## Curriculum Vitae

RAIGANJ UNIVERSITY

NORTH DINAJPUR | RAIGANJ - 733134 | WEST BENGAL INDIA

Department of Microbiology

Name: Debasis Mitra

**Father's Name:** Ranjit Kumar Mitra

**Mother's Name:** Mita Mitra

**Date of Birth:** 23/04/1993

**Known Language:** Bengali, Hindi and English.

Email: <u>debasismitra3@gmail.com</u>

**Phone:** +91 - 6370605142



## Address for correspondence:

C/o - Dr. P. Panneerselvam Lab (CPD), ICAR - National Rice Research Institute, Cuttack - 753 006 Odisha, India

#### Permanent address:

S/o - Ranjit Kumar Mitra, Vill. Aviaurjuni, P.O. Jhentla, P.S. Keshpur, Dist. Paschim Medinipur Pin. 721 150 West Bengal, India. (Phone: +91-9732971143)

#### **Research Web Links:**

https://scholar.google.co.in/citations?user=Nzg2wMMAAAAJ&hl=en

https://www.scopus.com/authid/detail.uri?authorId=57211354606

https://publons.com/researcher/AAP-1925-2020/

R<sup>6</sup> https://www.researchgate.net/profile/Debasis\_Mitra7

MENDELEY https://www.mendeley.com/profiles/debasis-mitra3

https://loop.frontiersin.org/people/535252/overview

https://raiganjcollege.academia.edu/DebasisMitra

https://orcid.org/0000-0003-0525-8812

## **Google Scholar Citations:**

(Since 2014)

Citations: 43 h-index: 3 i10-index: 1

## **EDUCATIONAL QUALIFICATION**

Class/Degree	Year	College / University	Subjects	CGPA / Grade
Doctor of Philosophy ( <b>Ph.D.</b> ) Microbiology	Enroll– Dec, 2019	Department of Microbiology, Raiganj University, Raiganj, West Bengal, India	Microbiology	(pursuing)
Master of Science (M.Sc.) Biotechnology	2017	Graphic Era (Deemed to be University), Uttarakhand, India	Biotechnology	A+ (CGPA: 8.28/10)
Bachelor of Science ( <b>B.Sc.</b> ) Biotechnology	2014	Vidyasagar University, OIST, West Bengal, India	Biotechnology	B+
Higher Secondary Degree	2011	WBCHS, West Bengal	Bengali, English, Biological Science, Chemistry, Physics	B+
Secondary Degree	2009	WBBSE, West Bengal	Bengali, English, Mathematics, Physical Science, Life Science, History, Geography	Α

## **RESEARCH EXPERIENCE**

Name of Lab /		Period of time		Total	Supervisor(s)	Research	
Institution	Designation	From	To	Ouration (Y,M,D)		Area	
ICAR- Indian Institute of Horticultural Research, Bengaluru	Dissertation Trainee	Jan. 2017	June, 2017	6 Months	Prof. (Dr.) A. N. Ganeshamurthy  Ph.D,ARS, FNAAS, FISPRD, FCHAI  Principal Scientist and Head,  SSAC, ICAR-IIHR  PI, Bioversity International Project  on Ecosystem Services.	Plant Microbes Interaction	
Graphic Era (Deemed to be University), Dehradun	Student Researcher (M.Sc.)	Jan, 2016 June, 2017	Dec, 2016 Nov, 2017	1 Year 6 Months	Prof. (Dr.) L. M. S. Palni  FNASC, FAAS, FNA, FISPM, PDF (ANU, Canberra)  Vice Chancellor, Graphic Era  (Deemed to be University),  Uttarakhand	Plant Microbes Interaction	

Oriental Institute of Science and Technology, VIH Campus, West Bengal India	Student Researcher (B.Sc.)	Mar, 2012	June, 2014	2 Year 3 Months	Dr. A. Mukhopadhaya Asst. Professor Oriental Institute of Science and Technology, VIH Campus, West Bengal	Plant Growth Promotion
ICAR - National Rice Research Institute, Cuttack Odisha India	Student Researcher	July, 2018	-		Dr. P. Panneerselvam Ph.D, ARS, FCHAI Principal Scientist, CPD, ICAR-National Rice Research Institute, Cuttack -751006, Odisha, India	Plant-AMF Interaction

