Bery

was admitted to the Degree of Doctor of Philosophy in Science of this University on 25/11/2009 and that the degree was conferred on him/her at the Convocation held in December 2009 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor of Jadaupur University are hereunto affixed.

P.N. Saha
Vice-Chancellor

14th December, 2009



Zanku Das

Chancellor

200801



Jadaupur University

Certified that

Smt. Shreedhara Gupta

*was admitted to the Degree of Doctor of Philosophy in Science
University on 30/04/2008 and that the degree was conferred on him
at the Convocation held in December 2008 with all the Rights and
thereof appertaining.*

*In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor
of Jadaupur University are hereunto affixed.*

N. Ch
Vice-Chancellor
The 2nd Member, 2008



*Attested
25.05.10*

Headmistress
MULTIPURPOSE GOVT GIRLS SCHOOL
Alipore, Kolkata-700 027

[Signature]
Chancellor

যাদবপুর বিশ্ববিদ্যালয়
কলকাতা-৭০০ ০৩২, ভারত



*JADAVPUR UNIVERSITY
KOLKATA-700 032, INDIA

Ref. No. : ...D-7/Sc/818/W

Dated : ...23.6.10

Smt. Ratna Mukherjee
11/2 Debi Chowdhury Road
Mominpur
Kolkata - 700 023.

Sub.: Provisional Ph.D.(Sc.) Certificate.

Madam,

With reference to your thesis entitled "*On the Synthesis and Reactions of Useful Small Molecules*", the undersigned is pleased to inform you that the Executive Council of the University at its meeting held on 09.06.2010 declared you eligible for admission to the degree of Doctor of Philosophy (Science). You may please note that the degree will be conferred on you at the next annual convocation of the University.

Yours faithfully,

attested
by siddh
3/7/2010

By: Registrar 16/10

SCIENTIST-C
National Botanical Research Institute
CSIR

* ESTABLISHED UNDER THE 24TH CONSTITUTIONAL AMENDMENT, 1955 UNDER NOTIFICATION No. (10986-Elm/11-42/55 DATED 6TH DECEMBER, 1955 UNDER JADAVPUR UNIVERSITY ACT, 1955 (WEST BENGAL ACT XXIII OF 1955) AND/OR BY JADAVPUR UNIVERSITY ACT, 1961 (WEST BENGAL ACT XXIV OF 1961)

ফোন : ৯৫৪-৬৬৬৬/৯৫৪৬৬৬৬/৯৫৪৬৬৬৬
ফ্যাক্স : (৯১)-৯০৬-২১১৪-৯৫৪৬৬৬৬-৭১২১

Website : www.jadavpur.edu
E-mail : registrar@adm.jdvu.ac.in

Phone : 2414-8886/6104/9643/6425/5443
Fax : (91)-033-2414-8414/2413-7121



Checked
M. Chatterjee

INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

upon the recommendation of the Senate hereby confers the degree of

Doctor of Philosophy

on

Soham Chattopadhyay

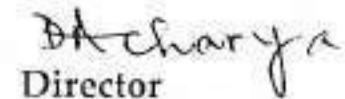
in recognition of the research work on

Continuous Biocatalytic Production and Characterization of Biodiesel Using a Renewable Vegetable Oil as a Model Feedstock

Given under the seal of the Institute at Kharagpur on the Fifteenth day of September, Two Thousand and Twelve


Registrar




Director

A3D000072



Jadavpur University

Certified that

Arkadeb Mukhopadhyay

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 31.10.2018 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 Witness whereof the Signature of the Vice-Chancellor of
Jadavpur University *is hereunto affixed.*

JADAVPUR UNIVERSITY
The 24th December, 2018



Sumanjan Das
Vice-Chancellor

Arkadeb Mukhopadhyay

UNIVERSITY OF CALCUTTA



This is to certify that

Ipsita Basu

obtained the degree of Doctor of Philosophy
(Science) in Chemistry

in this University in the year 2016 .

