

**Annexure II**  
**(1.3.4)**  
**List of Students undertaking Project in Current year (2019)**  
**Department of Botany**  
**M.Sc. Microbiology**  
**Sem IV**

| S No | Roll Number  | Name                    |
|------|--------------|-------------------------|
| 1.   | 180012830001 | Aishwarya Nikhil        |
| 2.   | 180012830002 | Ajay Kumar Verma        |
| 3.   | 180012830003 | Akanksha Priyadarshini  |
| 4.   | 180012830004 | Bintul Huda             |
| 5.   | 180012830005 | Divya Singh             |
| 6.   | 180012830006 | Gulzaruddin             |
| 7.   | 180012830007 | Ilma Vaquar             |
| 8.   | 180012830008 | Kashish Khanum          |
| 9.   | 180012830009 | Km Amina                |
| 10.  | 180012830010 | Krishna Murari Kushwaha |
| 11.  | 180012830012 | Mahima Katyayani        |
| 12.  | 180012830013 | Meenu Rajbhar           |
| 13.  | 180012830014 | Neetika Yadav           |
| 14.  | 180012830015 | Nidhi Tiwari            |
| 15.  | 180012830016 | Nisha Kashyap           |
| 16.  | 180012830017 | Pooja Chaturvedi        |
| 17.  | 180012830018 | Pooja Madheshia         |
| 18.  | 180012830019 | Prashasti Kulshreshtha  |
| 19.  | 180012830020 | Pratibha                |
| 20.  | 180012830021 | Priya                   |
| 21.  | 180012830022 | Priyanka Goswami        |
| 22.  | 180012830023 | Ruhi Fatima             |
| 23.  | 180012830025 | Satyam Rastogi          |
| 24.  | 180012830026 | Shafikun Nisha          |
| 25.  | 180012830027 | Shailja Dubey           |
| 26.  | 180012830028 | Shefali Parashar        |
| 27.  | 180012830029 | Shradha Singh           |
| 28.  | 180012830031 | Yasir Jamal Usmani      |
| 29.  | 17001012446  | Karuna                  |

CSIR-CDRI



CSIR - Central Drug Research Institute, Lucknow  
(Council of Scientific & Industrial Research)



Human Resource Development Programme

(Sponsored Project Training/Dissertation Work in Drug R&D and use of Sophisticated Laboratory Techniques)

Ref: No.:CDRI/HRD-Trng/1234/2019

Date: 29-04-2019

# CERTIFICATE

This certificate is issued to the candidate on successful completion of the below mentioned course, at Central Drug Research Institute:

Name of the Candidate & Qualification : Ms. Aishwarya Nikhil  
M. Sc. (Microbiology) Pursuing

Sponsoring Department & Institution : Department of Botany, University of Lucknow,  
Lucknow

Category of Training : General Training

Detail of Training : Worked on the Project "Comparative study of *Aspergillus fumigatus* Secretary protein on different days"

Duration of Course : 03<sup>rd</sup> January 2019 to 02<sup>nd</sup> May 2019

The candidate has fulfilled all prescribed requirements of the laboratory work, library consultation and completed the assigned task with sincerity and diligence.

  
P.K. Shukla

Training Supervisor & Sr. Principal Scientist  
Microbiology Division

  
Vinay Tripathi  
Training Co-ordinator & Head  
HRD Division

  
Professor Tapas Kumar Kundu  
Director





Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, Uttar Pradesh (India)

Certificate

This is certify that the study entitled "ISOLATION AND DETECTION OF POLIO VIRUSES FROM SEWAGE SAMPLE" is the original work of Mr. AJAY KUMAR VERMA carried out under my supervision at Sanjay Gandhi Post Graduate Institute of Medical Sciences, Raebareli Road, Lucknow. During 15<sup>th</sup> January to 15<sup>th</sup> May as a partial fulfillment for award of Master of Sciences in Microbiology at University of Lucknow, Uttar Pradesh.

  
(Dr. Atul Garg) 15/5/2019.

Department of Microbiology  
SGPGIMS,  
Lucknow- 226014  
Uttar Pradesh, India

डॉ. देवेन्द्र परमार  
मुख्य वैज्ञानिक एवं प्रमुख  
मानव संसाधन प्रोफेसर

मई 03, 2019

### *To whomsoever it may concern*

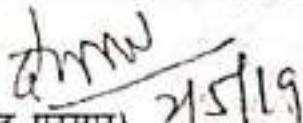
यह प्रमाणित किया जाता है कि सुश्री आकांक्षा प्रियदर्शिनी, एम०एससी० (माइक्रोबायोलॉजी), डिपार्टमेंट ऑफ बॉटनी, लखनऊ विश्वविद्यालय, लखनऊ में अध्ययन कर रही हैं। उन्होंने "Characterization of Plasmid Mediated AmpC Genes Responsible for Extended Spectrum  $\beta$ -Lactamase (ESBL) in Surface Water" विषय पर दिनांक 26-12-2018 से 25-04-2019 तक शोध निबंध का प्रशिक्षण डॉ. प्रीति चतुर्वेदी, वैज्ञानिक, अक्वैटिक टॉक्सिकोलॉजी लैब के पर्यवेक्षण में लिया है। इस कार्य या इसके किसी अंश को अपोहस्ताक्षरी की बिना लिखित अनुमति के प्रकाशित नहीं किया जायेगा।

मैं उनके उज्ज्वल भविष्य की कामना करता हूँ।

This is to certify that Km. Akanksha Priyadarshini student of M.Sc. (Microbiology), Department of Botany, University of Lucknow, Lucknow has undergone dissertation training on "Characterization of Plasmid Mediated AmpC Genes Responsible for Extended Spectrum  $\beta$ -Lactamase (ESBL) in Surface Water" from 26-12-2018 to 25-04-2019 under the supervision of Dr. Preeti Chaturvedi, Scientist, Aquatic Toxicology Lab of the Institute.