## **ONLINE COURSE**

University	Course Name	Period of Time		Percentage	
Jordan University of Science and Technology, Jordan	Microbiology and Forensic Science	28 <sup>th</sup> May,	26 <sup>th</sup> June,	85.00	
Macquarie University, Australia	Climate Change	2018	2018	60.00	
Massey University, New Zealand	Agriculture and the World We Live In			70.00	

## **RESEARCH INTERESTS**

## PUBLICATIONS AND OTHERS

<ul> <li>Plant Microbe Interactions</li> </ul>	Total Research and Review Publications: >25		
Soil fertility	Books	: 3	
Crop nutrition	Book chapters	: 20	
*	Popular article and other report	:1	
Mycorrhizal interactions	Research/ Technical Bulletin	: 1	
Soil Microbiology	Conference and training	:>50	
<ul> <li>Biocontrol</li> </ul>	Technology transferred/ developed	:1	
Molecular Biology	Editor/ EBM of Journal	:4	
O,	Special Issue Editor	: 2	
• Strigolactones	Reviewer (Publons)	:15	

## EDITORIAL BOARD MEMBER / EDITOR OF THE JOURNALS

#### 1. Journal of Plant Sciences

http://www.jplantsciences.org/

ISSN Online: 2331-0731, ISSN Print: 2331-0723

Editor from 23rd June, 2020

http://membership.sciencepublishinggroup.com/debasismitra3

Speciality: Plant-Microbes Interaction, Soil Microbiology, Arbuscular Mycorrhizal Fungi, Biocontrol,

and Molecular Biology section

#### 2. Acta Scientific Agriculture

ISSN: 2581-365X; Impact Factor 0.734 *Review board member* from 23<sup>rd</sup> July, 2020 <a href="https://actascientific.com/ASAG-RB.php">https://actascientific.com/ASAG-RB.php</a>

#### 3. Acta Scientific Microbiology

ISSN: 2581-3226; Impact Factor 1.125 **Review board member** from 14<sup>th</sup> Sept, 2020

<a href="https://actascientific.com/ASMI-RB.php">https://actascientific.com/ASMI-RB.php</a>

#### SPECIAL ISSUE EDITOR

1. Special Issue on "Recent Trends and Future Prospects in Plant-Microbes Interactions Research" in Journal of Plant Sciences

ISSN Online: 2331-0731, ISSN Print: 2331-0723

Role: Lead Guest Editor (Date: 27th August 2020 – 30th August 2021)

http://www.jplantsciences.org/specialissueinfo?journalid=215&specialissueid=215025

2. Special Issue on "Current Strategy and Future Perspectives in Plant Stress Management" in International Journal of Microbiology and Biotechnology

ISSN: 2578-9686

**Role:** Lead Guest Editor (Date: 10<sup>th</sup> September 2020 - 10<sup>th</sup> September 2021)

http://www.sciencepublishinggroup.com/specialissue/396006

## BOARD OF REVIEWER/ PEER REVIEWER / REVIEWER PANEL MEMBER

1. Microbiology | Microbiology Society

**ISSN:** 1350-0872; **Impact factor**: 3.235

Peer Reviewer from 2nd Oct, 2020

https://www.microbiologyresearch.org/journal/micro/reviewers-board

#### 2. American Journal of Agricultural and Biological Sciences

ISSN: 1557-4997

Peer Reviewer from 21st Oct, 2020 https://thescipub.com/ajabs

#### 3. Current Research in Nutrition and Food Science

ISSN: 2347-467X, Online ISSN: 2322-0007

Peer Reviewer from 28th Oct, 2020

https://www.foodandnutritionjournal.org/about/

## 4. Current Agriculture Research Journal

ISSN: 2321-9971

Peer Reviewer from 8<sup>th</sup> Oct, 2020 https://www.agriculturejournal.org/

#### 5. International Journal of Microbiology and Biotechnology

ISSN Online: 2578-9686

Peer Reviewer from 23rd June, 2020

http://membership.sciencepublishinggroup.com/debasismitra3

#### 6. The Open Microbiology Journal

ISSN: 1874-2858

Peer Reviewer Member from 11th Aug 2020

https://benthamopen.com/journal/reviewer-board.php?journalID=TOMICROI

#### 7. Journal of Applied and Natural Science

ISSN: 2231-5209

Peer Reviewer Member from 21th Aug 2020

http://journals.ansfoundation.org/index.php/jans/

#### **SOCIETY MEMBER**

#### 1. International Association for Agricultural Sustainability, IAAS

Address: 105 Cecil Street #18-39, the Octagon, Singapore

Year: Aug, 2020 to Aug 2021 http://www.iaas.org.sg/

## 2. American Association for Science and Technology

Nominated Year: July, 2020 – lifetime membership http://www.aascit.org/membership/mdev23