Sonal Chakravarti Banerjee

Senate House,
The 14th day of January, 2018

Vice-Chancellor

Ipsita Basu

UNIVERSITY OF CALCUTTA



This is to certify that

Prasantakumar Mahato

obtained the degree of **Doctor of Philosophy**
(Science) in *Physics*
in this University in the year 1991.

Senate House,

Tue 7th March 1991.

Blaylock
Vice-Chancellor.

विद्या परिषद की अनुशंसा पर
भारतीय प्रौद्योगिकी संस्थान कानपुर
के संचालक मण्डल द्वारा
संचारी पाल
को
डॉक्टर ऑफ फिलॉसफी
की उपाधि

समस्त सम्मानों विशेषाधिकारों व दायित्वों के साथ
सोलह जून दो हजार सत्रह को कानपुर में
प्रदान की गयी।



THE BOARD OF GOVERNORS
OF THE
INDIAN INSTITUTE OF TECHNOLOGY KANPUR
UPON THE RECOMMENDATION OF THE SENATE
HEREBY CONFERS ON
SANCHARI PAL
THE DEGREE OF
DOCTOR OF PHILOSOPHY
WITH ALL HONOURS PRIVILEGES AND OBLIGATIONS
THEREUNTO PERTAINING
GIVEN AT KANPUR ON THIS SIXTEENTH DAY OF JUNE
TWO THOUSAND SEVENTEEN





15 October 2012

TO WHOM IT MAY CONCERN


Name: Aniruddha Dasgupta (2741374)
Course: Doctor of Philosophy

This is to certify that on 30 December 2011, Aniruddha Dasgupta submitted a thesis for the degree of Doctor of Philosophy at the University of Wollongong in the School of Computer Science and Software Engineering.

The title of the thesis is:

Integrating Optimization and Preference Handling in Agent Programming Frameworks

On 10 October 2012 Aniruddha Dasgupta fulfilled the requirements of the degree of Doctor of Philosophy and the degree will be conferred at the graduation ceremonies to be held in December 2012.


Kim Callaway
Director,
Research Student Centre



Research Student Centre
Research and Innovation Division
University of Wollongong, New South Wales
Telephone +61 822 21 5000, Facsimile +61 822 21 5001

The Regents of the

UNIVERSITY OF MINNESOTA

on recommendation of the faculty
have conferred upon

Prosenjit Gupta

the degree of

Doctor of Philosophy

with all its privileges and obligations

Given at Minneapolis, in the State of Minnesota,
this thirty-first day of October, nineteen hundred and ninety-five.

Steven Bosacker
SECRETARY



Nils Hasselmo
PRESIDENT

Witnessed
Ravi Sankar
30.11.10.
Interpreting Officer (Court.)
High Court, Original Side
Calcutta

যাদবপুর বিশ্ববিদ্যালয়
কলকাতা-৭০০০৩২, ভারত



"JADAVPUR UNIVERSITY
KOLKATA-700 032, INDIA

Ref. No. D-7/E/847/15

Date: 18 November 2015
২৫

To,
Sri Sayantan Dhar
Flat-303, "Ashirbad Apartment"
45/30/1A, Moore Avenue
Kolkata-700040

Sub: PROVISIONAL PH.D. (ENGINEERING) CERTIFICATE.

Dear Sir,

With reference to your thesis entitled "Investigations on Multifrequency and Reconfigurable Antennas for Wireless Applications" the undersigned is pleased to inform you that the Executive Council of the University at its meeting held on 06.11.2015 declared you eligible for admission to the degree of Doctor of Philosophy (Engineering) in accordance with the University Grants Commission Regulations, 2009 with effect from 29.10.2015 (Date of Viva-Voce).

You may please note that the degree will be conferred on you at the next annual convocation of the University.

Yours faithfully,


REGISTRAR

Copy: Secretary, FET (File No. 129/11/Engr.)
(Vide Res. No. 91(k) of the E.C. Dated 06.11.2015)

Records- 2

20090090



Jadavpur University

Certified that

Sri Anil Kumar Ray

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 29/07/2009 and that the degree was conferred on him/her at the Convocation held in December 2009 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor of Jadavpur University are hereunto affixed.

attested
[Signature] 12/09/11
(D. Laha)

[Signature]

ASSOCIATE PROFESSOR
Mechanical Engineering Deptt.
Jadavpur University
Kolkata - 700 032

Chancellor

P.N. Gha
Vice-Chancellor



The 24th December, 2009

A3D000099



Jadavpur University

Certified that

Arindam Mandal

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 30.11.2018 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 Witness whereof the Signature of the Vice-Chancellor of Jadavpur University is hereunto affixed.