The work should not be published, even in part without the prior written permission of the undersigned.

I wish all success in her career.

  
(देवेन्द्र परमार) 2/5/19



# सी एस आई आर - राष्ट्रीय वनस्पति अनुसंधान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद)

राना प्रताप मार्ग, पोस्ट बाक्स सं० 436, लखनऊ-226 001 (भारत)

## CSIR - NATIONAL BOTANICAL RESEARCH INSTITUTE

(Council of Scientific & Industrial Research)

Rana Pratap Marg, P.B. No. 436, Lucknow-226 001 (India)



सं० / No

दिनांक / Date

TTBD/Trg-19/

16.04.2019

### प्रमाण-पत्र

सुश्री बितुल हुदा पुत्री स्व. श्री शहंशाह हुसैन, एम.एससी. माइक्रोबायोलॉजी, लखनऊ विश्वविद्यालय, लखनऊ ने दिनांक 07.01.2019 से 06.04.2019 तक "Characterization of chitinase and glucanase production from microbes using paddy straw as substrate" शीर्षक में डॉ. शुचि श्रीवास्तव, सीनियर वैज्ञानिक के पर्यवेक्षण में सफलतापूर्वक प्रशिक्षण प्राप्त किया।

### CERTIFICATE

Ms. Bintul Huda D/o Late Shri Shahanshah Hussain, student of M.Sc. Microbiology, University of Lucknow, Lucknow has successfully completed the training from 07.01.2019 to 06.04.2019 on the project entitled, "Characterization of chitinase and glucanase production from microbes using paddy straw as substrate" under the supervision of Dr. Suchi Srivastava, Senior Scientist.

(विवेक श्रीवास्तव)  
प्रशिक्षण इकाई

(शुचि श्रीवास्तव)

CSIR-CDRI



CSIR - Central Drug Research Institute, Lucknow  
(Council of Scientific & Industrial Research)



Human Resource Development Programme

[Sponsored Project Training/Dissertation Work in Drug R&D and use of Sophisticated Laboratory Techniques]

Ref: No.:CDRI/HRD-Trng/1239/2019

Date: 14-05-2019

# CERTIFICATE

This certificate is issued to the candidate on successful completion of the below mentioned course, at Central Drug Research Institute:

Name of the Candidate & Qualification : Ms. Divya Singh  
M.Sc. (Microbiology) Pursuing

Sponsoring Department & Institution : Department of Botany, University of Lucknow,  
Lucknow, Uttar Pradesh

Category of Training : General Training

Detail of Training : Worked on the Project "Antimicrobial screening of compounds  
using recombinant mycobacterial strain *Mycobacterium bovis*  
BCG"

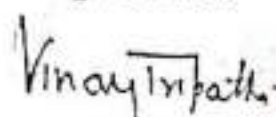
Duration of Course : 07<sup>th</sup> January 2019 to 06<sup>th</sup> May 2019

The candidate has fulfilled all prescribed requirements of the laboratory work, library consultation and completed the assigned task with sincerity and diligence.



B.N. Singh

Training Supervisor & Principal Scientist  
Microbiology Division



Vinay Tripathi

Training Co-ordinator & Head  
HRD Division



Professor Tapas Kumar Kundu  
Director





# सी एस आई आर - राष्ट्रीय वनस्पति अनुसंधान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद)

राना प्रताप मार्ग, पोस्ट बॉक्स सं० 436, लखनऊ-226 001 (भारत)

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सं० / No.

दिनांक / Date

TTBD/Trg-19/

09.05.2019

### प्रमाण-पत्र

श्री गुलजारुद्दीन पुत्र श्री जमालुद्दीन, एम.एससी, माइक्रोबायोलॉजी, लखनऊ विश्वविद्यालय, लखनऊ ने दिनांक 25.01.2019 से 24.04.2019 तक "*Agrobacterium* mediated stable genetic transformation and regeneration in *Gossypium hirsutum* via somatic embryogenesis" शीर्षक में डॉ. प्रवीन चन्द्र वर्मा, सीनियर वैज्ञानिक के पर्यवेक्षण में सफलतापूर्वक प्रशिक्षण प्राप्त किया।

### CERTIFICATE

Mr. Gulzaruddin S/o Shri Jamaluddin, student of M.Sc. Microbiology, University of Lucknow, Lucknow has successfully completed the training from 25.01.2019 to 24.04.2019 on the project entitled, "*Agrobacterium* mediated stable genetic transformation and regeneration in *Gossypium hirsutum* via somatic embryogenesis" under the supervision of Dr. Praveen Chandra Verma, Senior Scientist.

(प्रिन्सिपल श्रीवास्तव)  
प्रशिक्षण इकाई

(प्रवीन चन्द्र वर्मा)



# सी एस आई आर - राष्ट्रीय वनस्पति अनुसंधान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद)

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सं०/No.

दिनांक /Date

TTBD/Trg-19/

16.04.2019

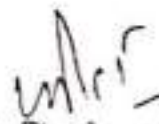
### प्रमाण-पत्र

सुश्री इल्मा वकार पुत्री श्री वकार अहमद, एम.एससी. माइक्रोबायोलॉजी, लखनऊ विश्वविद्यालय, लखनऊ ने दिनांक 01.01.2019 से 31.03.2019 तक "Synergistic effect of plant growth promoting rhizobacteria (PGPR) for growth promotion in maize (*Zea mays*) under alkaline condition" शीर्षक में डॉ. पुनीत सिंह चौहान, सीनियर वैज्ञानिक के पर्यवेक्षण में सफलतापूर्वक प्रशिक्षण प्राप्त किया।

### CERTIFICATE

Ms. Ilma Vaquar D/o Shri Vaquar Ahmad, student of M.Sc. Microbiology, University of Lucknow, Lucknow has successfully completed the training from 01.01.2019 to 31.03.2019 on the project entitled, "Synergistic effect of plant growth promoting rhizobacteria (PGPR) for growth promotion in maize (*Zea mays*) under alkaline condition" under the supervision of Dr. Puneet Singh Chauhan, Senior Scientist.