#### 3. South American Mycorrhizal Research Network

Nominated Year: July, 2020 – lifetime membership <a href="https://southmycorrhizas.org/about/members/">https://southmycorrhizas.org/about/members/</a>

#### 4. GEO BON: Group on Earth Observations Biodiversity Observation Network

REg. Year. July, 2020 https://geobon.org/ https://members.geobon.org/pages/index.php

#### 5. International Association of Oncology

Year: 25/07/2020 - 25/07/2021

http://iaoncology.org/

## **REVIEWER OF THE JOURNALS**

1. **Journal of Biomolecular Structure and Dynamics** (Taylor and Francis)

ISSN: 0739-1102; NAAS: 9.31; Impact Factor: 3.31

2. Asian Journal of Soil Science and Plant Nutrition

ISSN: 2456-9682

3. Journal of Advances in Microbiology

ISSN: 2456-7116

4. Agricultural Science Research Journal

ISSN: 2026-6073

5. Issues in Biological Sciences and Pharmaceutical Research

ISSN 2350-1588; Impact factor 0.395

6. Journal of Microbiology, Biotechnology and Food Sciences

ISSN 1338-5178; Impact factor 0.3

#### **BOOK**

1. Title: MICROBIAL RESOURCES FOR SUSTAINABLE AGRICULTURE

**Author(s)** / **Edited by: Debasis Mitra**, Divya Jain, P. Panneerselvam

Co-author(s): A. N. Ganeshamurthy, Ei Mon Myo, Rittick Mondal, Ansuman Senapati

Publisher: Lambert Academic Publishing, Heinrich-Böcking-Straße, Saarbrücken, Germany.

**ISBN:** 978-613-9-83608-6

**2. Title:** MICROORGANISMS, BIOFERTILIZERS AND SUSTAINABLE AGRICULTURE PART A

**Author(s)** / **Edited by: Debasis Mitra,** Bhaswatimayee Mahakur, Bahman Khoshru and Pradeep K. Das Mohapatra

Publisher: Scholar's Press, Baznīcas iela 13-17, Rīgā, LV-1010 Latvia, European Union

**ISBN:** 978-613-8-93946-7

**3. Title:** MICROORGANISMS, BIOFERTILIZERS AND SUSTAINABLE AGRICULTURE PART B

**Author(s)** / **Edited by:** Bahman Khoshru, **Debasis Mitra,** Bhaswatimayee Mahakur, and Pradeep K. Das Mohapatra

Publisher: Scholar's Press, Baznīcas iela 13-17, Rīgā, LV-1010 Latvia, European Union