JADAVPUR UNIVERSITY
The 24th December, 2018



Arindam Mandal

Sumanjan Das
Vice-Chancellor



*attested
Asim
29/1/59*

Indian Institute of Technology Kharagpur

*Asim Kumar Bose
Professor
Department of Mechanical Engineering
Biju Patnaik Engineering and Science University
Kharagpur, Howrah-711 103, W.B.*

Upon the recommendation of the Senate hereby confers the degree of

Doctor of Philosophy

in

ENGINEERING

on Dulal Chandra Ray

GIVEN this day under the seal of the Institute at Kharagpur in the Republic of India
The 1st march, 1959

Title of thesis Some Studies on Material Removal Rate in
Abrasive Jet Machining.

Registered in Mechanical Engineering

[Signature]
Registrar

[Signature]
Director

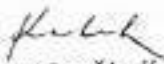
CZECH TECHNICAL UNIVERSITY
OF PRAGUE
FACULTY OF ELECTRICAL ENGINEERING

Prague, 7th July 1981

C E R T I F I C A T E

Czech Technical University of Prague, Faculty of Electrical Engineering herewith confirms, that Mr. Tapan CHAKRABARTI born 17. 12. 1949, has on the basis of the defence of his thesis on the theme "Linearity and transfer function of transistor temperature sensor", been conferred upon the degree "Candidatus scientiarum", awarded by the Scientific Council of the Czech Technical University of Prague, Faculty of Electrical Engineering on 2th July 1981.

This degree corresponds to the scientific degree of "Doctor of Philosophy in Engineering" according to the British system of scientific degrees.


Prof. Ing. Zdeněk Kotek, DrSc.
Dean



Jadabpur University

Certified that

Sri Siddhartha Ray

was admitted to the Degree of Doctor of Philosophy in Engineering of this University
on 15.5.36 and that the degree was conferred on him/her at
the Convocation held on 30th December 1976 with all the Rights and Privileges
thereof appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor
of Jadabpur University are hereunto affixed.

Vice-Chancellor

Chancellor

UNIVERSITY OF CALicut



This is to certify that

Sankhunar Biscas

obtained the degree of **Doctor of Philosophy**
(**Science**) in Radio Physics and Electronics
in this University in the year 1974.

Senate House,
The 8th March, 1975.

M. S. S.
Vice-Chancellor.

UNIVERSITY OF CAIRO



This is to certify that

Samirah Mitra

obtained the degree of **Doctor of Philosophy**
(**Science**) in Chemistry
in this University in the year 1976 .

Senate House,
The 16th April, 1977

Samirah Mitra
Vice-Chancellor



Smith

UNIVERSITY OF CALCUTTA



This is to certify that

Surenkumar Datta

obtained the degree of **Doctor of Philosophy**
(Technology) in *Chemical Technology*
in this University in the year 1992.

Tapan Kumar Datta

R. B. Sen
Vice-Chancellor.

Senate House,
The 17th February, 1993.



Ref. No. : ...D-7/54/893/12

Dated : 28 . 08 . 2012.

২০১২

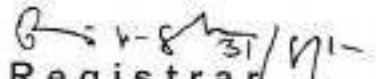
Smt. Ritu Mishra
Srikana Apartment
1/94, M. M. ghosh Road
Kolkata – 700 074.

Sub.: Provisional Ph.D.(Sc.) Certificate.

Dear Madam,

With reference to your thesis entitled "**MECHANISTIC STUDIES ON REACTIVITIES OF SOME RADICALS.**" the undersigned is pleased to inform you that the **Executive Council** of the University at its meeting held on **22.08.2012** declared you eligible for admission to the degree of **Doctor of Philosophy (Science)**. You may please note that the degree will be conferred on you at the **next annual convocation** of the University.