  
(विवेक श्रीवास्तव)  
प्रशिक्षण इकाई

  
(पुनीत सिंह चौहान) 16/4/19



# सी एस आई आर - राष्ट्रीय वनस्पति अनुसंधान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद)

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सं/ No

दिनांक / Date

FIBD/Trd-19

16.04.2019

### प्रमाण-पत्र

सुश्री कश्मिरा खानम पुत्री श्री मो. शमशेर खान, एमएससी माइक्रोबायोलॉजी, लखनऊ विश्वविद्यालय, लखनऊ ने दिनांक 07.01.2019 से 06.04.2019 तक "Isolation and characterization of micro-fungi from soil sample" शीर्षक में डॉ. पूनम सी. सिंह, सीनियर वैज्ञानिक के पर्यवेक्षण में सफलतापूर्वक प्रशिक्षण प्राप्त किया।

### CERTIFICATE

Ms. Kashish Khanum D/o Shri Mohd. Shamsheer Khan, student of M.Sc. Microbiology, University of Lucknow, Lucknow has successfully completed the training from 07.01.2019 to 06.04.2019 on the project entitled, "Isolation and characterization of micro-fungi from soil sample" under the supervision of Dr. Poonam C. Singh, Senior Scientist.

(चित्रक श्रीवास्तव)  
प्रशिक्षण इकाई

(पूनम सी. सिंह)



# सी एस आई आर - राष्ट्रीय वनस्पति अनुसंधान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद)

राणा प्रताप मार्ग, पोस्ट बाक्स सं० 436, लखनऊ-226 001 (भारत)

## CSIR - NATIONAL BOTANICAL RESEARCH INSTITUTE

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सं० / No

दिनांक / Date

TTBD/Trg-19/

16.04.2019

### प्रमाण-पत्र

सुश्री कुमारी आमिना पुत्री श्री एहरारुज्जमा, एम.एससी. माइक्रोबायोलॉजी, लखनऊ विश्वविद्यालय, लखनऊ ने दिनांक 07.01.2019 से 06.04.2019 तक "An understanding on the plant growth promoting traits of *Pseudomonas putida* (RA) and expression analysis of drought stress responsive genes" शीर्षक में डॉ. चारु लता, वैज्ञानिक के पर्यवेक्षण में सफलतापूर्वक प्रशिक्षण प्राप्त किया।

### CERTIFICATE

Ms. Km. Amina D/o Shri Ehraruzzama, student of M.Sc. Microbiology, University of Lucknow, Lucknow has successfully completed the training from 07.01.2019 to 06.04.2019 on the project entitled, "An understanding on the plant growth promoting traits of *Pseudomonas putida* (RA) and expression analysis of drought stress responsive genes" under the supervision of Dr. Charu Lata, Scientist.

(चिवेक श्रीवास्तव)  
प्रशिक्षण इकाई

(चारु लता)


**DEPARTMENT OF MICROBIOLOGY**  
**Dr. Ram Manohar Lohia Institute of Medical Sciences**  
**Vibhuti Khand, Gomti Nagar, Lucknow-22601**  
Ph No.0522- 4918555, 504 Fax No.- 0522- 4918506, Website- [www.drmlims.org](http://www.drmlims.org)

/Dr.RMLIMS/Microbiology/2019

Date: 13/05/2019

**TO WHOM IT MAY CONCERN**

This is to certify that Mr Krishna Murari Kushwaha of M Sc. Microbiology, Lucknow University Lucknow, has undergone a short term training in the department of Microbiology, Dr RMLIMS, Lucknow and has worked on the topic "Detection of Human Immuno deficiency Virus (HIV) by ELISA technique in patients coming to a tertiary care centre in Lucknow" for a period from 18/01/2019 to 30/03/2019 under my supervision.

  
(Dr Vineeta Mittal)  
Professor (jr),  
Department of Microbiology,  
Dr RMLIMS, Lucknow



Phones : (0522) 2668004-006, 700, 800, 900  
Fax : (0522) 2668017, 2668129

Department of Microbiology  
संजय गाँधी स्नातकोत्तर आयुर्विज्ञान संस्थान, लखनऊ  
Sanjay Gandhi Postgraduate Institute of Medical Sciences

Dr.UjjalaGhoshal  
Professor & Head  
Department of Microbiology

Raebareli Road  
Lucknow-226014 (India)

Certificate of Head of the Department

This is to certify that the project work entitled " Clinical and Mycological Study of Dermatophytic Infections in a Tertiary Care Hospital" ,is carried out by Ms.Mahima Katyayani under Supervision of Dr. Rungmei SK Marak, Professor , Department of Microbiology ,SGPGIMS ,Lucknow from 15<sup>th</sup> January to 15<sup>th</sup> may 2019 . The work is carried out by the candidate Herself and the data obtained is genuine . She was found very honest , sincere, methodological and enthusiastic .

I wish all the success in her life.

*Ujjala Ghoshal*  
15/5/19

(Dr.Ujjala Ghoshal)



# सी एस आई आर - राष्ट्रीय वनस्पति अनुसंधान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्)

राणा प्रताप मार्ग, पोस्ट नाक्स रां0 436, लखनऊ-226 001 (भारत)

## CSIR - NATIONAL BOTANICAL RESEARCH INSTITUTE

(Council of Scientific & Industrial Research)

Rana Pratap Marg, P.B. No. 436, Lucknow-226 001 (India)



रां0 / No.