**ISBN:** 978-613-8-93945-0

#### RESEARCH PUBLICATIONS

- 1. Debasis Mitra, Devvret Verma, Bhaswatimayee Mahakur, Anshul Kamboj, Bhavya Mudgal, Kumud Pant, Brijesh Prasad, Durga P. Barik and Pradeep K. Das Mohapatra (2020) Molecular docking studies of *Vitex negundo* L. natural compounds against papain-like protease (PLpro) of SARS CoV-2 (coronavirus) to conquer the pandemic situation in the world. Journal of Biomolecular Structure and Dynamics. (Under Review). (Impact factor: 3.220; NAAS Score: 9.31)
- 2. Ishita Biswas, **Debasis Mitra**, Ansuman Senapati, Debanjan Mitra, Sourav Chattaraj, Murshed Ali, Goutam Basak, Periyasamy Panneerselvam and Pradeep K. Das Mohapatra(2020) Valorization of vermicompost with bacterial fermented chicken feather hydrolysate for the yield improvement of tomato plant: a novel organic combination. **Int. J. Recycl. Org. Waste Agric.** (Impact factor: 1.169/0.42; NAAS Score: 9.31)
- **3.** Devvret Verma, **Debasis Mitra**, Anshul Kamboj, Bhaswatimayee Mahakur, Priya Chaudhary, Kumud Pant, Rakesh Shrivastav, Pracheta Janmeda and Pradeep K. Das Mohapatr (2020) Potential inhibitors of SARS-CoV-2 (COVID 19) proteases PLpro and Mpro/ 3CLpro: An *in silico* screening of three pertinent medicinal plant natural components.
- **4. Debasis Mitra**, A. N. Ganeshamurthy, Komal Sharma, T. K. Radha and T. R. Rupa (2020) Plant growth promotion and biocontrol activity of some typical harsh environment rhizo-microbes and their effects on *Amaranthus cruentus* plants. **Res. J. Biotech.** 15(1):35-45. (Impact factor: 0.21; NAAS Score: 5.00).
- **5. Debasis Mitra**, Navendra Uniyal, Komal Sharma, Anju Rani, Lok Man S. Palni, Akansha Chauhan, Poonam and Prabhakar Semwal (2020) Isolation and impacts of rhizobacteria from *Saussurea obvallata* (DC.) Edgew. (Brahma Kamal). **Biologica Nyssana (Journal of Biological Science)** 11(1):35-44.
- **6. Debasis Mitra**, A. N. Ganeshamurthy, T. K. Radha, Komal Sharma and T. R. Rupa (2020) Soil physico-chemical properties and *in-vitro* zinc solubilization of rhizo-microbes from the different

- rhizospheric soil samples of harsh environment. **Annals Food Science and Technology**. 21(1):226-232.
- 7. Srushti Prajna Mohanty, Bhaswatimayee Mahakur, **Debasis Mitra** and Durga Prasad Barik. (2020) Qualitative phytochemical screening of leaf extract of two valuable medicinal plants (*Catharanthus roseus* and *Alstonia scholaris*) of Odisha. **Kerala Academy of Sciences. International Webinar on Phytochemistry-2020. pp. 28.**
- 8. Debasis Mitra, Anju Rani, Lok Man S. Palni, Navendra Uniyal, Komal Sharma, Akansha Chauhan, Prabhakar Semwal and Poonam Arya (2019) Isolation and characterization of dominant fungi from rhizospheric soil of Saussurea obvallata (DC.) Edgew. (Brahma Kamal) of the Indian Himalayan region. Journal of Pure and Applied Microbiology. 13(3):1509-1515(Impact factor: 0.157; NAAS Score:4.00\*\*)
- 9. Periyasamy Panneerselvam, Sowarnalisha Sahoo, Ansuman Senapati, Upendra Kumar, **Debasis** Mitra, Chidambaranathan Parameswaran, Annamalai Anandan, Anjani Kumar, Afrin Jahan, Amresh Kumar Nayak (2019) Understanding interaction effect of arbuscular mycorrhizal fungi in rice under elevated carbon dioxide conditions. **Journal of Basic Microbiology.** 59 (12), 1217-1228. (Impact factor:1.909; NAAS Score: 7.76)
- 10. P. Panneerselvam, U. Kumar, A. Senapati, L. Sharma, P Lepcha, S.R. Prabhukarthikeyan, A. Jahan, G.P.P. Govindharaj, S. Lenka, P.K. Nayak, Debasis Mitra, M.S. Sagarika, S. Thangappan and U. Sivakumar (2018) Antagonistic and plant-growth promoting novel Bacillus species from long-term organic farming soils from Sikkim, India. 3 Biotech. 9 (11), 416. (Impact factor: 2.389; NAAS Score: 7.79)
- 11. Radha T.K., Ganeshamurthy A. N., **Debasis Mitra**, Komal Sharma, Rupa T.R. and G. Selvakumar (2018) Feasibility of substituting cocopeat with rice husk and saw dust compost as a nursery medium for growing vegetable seedlings. **The BioScan**. 13(2): 619-623. ISSN: 0973-7049. (NAAS Score:5.26)
- **12.** Vidyashree D.N., Muthuraj R., Panneerselvam P. and **Debasis Mitra** (2018) Organic acids production by zinc solubilizing bacterial isolates. **Int. J. Curr. Microbiol. App. Sci.** 7(10): 626-633. ISSN: 2319-7706. (NAAS score: 5.38)
- 13. Navendra Uniyal, Akansha Chauhan, Komal Sharma and **Debasis Mitra** (2018) Plant growth promotion by bacterial inoculants with different conditions and estimation of enzyme activity from germination seeds and bacterial isolates. **Curr. Trends Biotechnol. Pharm.** 12(1): 51-62. (**Impact factor: 0.320; NAAS: 3.90**)