Yours faithfully,


Registrar

National Institute of Technology



Durgapur, India

The Board of Governors of the Institute upon the recommendation of the Senate hereby confers the degree of

Doctor of Philosophy
Department of Chemical Engineering

on

Nababithi Goswami

who submitted a thesis entitled

ANALYSIS AND ENERGY OPTIMIZATION OF BOILING FLOW IN CHANNEL

and successfully completed the requirement as prescribed under the regulations on 16-01-2015


Chairman
Senate

Durgapur, India
The 11th February, 2015




Chairman
Board of Governors

The Georg-August-Universität Göttingen

under its President

Prof. Dr. rer. physiol. Dr. h.c. Ulrike Beisiegel

awards

within the Faculties of Mathematics and Natural Sciences

under the Dean of the Faculty of Mathematics and Computer Science

Prof. Dr. Stefan Halverscheid

Mr

Anirban Bhar

born on the 22nd March 1984 in Kolkata, India

the degree Doktor der Naturwissenschaften (Dr. rer. nat.).

He has fulfilled the requirements for the degree
according to the regulations of the doctoral programme

“Computer Science”

by submission of the doctoral thesis entitled

**“Application of A Novel Triclustering Method in
Analyzing Three Dimensional Transcriptomics Data”**

and oral examination on 24th March 2015.

Göttingen, 19th June 2015

signed by the Dean of the Faculty

This document is an official translation of the Dr. rer. nat. certificate issued on the 19th June 2015

Anirban Bhar



GEORG-AUGUST-UNIVERSITÄT GÖTTINGEN



Ref. No. D-7/E(375)/16

Date: 6 May 2016

To.

To,
Sri Partha Basuchowdhuri
4 Nutan Path, Modern Park
Santoshpur
Kolkata-700075

Sub: PROVISIONAL PH.D. (ENGINEERING) CERTIFICATE.

Dear Sir,

With reference to your thesis entitled "Dynamics of Communities in Social Networks" the undersigned is pleased to inform you that the Executive Council of the University at its meeting held on 03.05.2016 declared you eligible for admission to the degree of Doctor of Philosophy (Engineering) in accordance with the University Grants Commission Regulations, 2009 including successful completion of course work with effect from 18.03.2016 (Date of Viva-Voce).

You may please note that the degree will be conferred on you at the next annual convocation of the University.

Yours faithfully,


REGISTRAR

Copy: Secretary, FET (File No. 295/12/Engg.)
(Vide Ros. No. 93(n) of the E.C. Dated 03.05.2016)

Records- 2

20060291



Jadavpur University

Certified that

Smt. Kasturi Sanyal

was admitted to the Degree of Doctor of Philosophy in Science of this University on 13/09/2006 and that the degree was conferred on him / her at the Convocation held in December 2006 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor of Jadavpur University are herewith affixed.

A handwritten signature in cursive script, likely belonging to the Vice-Chancellor.

Vice-Chancellor

The 24th December, 2006



A handwritten signature in cursive script, likely belonging to the Chancellor.

Chancellor



No. RPhD-1/730/18

Date: 19 - April - 2018

Provisional Certificate

On the basis of recommendation of the Board of examiners on their adjudication of the PhD thesis and on satisfactory performance in the PhD viva voce examination, the Director is pleased to admit the under noted candidate to the Degree of Ph.D.(Engineering) with effect from . 02 . 04 . 2018

Name of the Candidate	Department/School	Faculty	Title of the thesis
Soumi Bhattacharyya [PhD/R/2014/0086]	Department of Civil Engineering	Faculty of Engineering	"An investigation on some modified configurations of passive and active TLCDs applied to seismic vibration control" <u>Supervisor(s):</u> I) Dr. Aparna (Dey) Ghosh Professor, Department of Civil Engineering, IESTS II) Dr. Biswajit Basu Professor, Civil, Struc. & Envir. Engineering, Trinity College Dublin, Dublin 2, Ireland

The Degree has been awarded in accordance with the provisions of the University Grants Commission (minimum standards and procedure for award of Ph.D. Degree), Regulation 2009.