दिनांक / Date

TTBD/Trg-19/

08.04.2019

### प्रमाण-पत्र

सुश्री मीनू राजभर पुत्री श्री विश्वनाथ राजभर, एम.एससी. माइक्रोबायोलॉजी, लखनऊ विश्वविद्यालय, लखनऊ ने दिनांक 01.01.2019 से 31.03.2019 तक "Unraveling the mechanism of *Fusarium oxysporum* infection in chickpea roots" शीर्षक में डॉ. मनोज कुमार, वैज्ञानिक के पर्यवेक्षण में सफलतापूर्वक प्रशिक्षण प्राप्त किया।

### CERTIFICATE

Ms. Meenu Rajbhar D/o Shri Vishwanath Rajbhar, student of M.Sc. Microbiology, University of Lucknow, Lucknow has successfully completed the training from 01.01.2019 to 31.03.2019 on the project entitled, "Unraveling the mechanism of *Fusarium oxysporum* infection in chickpea roots" under the supervision of Dr. Manoj Kumar, Scientist.

  
(विवेक श्रीवास्तव)  
प्रशिक्षण इकाई

  
(मनोज कुमार)



# सी एस आई आर - राष्ट्रीय वनस्पति अनुसंधान संस्थान



(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्)

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CSIR - NATIONAL BOTANICAL RESEARCH INSTITUTE

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Rana Pratap Marg, P.B. No. 436, Lucknow-226 001 (India)

सं०/No

दिनांक / Date

TTBD Trg-19'

11.04.2019

## प्रमाण-पत्र

सुभी नीतिका यादव पुत्री श्री हरिश चन्द्र यादव, एम.एससी. माइक्रोबायोलॉजी, लखनऊ विश्वविद्यालय, लखनऊ ने दिनांक 07.01.2019 से 06.04.2019 तक "An understanding on the plant growth promoting traits of *Bacillus amyloliquefaciens* (SN13) and cloning of SN13-induced *OsGRAM* gene from *Oryza sativa* L." शीर्षक में डॉ. चारु लता, वैज्ञानिक के पर्यवेक्षण में सफलतापूर्वक प्रशिक्षण प्राप्त किया।

## CERTIFICATE

Ms. Neetika Yadav D/o Shri Harish Chandra Yadav, student of M.Sc. Microbiology, University of Lucknow, Lucknow has successfully completed the training from 07.01.2019 to 06.04.2019 on the project entitled, "An understanding on the plant growth promoting traits of *Bacillus amyloliquefaciens* (SN13) and cloning of SN13-induced *OsGRAM* gene from *Oryza sativa* L." under the supervision of Dr. Charu Lata, Scientist.

(चरु लता)  
प्रशिक्षण इकाई

(चरु लता)



संस्कृत-भारतीय विषविज्ञान अनुसंधान संस्थान  
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वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद  
COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH

डॉ. देवेन्द्र परमार  
मुख्य वैज्ञानिक एवं प्रमुख  
मानव संसाधन प्रोफेसर

मई 03, 2019

### *To whomsoever it may concern*

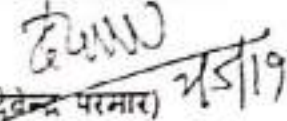
यह प्रमाणित किया जाता है कि सुश्री निधि तिवारी, एम०एससी० (माइक्रोबायोलॉजी), डिपार्टमेंट ऑफ बॉटनी, लखनऊ विश्वविद्यालय, लखनऊ में अध्ययन कर रही हैं उन्होंने "Prevalence of Multi-drug Resistance (MDR) in Environmental Isolates and their Mode of Action" विषय पर दिनांक 26-12-2018 से 25-04-2019 तक शोध निबंध का प्रशिक्षण डॉ. प्रीति चतुर्वेदी, वैज्ञानिक, अक्वैटिक टॉक्सिकोलॉजी लैब के पर्यवेक्षण में लिया है। इस कार्य या इसके किसी अंश को अधोहस्ताक्षरी की बिना लिखित अनुमति के प्रकाशित नहीं किया जायेगा।

मैं उनके उज्ज्वल भविष्य की कामना करता हूँ।

This is to certify that Km. Nidhi Tiwari student of M.Sc. (Microbiology), Department of Botany, University of Lucknow, Lucknow has undergone dissertation training on "Prevalence of Multi-drug Resistance (MDR) in Environmental Isolates and their Mode of Action" from 26-12-2018 to 25-04-2019 under the supervision of Dr. Preeti Chaturvedi, Scientist, Aquatic Toxicology Lab of the Institute.

The work should not be published, even in part without the prior written permission of the undersigned.

I wish all success in her career.

  
(देवेन्द्र परमार) 3/5/19

विषविज्ञान भवन, 31, महात्मा गांधी मार्ग  
पोस्ट बॉक्स नं० 80, लखनऊ, उ०प्र०, भारत  
VISHVIGYAN BHAVAN, 31, MAHATMA GANDHI MARG  
POST BOX NO 80, LUCKNOW-226001, U.P. INDIA

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Toxicity Testing, GLP Test Facility



# सी एस आई आर - राष्ट्रीय वनस्पति अनुसंधान संस्थान



(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्)  
राणा प्रताप मार्ग, पोस्ट बाक्ता रा0 436, लखनऊ-226 001 (भारत)

CSIR - NATIONAL BOTANICAL RESEARCH INSTITUTE

(Council of Scientific & Industrial Research)

Rana Pratap Marg, P.B. No. 436, Lucknow-226 001 (India)

सं0 / No.

दिनांक / Date

FIBD/Trg-19/

22.04.2019

## प्रमाण-पत्र

सुश्री निशा कश्यप पुत्री श्री मालिक राम कश्यप, एम.एससी. माइक्रोबायोलॉजी, लखनऊ विश्वविद्यालय, लखनऊ ने दिनांक 01.01.2019 से 31.03.2019 तक "Role of rhizobacteria *Pseudomonas putida* in drought stress alleviation in *Cicer arietinum*" शीर्षक में डॉ. मनोज कुमार, वैज्ञानिक के पर्यवेक्षण में सफलतापूर्वक प्रशिक्षण प्राप्त किया।

## CERTIFICATE

Ms. Nisha Kashyap D/o Shri Malik Ram Kashyap, student of M.Sc. Microbiology, University of Lucknow, Lucknow has successfully completed the training from 01.01.2019 to 31.03.2019 on the project entitled, "Role of rhizobacteria *Pseudomonas putida* in drought stress alleviation in *Cicer arietinum*" under the supervision of Dr. Manoj Kumar, Scientist.