- **14. Debasis Mitra,** Komal Sharma, Ganeshamurthy A.N., Radha T.K., T. R. Rupa and G. Selvakumar (2017) International Symposium on Horticulture: Priorities and Emerging Trends. ICAR-IIHR. **Page. 415**.
- **15. Debasis Mitra** and Arup K Mondal (2016) Plant Growth Promotion: on *Cicer arietinum* L. under elaborated treatment conditions. **Int. J. Curr. Microbiol. App. Sci.** 5(3):159-180. (NAAS score:5.38)
- **16. Debasis Mitra**, Komal Sharma, Navender Uniyal, Akansha Chauhan and Paratapar Sarkar (2016) Study on Plant Hormone (Indole-3-Acetic Acid) Producing Level and Other Plant Growth Promotion Ability (PGPA) by *Asparagus racemosus* (L.) Rhizobacteria. **J. Chem. Pharm. Res.** 8(4): 995-1002. (Impact factor: 0.39).
- **17. Debasis Mitra** and Arup K Mondal (2015) Growth and vigour improvement of *Lycopersicon* esculentum by a bacterial isolate (*Bacillus* sp.) From *Leonurus sibiricus* rhizosphere. **Int. J. Res.** 2(10): 602-608.
- **18. Debasis Mitra**, Arup K Mondal, Manas Mondol and Arijit Mukhopadhyay (2014) Plant growth promoting traits and prospects of using phosphate solubilizing *pseudomonas* sp. isolated from laterite soil. **Annals Food Science and Technology.** 15(2): 309-315.
- **19. Debasis Mitra**, Arup K Mondal and Arijit Mukhopadhyay (2014) Enhance plant health by using of phosphate solubilizing *Bacillus* sp. as ecofriendly Bio fertilizer. **Int. J. Res.** 1(11): 1438-1448.
- **20. Debasis Mitra**, Arup K Mondal, Saikat Acharya and Arijit Mukhopadhyay (2014) Isolation and Characterization of some intracellular pigmented bacteria isolated from Soil & Coal powder. **Res.** in Biotech. 5(6): 24-32.
- **21. Debasis Mitra**, Arup K Mondal and Arijit Mukhopadhyay (2014) Unique level of Multi-Drug Resistance (MDR) in *Pseudomonas aeruginosa* strain DEB1. Int. J. Sci. Res. 3(9): 455-460.
- 22. B. Saritha, P. Panneerselvama, K. Srinivas, **Debasis Mitra** and Ansuman Senapati (2020) Enhancing the sapota [Manilkara achras (Mill) Forsberg] yield through intervention of Arbuscular Mycorrhizal fungi and its associated bacteria. **Res. J. Biotech. (Accepted). (Impact factor: 0.21; NAAS score:5.00)**
- 23. P. Panneerselvam, G. Selvakumar, A. N. Ganeshamurthy, **Debasis Mitra** and Ansuman Senapati. (2020) Enhancing pomegranate (*Punica granatum* L.) plant health through intervention of Streptomyces consortium. **Biocontrol Science and Technology.** (**Under review**). (**Impact factor: 1.010; NAAS score: 7.00**)

- **24.** Periyasamy Panneerselvam, Sanjoy Saha, Ansuman Senapati, Amaresh Kumar Nayak, Upendra Kumar and **Debasis Mitra**. (2020) New generation post-emergence herbicides and their impact on arbuscular mycorrhizae fungal association in rice using deep learning approaches. **Rice Science** (**Under process**).
- **25.** Periyasamy Panneerselvam, Ansuman Senapati, Laxuman Sharma, Amaresh Kumar Nayak, Anjani Kumar, Upendra Kumar, S. R. Prabhukarthikeyan and **Debasis Mitra**. (2020). Understanding plant growth promoting potential of Enterobacter in rice isolated from long-term organic farming soil of Sikkim, India through supervised learning approach (**Under process**).