(Amitava Basu Mallick)
Dean, Academic Affairs

Copy to:-

1. The Controller of Examinations, IESTS
2. Head, Department of *Civil Engineering*
3. Supervisor(s)
4. Recipient of the Certificate
5. PhD Section, IESTS



Dated : 17.07.2013

PROVISIONAL CERTIFICATE

This is to certify that *Arindam Das* has been awarded Ph. D. Degree provisionally on July 15, 2013 in *English* under the faculty of *Arts & Commerce* for the thesis entitled "**NARRATING THE AUSTRALIAN NATION : IDENTITY FORMATION THROUGH CULTURAL RESISTANCE IN THE SELECTED ABORIGINAL WORKS OF KIM SCOTT**". The candidate will be formally awarded the degree in the next Convocation of the University.



Ranajit Dhar
(*Dr. Ranajit Dhar*)
Registrar
Registrar
Vidyasagar University
Midnapore - 721102

Dated: 21st July 20

Letter: 02526/Ph.D.(Tech.)



Registrar
University of Calcutta

To
Sri Rajib Biswas
C-3, 33 Satyan Park, PO-Joka,
Tarakpurkul, Kolkata-700104

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

Regulation for the Degree of Philosophy (Ph.D.), Calcutta

University, UGC Guidelines, 2009, and on the results of

your re-examination, you have been admitted to the aforesaid

degree on June 25, 2020 in Computer Science And Engineering.

Yours faithfully,

Rajib Biswas

Registrar

Title of Thesis : Design of Ad-Hoc Wireless Network With Secret
Communication



Jadabpur University

Certified that

Sri Pranay Chaudhuri

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 20. 1. 1988 and that the degree was conferred on him/her at the Convocation held in December 1988 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor of Jadabpur University are hereunto affixed.


Vice-Chancellor


Chancellor

The 24th December, 1988

UNIVERSITY OF CABOTTA



This is to certify that

Anuradha Goyal

obtained the degree of **Doctor of Philosophy**
(Arts) in *English*

in this University in the year 1997.

Attested

[Signature]

By: Chief Clerk, Management
Eastern Railway, Kolkata
१९ अगस्त १९९७

Senate House,
The 16th August 1997

[Signature]
Vice-Chancellor.



To Whom It May Concern

To Whom It May Concern

This is to certify that

Mr. Timir Hajari

Master of Science

born on March 19, 1989 in Rasulpur, Hooghly (India) passed his
doctoral examination (grade: "very good") at the
Technische Universität Darmstadt (Germany) on July 13, 2015.

The title of his thesis reads:

Molecular simulations of Hofmeister ion pairing and solvation of
protein building blocks in aqueous interfacial environments

After having fulfilled all the prescribed academic requirements, he has
been awarded the degree of

Doctor rerum naturalium (Dr. rer. nat.).

(Prof. Dr. rer. nat. Michael Reggelin)

Chairperson of the Promotion Examination Board

Promotionsausschuss des
Fachbereichs Chemie

Der Vorsitzende
Prof. Dr. rer. nat. M. Reggelin

Alarich-Weiss-Straße 4
64287 Darmstadt

Tel. +49 6151 16 - 5540 (5626)
Fax +49 6151 16 - 5531
re@punk.oc.chemie.tu-darmstadt.de

Datum
16.07.2015

Ihre Nachricht

Unser Zeichen
Salms



Timir Hajari
13/06/17



सीनेट की अनुशंसा पर

भारतीय अभियांत्रिकी विज्ञान एवं प्रौद्योगिकी संस्थान, शिवपुर

का शासी मंडल

मौमिता पालचौधुरी

को

इंजीनियरिंग

में

डॉक्टर ऑफ़ फिलॉसफी

की उपाधि प्रदान करता है।

इन्होंने नियमों के तहत 18 मई 2018 में निर्धारित पाठ्यक्रम सफलतापूर्वक पूरा कर लिया है।
भारतीय गणराज्य के अंतर्गत शिवपुर में यह संस्थान-मुद्रांकित उपाधि आज दिनांक 23 दिसंबर 2018 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