(विवेक टीवास्तव)  
प्रशिक्षण इकाई

(मनोज कुमार)



(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्)  
राणा प्रताप मार्ग, पोस्ट नावरा सं० 436, लखनऊ-228 001 (भारत)

# CSIR - NATIONAL BOTANICAL RESEARCH INSTITUTE

(Council of Scientific & Industrial Research)  
Rana Pratap Marg, P.B. No. 436, Lucknow-226 001 (India)

दिनांक / Date

TTBD/Trg-19/

03.04.2019

## प्रमाण-पत्र

सुश्री पूजा चतुर्वेदी पुत्री श्री राम अभिलाष चतुर्वेदी, एम.एससी. माइक्रोबायोलॉजी, लखनऊ विश्वविद्यालय, लखनऊ ने दिनांक 01.01.2019 से 31.03.2019 तक "Characterization of plant growth promoting rhizobacteria *Pseudomonas putida* (NBRI-RA) under normal and abiotic stress condition." शीर्षक में डॉ. पुनीत सिंह चौहान, सीनियर वैज्ञानिक के पर्यवेक्षण में सफलतापूर्वक प्रशिक्षण प्राप्त किया।

## CERTIFICATE

Ms. Pooja Chaturvedi D/o Shri Ram Abhilash Chaturvedi, student of M.Sc. Microbiology, University of Lucknow, Lucknow has successfully completed the training from 01.01.2019 to 31.03.2019 on the project entitled, "Characterization of plant growth promoting rhizobacteria *Pseudomonas putida* (NBRI-RA) under normal and abiotic stress condition." under the supervision of Dr. Puneet Singh Chauhan, Senior Scientist.

(विवेक श्रीवास्तव)  
प्रशिक्षण इकाई

31/4/19  
(पुनीत सिंह चौहान)

Gram : BAGH, Lucknow

Fax : (0522) 2205836, 2205839



डॉ. देवेन्द्र परमार  
मुख्य वैज्ञानिक एवं प्रमुख  
मानव संसाधन प्रोफेसर

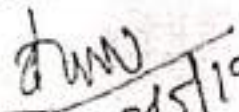
मई 03, 2019

*To whomsoever it may concern*

यह प्रमाणित किया जाता है कि सुश्री पूजा मधेशिया, एम०एससी० (माइक्रोबायोलॉजी), डिपार्टमेंट ऑफ बॉटनी, लखनऊ विश्वविद्यालय, लखनऊ में अध्ययन कर रही हैं उन्होंने "Characterization of Environmental Extended Spectrum  $\beta$ -Lactamase (ESBL) Genes TEM, OXA in *E. coli* Isolated from Surface Waters" विषय पर दिनांक 05-01-2019 से 03-05-2019 तक शोध निबंध का प्रशिक्षण डॉ. प्रीति चतुर्वेदी, वैज्ञानिक, अक्वेटिक टॉक्सिकोलॉजी लैब के पर्यवेक्षण में लिया है।

इस कार्य या इसके किसी अंश को अधोहस्ताक्षरी की बिना लिखित अनुमति के प्रकाशित नहीं किया जायेगा।  
मैं उनके उज्ज्वल भविष्य की कामना करता हूँ।

This is to certify that Km. Pooja Madheshia student of M.Sc. (Microbiology), Department of Botany, University of Lucknow, Lucknow has undergone dissertation training on "Characterization of Environmental Extended Spectrum  $\beta$ -Lactamase (ESBL) Genes TEM, OXA in *E. coli* Isolated from Surface Waters" from 05-01-2019 to 03-05-2019 under the supervision of Dr. Preeti Chaturvedi, Scientist, Aquatic Toxicology Lab of the Institute.  
The work should not be published, even in part without the prior written permission of the undersigned.  
I wish all success in her career.

  
(देवेन्द्र परमार) 25/5/19





संस्कृत-भारतीय विषविज्ञान अनुसंधान संस्थान  
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वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्  
COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH

Dr. Devendra Parmar  
Chief Scientist  
Head, Human Resource Cell

May 13, 2019

*To whomsoever it may concern*

यह प्रमाणित किया जाता है कि कु. प्रशस्ति कुलश्रेष्ठ, एम०एस०सी०, (माइक्रोबायोलॉजी), लखनऊ विश्वविद्यालय, लखनऊ में अध्ययन कर रही हैं उन्होंने "Identification and characterization of phthalate utilizing bacteria: Evaluation of their growth potential and verification of degradative genes" विषय पर दिनांक 02-01-2019 से 02-05-2019 तक शोध निबंध का प्रशिक्षण लिया है, जो संस्थान के डॉ. एन मणिकम, वरिष्ठ प्रधान वैज्ञानिक एवं प्रमुख, इन्वायरोनमेंटल बायोटेक्नोलॉजी प्रभाग के पर्यवेक्षण में था।

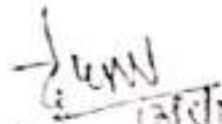
इस कार्य या इसके किसी अंश को अधोहस्ताक्षरी की बिना लिखित अनुमति के प्रकाशित नहीं किया जाना चाहिए।

मैं उनकी सफलता की कामना करता हूँ।

This is to certify that Ms. Prashasti Kulshreshtha student of M.Sc. (Microbiology), University of Lucknow, Lucknow has undergone dissertation training on "Identification and characterization of phthalate utilizing bacteria: Evaluation of their growth potential and verification of degradative genes" from 02.01.2019 to 02.05.2019 under the supervision of Dr. N Manickam, Senior Principal Scientist and Head, Environmental Biotechnology Division of the Institute.