#### **NEWS LETTER**

1. Ganeshamurthy A.N., Komal Sharma, **Debasis Mitra**, Radha T.K. and T. R. Rupa (2017) Isolation and characterization of Arbuscular mycorrhizal fungi and their role in plants growing under harsh environments. **Mycorrhiza News - mycorrhizae (TERI)**. 29(3): 7-12. ISSN 0970-695X. (http://bookstore.teri.res.in/e\_issue\_text\_1.php?oj\_id=350&sector=857)

#### RESEARCH TECHNICAL BULLETIN

Title: Microbial consortium for sustainable agriculture production in Sikkim
 Author(s): P. Panneerselvam, L. Sharma, A. Senapati, A.K. Nayak, SR P. Karthikeyan, U. Kumar,
 A. Kumar, G.P. Pandi, D. Mitra, A. Anandan, P.K. Nayak

Publisher: ICAR-NRRI, Cuttack

Pg, No.: xx-xx.

#### **REVIEW PUBLICATIONS**

- 1. Bahman Khoshru, **Debasis Mitra**, Elaheh Khoshmanzar, Ei Mon Myo, Navendra Uniyal, Bhaswatimayee Mahakur, Pradeep Kumar Das Mohapatra, P. Panneerselvam, Hanane Boutaj, Mehrdad Alizadeh, Martha Viviana Torres Cely, Ansuman Senapati and Anju Rani (2020) Current scenario and future prospects of plant growth-promoting rhizobacteria: an economic valuable resource for the agriculture revival under stressful conditions. **Journal of Plant Nutrition. doi.** 10.1080/01904167.2020.1799004 (Impact Factor: 1.132; NAAS score: 6.75).
- 2. Debasis Mitra, Snežana Anđelković, P. Panneerselvama, Ansuman Senapati, Tanja Vasić, A. N. Ganeshamurthy, Manisha, Navendra Uniyal and T. K. Radha (2019) Phosphate solubilizing microbes and biocontrol agent for plant nutrition and protection: current perspective. Communications in Soil Science and Plant Analysis. 51(5):645-657. (Impact Factor: 0.767; NAAS score: 6.69).

- 3. Divya Jain, Navendra Uniyal, Debasis Mitra, Pracheta Janmeda (2020) Traditional resources and use of aromatic and ethno- medicinal plants in Uttarakhand: Compliment of nature. **International Journal of Herbal Medicine.** 8(5):88-95. (NAAS score: 3.2).
- **4.** Bahman Khoshru, **Debasis Mitra**, Bhaswatimayee Mahakur, Mohammad Reza Sarikhani, Rittick Mondal, Devvret Verma, and Kumud Pant (2020) Role of soil rhizobacteria in utilization of an indispensable micronutrient zinc for plant growth promotion. **Journal of Natural Remedies**. 21(06):239-251.
- **5. Debasis Mitra**, Snežana Anđelković, P. Panneerselvam, Manisha, A. Senapati, Tanja Vasić, A. N. Ganeshamurthy, Devvrat, Poonam, T. K. Radha and D. Jain (2019) Plant Growth Promoting Microorganisms (PGPMs) help in Sustainable Agriculture: Current Perspective. **Int. J. Agri. Sci. Vet. Med.** 7(2): 50-74. (NAAS score:2.83)
- **6. Debasis Mitra**, Navendra Uniyal, P. Panneerselvam, Ansuman Senapati, A. N. Ganeshamurthy, Vikas Kumar and Divya Jain (2019) Role of mycorrhiza and its associated bacteria on plant growth promotion and nutrient management in sustainable agriculture. **IJLSAS**. 1(1): 1-11.
- 7. Devvret Verma, B. Mudgal, P.Chaudhary, B. Mahakur, **Debasis Mitra**, K.Pant & A. Thapliyal (2020) Medicinal Plants of Uttarakhand (India) and Their Benefits in the Treatment of Tuberculosis: Current Perspectives. **Global Journal of Bio-Science and biotechnology. 9(3): 75-85.** (Impact Factor: 0.675; NAAS: 4.13)
- **8.** Bahman Khoshru, **Debasis Mitra**, Bhaswatimayee Mahakur and Rittick Mondal. 2020. Increase the bioavailability of iron and zinc nutrient in nutrient deficiency condition by rhizo-microbes for efficient plant growth. (**Under process**).
- 9. Debasis Mitra, R. Mondal, Bahman Khoshru, N. Uniyal, Ei Mon Myo, H.Boutaj, Beatriz E. Guerra, T. K. Radha, Bhaswatimayee Mahakur, A. Senapati, P. Panneerselvam, A. N. Ganeshamurthy, Snežana Anđelković, Tanja Vasić, Anju Rani, Pradeep Kumar Das Mohapatra, Amit K. Mandal and Octávio Luiz Franco. Revitalization of growth promotion, nutrient acquisition and protection of plant by actinobacteria for sustainable agriculture. World Journal of Microbiology and Biotechnology. (Under Review) (Impact Factor: 2.518; NAAS score: 8.65).
- 10. Debasis Mitra, Guerra Sierra B. E., Bahman Khoshru, Bhaswatimayee Mahakur, Claudia Krüger, Priya Chaudhary, Faride Noroozi Shahri, Rihab Djebaili, Adeyemi N. Olatunbosun, Enas M. El-Ballat, Mohamed A. El-Esawi, Shokufeh Moradi, Rittick Mondal, Ansuman Senapati, P. Panneerselvam and Pradeep K. Das Mohapatra (2020) Impacts of arbuscular mycorrhizal fungi on rice growth, development and stress management with a particular emphasis on strigolactone effects on plant root development. Communications in Soil Science and Plant Analysis (Under Review). (Impact Factor: 0.767; NAAS score: 6.69).