Moumita Palchaudhuri

*on her having successfully completed the prescribed requirements of the degree on
18 May 2018.*

*Given this day, under the seal of the Institute, at Shibpur in the Republic of
India, the 23rd day of December 2018.*

✓

कुलसचिव
Registrar



Palchaudhuri

अध्यक्ष / Chairman
सीनेट एवं शासी मंडल

The Senate and the Board of Governors

National Institute of Technology



Durgapur, India

The Board of Governors of the Institute upon the recommendation of the Senate hereby confers the degree of

Doctor of Philosophy
Department of Chemical Engineering

on

Aparupa Bhattacharyya

who submitted a thesis entitled

LIQUID PHASE ADSORPTION OF MERCURY (II) USING IMMOBILIZED ENZYME

and successfully completed the requirement as prescribed under the regulations on July 31, 2014

Aparupa Bhattacharyya

J. M. M.
Chairman
Senate

A. P. S. Bhattacharyya
Chairman
Board of Governors



Jodhpur University

Certified that

Smt. Rakha Sen (Mazumdar)

was admitted to the Degree of Doctor of Philosophy in Engineering of this University on 28.07.1999 and that the degree was conferred on him / her at the Convocation held in December 1999 with all the Rights and Privileges thereto appertaining.

In Witness whereof the Signatures of the Chancellor and the Vice-Chancellor of Jodhpur University are hereunto affixed.


Vice-Chancellor
The 24th December, 1999


Chancellor

verified with original
2/16/12/10

INDIAN INSTITUTE OF TECHNOLOGY
KHARAGPUR-721 302

PROVISIONAL CERTIFICATE

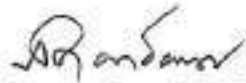
for the degree of
DOCTOR OF PHILOSOPHY (Ph.D.)

Certified that Alok Kumar Sen of the Materials Science Centre has successfully completed all the prescribed requirements for the degree of Doctor of Philosophy of the Institute.

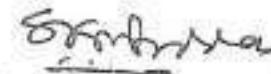
The date of the Ph.D. Viva-Voce examination is: 30/04/2010.

The title of the Ph.D. thesis is: Taste Response Characteristics of Functionalised Polymers.

This certificate is issued this day, the May 10, 2010 with the approval of the authorities.



Superintendent (PGS&R)



Assistant Registrar (PGS&R)

Note: Validity of this certificate will expire after the degree is awarded in the next convocation.

UNIVERSITY OF KALYANI
Ph. D. Section, Registrar's Department



Provisional Certificate

No.Ph.D. /Comp. Sc. & Engg. /AJP/151/2010

August 17, 2010

To

Shri Anindya Jyoti Pal
Department of Computer Science & Engineering
University of Kalyani
Kalyani 741 235
West Bengal
INDIA

Dear Sir,

May I inform you that on the recommendation of the Board of Examiners on their adjudication of the undemoted thesis submitted by you for the award of **Ph.D. Degree** of this University and on the performance of your Ph.D. lecture vide U.ord.74 (Adm.) (iii) you have been admitted to the aforesaid degree on **17.08.2010** in **Computer Science & Engineering**.

Your Degree will be conferred at the next Convocation of this University



Yours sincerely,


REGISTRAR
University of Kalyani
Kalyani - 741235

Title of the Thesis:

"MANY FACETS OF GRAPH COLORING PROBLEM"



Michigan State University

Upon the Nomination of the Faculty has conferred upon

Amrita Sen

the Degree of

Doctor of Philosophy

English

Given under the Seal of the University at East Lansing in the
State of Michigan on this eighteenth day of August, in the
year Two Thousand and Eleven.

John J. Pappas
Chairman, Board of Trustees



Loe Ann King Sen
President of the University

*attested
Amrita Sen
11/8/2016*

UNIVERSITY OF CALCUTTA



This is to certify that

Anasuya Bagchi

obtained the degree of **Doctor of Philosophy**
(**Science**) in *Chemistry*

in this University in the year 1983.

*Senate House,
The 28th March, 1984.*

*S. K. Bhattacharya
Vice-Chancellor.*