The work should not be published, even in part without the prior written permission of the undersigned.

I wish her all success in her career.

  
(देवेन्द्र परमार)

विषविज्ञान भवन, 31, महात्मा गांधी मार्ग  
पोस्ट बॉक्स नं० 80, लखनऊ, उप्र, भारत  
VISHVIGYAN BHAVAN 31, MAHATMA GANDHI MARG  
POST BOX NO 80, LUCKNOW-226001, U.P. INDIA

Phone +91-522-2627586 2614118, 2628228 Fax +91-522-2628227, 2611547  
CHCT@icmrda.org www.icmrda.org



भारतीय विज्ञान संस्थान  
भारतीय विज्ञान संस्थान

विषविज्ञान भवन, लखनऊ, उप्र, भारत  
Toxicology Building, I.I.T. Lucknow



# सी एस आई आर - राष्ट्रीय वनस्पति अनुसंधान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद)

राना प्रताप मार्ग, पोस्ट बाराह रोड 438, लखनऊ-226 001 (भारत)

## CSIR - NATIONAL BOTANICAL RESEARCH INSTITUTE

(Council of Scientific & Industrial Research)

Rana Pratap Marg, P.O. No. 438, Lucknow-226 001 (India)



RD/No.

दिनांक / Date

ITBD/Tg-19/


22.04.2019

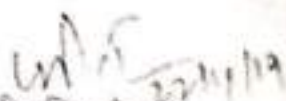
### प्रमाण-पत्र

सुश्री प्रतिभा पुत्री श्री विन्दा प्रसाद मिश्रा, एम.एससी. माइक्रोबायोलॉजी, लखनऊ विश्वविद्यालय, लखनऊ ने दिनांक 07.01.2019 से 06.04.2019 तक "Studies of antiaging & stress modulating activities of *Hedychium spicatum* in *Caenorhabditis elegans*" शीर्षक में डॉ. पुनीत सिंह चौहान, सीनियर वैज्ञानिक के पर्यवेक्षण में सफलतापूर्वक प्रशिक्षण प्राप्त किया।

### CERTIFICATE

Ms. Pratibha D/o Shri Vindra Prasad Mishra, student of M.Sc. Microbiology, University of Lucknow, Lucknow has successfully completed the training from 07.01.2019 to 06.04.2019 on the project entitled, "Studies of antiaging & stress modulating activities of *Hedychium spicatum* in *Caenorhabditis elegans*" under the supervision of Dr. Puneet Singh Chauhan, Senior Scientist.

  
(निदेशक श्रीवास्तव)  
प्रशिक्षण इकाई

  
(पुनीत सिंह चौहान)



# सी एस आई आर - राष्ट्रीय वनस्पति अनुसंधान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद)

राना प्रताप मार्ग, पोस्ट बॉक्स नं० 436, लखनऊ-226 001 (भारत)

## CSIR - NATIONAL BOTANICAL RESEARCH INSTITUTE

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Rana Pratap Marg, P.B. No. 436, Lucknow-226 001 (India)



सं/नं.

दिनांक / Date

TTBD/Trg-19/


11.04.2019

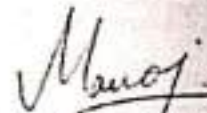
### प्रमाण-पत्र

शुश्री प्रिया पुत्री श्री हरीशचन्द्र वर्मा, एम.एससी. माइक्रोबायोलॉजी, लखनऊ विश्वविद्यालय, लखनऊ ने दिनांक 07.01.2019 से 06.04.2019 तक "Assessment of antioxidant activity in chickpea during *Fusarium oxysporum* f. Sp. *ciceris* infection" शीर्षक में डॉ. मनोज कुमार, वैज्ञानिक के पर्यवेक्षण में सफलतापूर्वक प्रशिक्षण प्राप्त किया।

### CERTIFICATE

Ms. Priya D/o Shri Harish Chandra Verma, student of M.Sc. Microbiology, University of Lucknow, Lucknow has successfully completed the training from 07.01.2019 to 06.04.2019 on the project entitled, "Assessment of antioxidant activity in chickpea during *Fusarium oxysporum* f. Sp. *ciceris* infection" under the supervision of Dr. Manoj Kumar, Scientist.

  
(विवेक धीवास्तव)  
प्रशिक्षण इकाई

  
(मनोज कुमार) 11/04/2019



# सी एस आई आर - राष्ट्रीय वनस्पति अनुसंधान संस्थान



(विज्ञानिक तथा औद्योगिक अनुसंधान परिषद्)

राजा प्रताप मार्ग, पोस्ट बॉक्स नं० 436, लखनऊ-226 001 (भारत)

CSIR - NATIONAL BOTANICAL RESEARCH INSTITUTE

(Council of Scientific & Industrial Research)

Raja Pratap Marg, P.O. No. 436, Lucknow-226 001 (India)

सं०/नं०

दिनांक / Date

TTBD/Trg-19

16.04.2019

## प्रमाण-पत्र

सुश्री प्रियंका गोस्वामी पुत्री श्री बाबू लाल भारती, एम.एससी. माइक्रोबायोलॉजी, लखनऊ विश्वविद्यालय, लखनऊ ने दिनांक 07.01.2019 से 06.04.2019 तक "Biofungicide enhance defense activity in tomato plant during wilt disease" शीर्षक में डॉ. आराधना मिश्रा, सीनियर वैज्ञानिक के पर्यवेक्षण में सफलतापूर्वक प्रशिक्षण प्राप्त किया।

## CERTIFICATE

Ms. Priyanka Goswami D/o Shri Babu Lal Bharti, student of M.Sc. Microbiology, University of Lucknow, Lucknow has successfully completed the training from 07.01.2019 to 06.04.2019 on the project entitled, "Biofungicide enhance defense activity in tomato plant during wilt disease" under the supervision of Dr. Aradhana Mishra, Senior Scientist.