11. Debasis Mitra, Djebaili Riha, Bhaswatimayee Mahakur, Marika Pellegrini, Aniruddha Sarker, Priya Chaudhary, Bahman Khoshru, Maddalena Del Gallo, Mahmoud Kitouni, P. Panneerselvam, Durga P. Barik & Pradeep Kumar Das Mohapatra (2020) Arbuscular mycorrhizal symbiosis: plant growth improvement and induction of resistance under stressful conditions. Journal of Plant Nutrition (Under Review). (Impact Factor: 1.132; NAAS score: 6.75).

#### **BOOK CHAPTERS**

- 1. Debasis Mitra, Priya Chaudhary, Devvret Verma, Bahman Khoshru, Ansuman Senapati, Bhaswatimayee Mahakur, P. Panneerselvam, Pradeep K. Das Mohapatra and Snežana Anđelković (2020) Bioinformatics role in studying microbe mediated biotic and abiotic stress tolerance, In. Kumar Microbial Management of Plant Stresses: Current Trends, Application and Challenges. Elsevier, Netherlands, pp. xxx-xxx.
- 2. Debasis Mitra, Priya Chaudhary, Bhaswatimayee Mahakur, D. P. Barik, Bahman Khoshru and Pradeep Kr. Das Mohapatra (2020) Interaction of rhizome-bacteria & fungi in plant, In. Mitra, Mahakur, Khoshru, and Mahapatra Eds. Microorganisms, Biofertilizers and Sustainable Agriculture. Part A, Scholar's Press, Baznīcas iela 13-17, Rīgā, LV-1010 Latvia, European Union. pp. 17-39.
- 3. Kumar Anand, Amit Kumar Dutta, Priya Chaudhary, Devvret Verma, Bhaswatimayee Mahakur, Bahman Khoshru and **Debasis Mitra** (2020) Basic Information of Beneficial Microbes in Crop Production and Bio-fertilizer production In. Mitra, Mahakur, Khoshru, and Mahapatra Eds. Microorganisms, Biofertilizers and Sustainable Agriculture. Part A, Scholar's Press, Baznīcas iela 13-17, Rīgā, LV-1010 Latvia, European Union. pp. 1-16.
- **4.** Bhaswatimayee Mahakur, Durga P. Barik, **Debasis Mitra** and Pradeep K. Das Mohapatra (2020) Bio-control Activity of rhizo-microbes for plant growth promotion and protection In. Mitra, Mahakur Khoshru, and Mahapatra Eds. Microorganisms, Biofertilizers and Sustainable Agriculture. Part A, Scholar's Press, Baznīcas iela 13-17, Rīgā, LV-1010 Latvia, European Union. pp. 40-51.
- 5. Priya Chaudhary, **Debasis Mitra**, Bhaswatimayee Mahakur and Pracheta Janmeda (2020) Azolla: Uses, Role, Benefits and Importance in crop production, In. Mitra, Khoshru, Mahakur and Mahapatra Eds. Microorganisms, Biofertilizers and Sustainable Agriculture. Part A, Scholar's Press, Baznīcas iela 13-17, Rīgā, LV-1010 Latvia, European Union. pp. 65-92.
- **6.** Bahman Khoshru, **Debasis Mitra**, and Bhaswatimayee Mahakur (2020) Advances in Bio-fertilizers or Bio-inoculums Production Research, In. Mitra, Khoshru, Mahakur and Mahapatra Eds. Microorganisms, Biofertilizers and Sustainable Agriculture. Part A, Scholar's Press, Baznīcas iela 13-17, Rīgā, LV-1010 Latvia, European Union. pp. 93-131.