(निबंध श्रीमान्त्र)  
प्रशिक्षण इकाई

(आराधना मिश्रा)



# सी एस आई आर - राष्ट्रीय वनस्पति अनुसंधान संस्थान



(विज्ञानिक तथा औद्योगिक अनुसंधान संस्थान)  
एनए प्रोबल मार्ग, पीएच बाग, पो- 220, लखनऊ-226 001 (भारत)

CSIR - NATIONAL BOTANICAL RESEARCH INSTITUTE

(Council of Scientific & Industrial Research)  
Rana Pratap Marg, P.O. No. 436, Lucknow-226 001 (India)

दिनांक / Date

FHD/Trg-19/

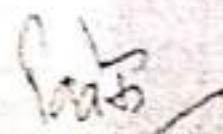
10.05.2019

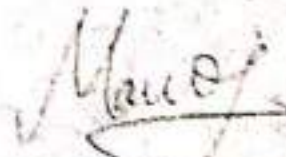
## पमाण-पत्र

शुद्धी लती फातिमा मुन्नी से सजीबत अहमद, एम.एससी. माइक्रोबायोलॉजी, लखनऊ विश्वविद्यालय, लखनऊ में दिनांक 24.01.2019 से 23.04.2019 तक "Studying effect of plant growth promotion by *Bacillus amyloliquefaciens* in drought stressed chickpea in glass house condition" शीर्षक में डॉ. मनोज कुमार, वैज्ञानिक के पर्यवेक्षण में सफलतापूर्वक परीक्षण प्राप्त किया।

## CERTIFICATE

Ms. Rubi Fatima D/o Smt. Iffekhat Ahmad, student of M.Sc. Microbiology, University of Lucknow, Lucknow has successfully completed the training from 24.01.2019 to 23.04.2019 on the project entitled, "Studying effect of plant growth promotion by *Bacillus amyloliquefaciens* in drought stressed chickpea in glass house condition" under the supervision of Dr. Manoj Kumar, Scientist.

  
(निदेशक श्रीवास्तव)  
परिष्कार इकाई

  
(मनोज कुमार)

Dr. Manoj Kumar  
Scientist  
Department of Biotechnology  
CSIR-National Botanical Research Institute  
Lucknow-226001



# सी एस आई आर - राष्ट्रीय वनस्पति अनुसंधान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्)  
राना प्रताप मार्ग, पोस्ट बाक्स सं० 436, लखनऊ-226 001 (भारत)



## CSIR - NATIONAL BOTANICAL RESEARCH INSTITUTE

(Council of Scientific & Industrial Research)  
Rana Pratap Marg, P.B. No. 436, Lucknow-226 001 (India)

सं०/No.

दिनांक / Date

TTBD/Trg-19/

16.04.2019

### प्रमाण-पत्र

श्री सत्यम रस्तोगी पुत्र श्री संदीप कुमार रस्तोगी, एम.एससी. माइक्रोबायोलॉजी, लखनऊ विश्वविद्यालय, लखनऊ ने दिनांक 01.01.2019 से 31.03.2019 तक "Screening and characterization of *Fusarium* for pathogenicity in chickpea and its biocontrol" शीर्षक में डॉ. शुचि श्रीवास्तव, सीनियर वैज्ञानिक के पर्यवेक्षण में सफलतापूर्वक प्रशिक्षण प्राप्त किया।

### CERTIFICATE

Mr. Satyam Rastogi S/o Shri Sandeep Kumar Rastogi, student of M.Sc. Microbiology, University of Lucknow, Lucknow has successfully completed the training from 01.01.2019 to 31.03.2019 on the project entitled, "Screening and characterization of *Fusarium* for pathogenicity in chickpea and its biocontrol" under the supervision of Dr. Suchi Srivastava, Senior Scientist.

(विचेंक श्रीवास्तव)  
प्रशिक्षण इकाई

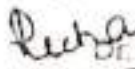
(शुचि श्रीवास्तव)

Department of Microbiology  
संजय गाँधी स्नातकोत्तर आयुर्विज्ञान संस्थान, लखनऊ  
Sanjay Gandhi Postgraduate Institute of Medical Sciences

Raebareli Road  
Lucknow-226 014 (India)

Certificate of Guide

This is to certify that Ms. Shafiqun Nisha, a student of M.Sc. (Microbiology), Lucknow University, Lucknow, has worked in my laboratory for her Dissertation from January 20 to April 20, 2019 on the project entitled "Line Probe Assay for the detection of Multi- Drug Resistant Mycobacterium tuberculosis Complex". She has successfully completed the Dissertation work and has gained practical experience in the various molecular biology techniques related to this project.

  
Dr. RICHHA MISRA  
Associate Professor  
Dept. of Microbiology  
S.G.P.G.I.M.S., Lucknow-226014  
Associate Professor

Section-In Charge, Mycobacteriology Laboratory

Department of Microbiology

Sanjay Gandhi Postgraduate Institute of Medical Sciences

Lucknow - 226014, U.P.



Phones : (0522) 2668004-006, 700, 800, 900  
Fax : (0522) 2668017, 2668129

Department of Microbiology  
संजय गाँधी स्नातकोत्तर आयुर्विज्ञान संस्थान, लखनऊ  
Sanjay Gandhi Postgraduate Institute of Medical Sciences

Raebareli Road  
Lucknow-226 014 (India)

**CERTIFICATE**

This is to certify that the study entitled "Incidence, epidemiology of *Clostridium difficile* in tertiary care institute in Northern India" has been carried out by Ms. Shailja Dubey under the supervision and guidance of Dr Ujjala Ghoshal, HOD, Department of Microbiology, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow during 15th January 2019 to 15th may 2019 as a partial fulfilment for the award of M.Sc Microbiology Degree of Lucknow University (UP). The candidate herself has obtained all the observations and the data is genuine.

Note: No part of this work may be published, reproduced, distributed or transmitted in any form or by any means, including photocopying or other electronic or mechanical methods without the prior permission of the undersigned.

*Ujjala Ghoshal*

Dr Ujjala Ghoshal

Professor and Head

Department of Microbiology,

SGPGIMS,

Lucknow- 226014

Uttar Pradesh, India

Dr. Ujjala Ghoshal  
Professor & Head  
Dept. of Microbiology  
SGPGIMS., Lucknow-14

CSIR-CDRI



CSIR - Central Drug Research Institute, Lucknow  
(Council of Scientific & Industrial Research)



Human Resource Development Programme

(Sponsored Project Training/Dissertation Work in Drug R&D and use of Sophisticated Laboratory Techniques)

Ref: No.:CDRI/HRD-Trng/1240/2019

Date: 10-05-2019

# CERTIFICATE

This certificate is issued to the candidate on successful completion of the below mentioned course, at Central Drug Research Institute:

Name of the Candidate & Qualification : Ms. Shefali Parashar  
M. Sc. (Microbiology) Pursuing

Sponsoring Department & Institution : Department of Botany, University of Lucknow,  
Lucknow, Uttar Pradesh

Category of Training : General Training

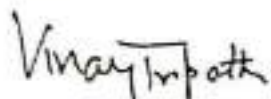
Detail of Training : Worked on the Project "Purification and Functional Assay of a  
*Mycobacterium tuberculosis* Protein Using the *E.coli* Expression System"

Duration of Course : 07<sup>th</sup> January 2019 to 06<sup>th</sup> May 2019

The candidate has fulfilled all prescribed requirements of the laboratory work, library consultation and completed the assigned task with sincerity and diligence.

  
Y.K. Manju

Training Supervisor & Principal Scientist  
Microbiology Division



Vinay Tripathi  
Training Co-ordinator & Head  
HRD Division



Professor Tapas Kumar Kundu  
Director





CSIR-CIMAP

केन्द्रीय औषधीय एवं सगंध पौधा संस्थान

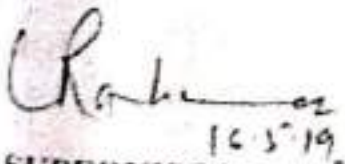
CSIR-CENTRAL INSTITUTE OF MEDICINAL AND AROMATIC PLANTS  
Human Resource Development Programme

CERTIFICATE

This certificate is issued to the candidate by CSIR-Central Institute of Medicinal and Aromatic Plants, Lucknow. On successful completion of his/her M.Sc. /M.Tech/ M.Pharm dissertation work

**Name of the Candidate** : Shradha Singh  
**Institution** : University of Lucknow  
**Category of Training** : Post Graduate Training  
**Training Department** : Biotechnology Division  
**Title of Training** : Tissue culture studies in *Bacopa monnieri* an important Medicinal plant.  
**Duration of Training** : 22<sup>nd</sup> January – 14<sup>th</sup> may (2019), (3-4 months)

The institute wishes the candidate success in his/her future endeavors.

  
16.5.19.

SUPERVISOR

Dr. Laiq Ur Rahman

Senior Principal Scientist

Head of Department



# सी एस आई आर - राष्ट्रीय वनस्पति अनुसंधान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्)

राणा प्रताप मार्ग, पोस्ट बाक्स सं० 436, लखनऊ-226 001 (भारत)

## CSIR - NATIONAL BOTANICAL RESEARCH INSTITUTE

(Council of Scientific & Industrial Research)

Rana Pratap Marg, P.B. No. 436, Lucknow-226 001 (India)



सं० / No.

दिनांक / Date

TTBD/Trg-19/

09.05.2019

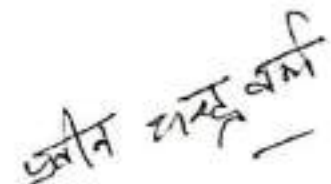
### प्रमाण-पत्र

श्री यासिर जमाल उस्मानी पुत्र श्री अख्तर जमाल उस्मानी, एम.एससी. माइक्रोबायोलॉजी, लखनऊ विश्वविद्यालय, लखनऊ ने दिनांक 25.01.2019 से 24.04.2019 तक "Identification of bacterial endosymbionts in the cotton Mealybug *Phenacoccus solenopsis*" शीर्षक में डॉ. प्रवीन चन्द्र वर्मा, सीनियर वैज्ञानिक के पर्यवेक्षण में सफलतापूर्वक प्रशिक्षण प्राप्त किया।

### CERTIFICATE

Mr. Yasir Jamal Usmani S/o Shri Akhtar Jamal Usmani, student of M.Sc. Microbiology, University of Lucknow, Lucknow has successfully completed the training from 25.01.2019 to 24.04.2019 on the project entitled, "Identification of bacterial endosymbionts in the cotton Mealybug *Phenacoccus solenopsis*" under the supervision of Dr. Praveen Chandra Verma, Senior Scientist.

  
(डिरेक्टर श्रीवास्तव)  
प्रशिक्षण इकाई

  
(प्रवीन चन्द्र वर्मा)



Sanjay Gandhi Postgraduate  
Institute of Medical Sciences  
Lucknow-226014, INDIA

Dr. Shubha R. Phadke  
Professor & HOD  
Department of Genetics

CERTIFICATE

This is to certify that the work titled "Molecular Characterization of CGG repeat status at FMRI gene in Premature Ovarian Insufficiency cases using TP-PCR" submitted by -Karuna ( Roll No.- 17001012446) " in partial fulfilment for the award of degree of M.Sc. Microbiology, Lucknow University has been carried out under my supervision. The thesis is an original piece of work of candidate herself. This work has not been submitted partially or wholly to any other University or Institute for the award of this or any other degree or diploma.

*Shubha R. Phadke*  
Signature of  
Dr. Shubha R. Phadke  
Prof. Department of Genetics  
Lucknow-226114