- 7. Shokufeh Moradi, Bahman Khoshru, Sajad Bayat, **Debasis Mitra** and Devvret Verma (2020) Rhizobia, Biofertilizers, and Their Plant Growth Promoting Traits, In. Khoshru, Mitra, Mahakur and Mahapatra Eds. Microorganisms, Biofertilizers and Sustainable Agriculture. Part B, Scholar's Press, Baznīcas iela 13-17, Rīgā, LV-1010 Latvia, European Union. pp. 1-26.
- 8. Priya Chaudhary, **Debasis Mitra**, Pracheta Janmeda, and Pradeep K. Das Mohapatra (2020) Assessment of different carriers' materials for biofertilizers and their effect on plant growth, In. Mitra, Mahakur, Khoshru and Mahapatra Eds. Microorganisms, Biofertilizers and Sustainable Agriculture. Part A, Scholar's Press, Baznīcas iela 13-17, Rīgā, LV-1010 Latvia, European Union. pp. 27-50.
- **9.** Saeedeh Ansari, Bahman Khoshru, **Debasis Mitra**, Bhaswatimayee Mahakur, Shokufeh Moradi (2020) The Quality Control of Biofertilizers, In. Khoshru, Mitra, Mahakur and Mahapatra Eds. Microorganisms, Biofertilizers and Sustainable Agriculture. Part B, Scholar's Press, Baznīcas iela 13-17, Rīgā, LV-1010 Latvia, European Union. pp. 51-84.
- 10. Sajad Bayat, Shokufeh Moradi, Bahman Khoshru, Saeedeh Ansari and **Debasis Mitra** (2020) PGPMs and Bioremediation: Novel Approaches to Cleaning Up Polluted Soils, In. Khoshru, Mitra, Mahakur and Mahapatra Eds. Microorganisms, Biofertilizers and Sustainable Agriculture. Part B Scholar's Press, Baznīcas iela 13- 17, Rīgā, LV-1010 Latvia, European Union. pp. 85-107.
- 11. Bahman Khoshru, Shokufeh Moradi, Sajad Bayat, **Debasis Mitra** and Saeedeh Ansari (2020) Biofertilizers, Preparation, Type and Diversity, In. Khoshru, Mitra, Mahakur and Mahapatra Eds. Microorganisms, Biofertilizers and Sustainable Agriculture. Part B, Scholar's Press, Baznīcas iela 13-17, Rīgā, LV-1010 Latvia, European Union. pp. 108-150.
- 12. Shokufeh Moradi, Bahman Khoshru, **Debasis Mitra**, Bhaswatimayee Mahakur, Pradeep K. Das Mohapatra, Behnam Asghari and Mansour Ghorbanpour. (2020)Transcriptomics Analyses and the Relationship between Plant and Plant Growth-Promoting Rhizobacteria (PGPR). Springer Publishing. (**Submitted**).
- **13.** Vinay Kumar, Rajndra Sonwani, Lata Jain, Bhanu Pratap Singh Gautam, Manjul Gondwal, Ravindra Soni, Anju Rani and **Debasis Mitra** (2020). Bio-inoculants for Biodegradation and Bioconversion of Agrowaste: Status and Prospects. Springer Publishing. (**Submitted**).
- **14.** Al-Tawaha et al. 2021. Application of Arbuscular mycorrhiza fungi (AMF) to Agricultural and Horticultural Crops. CRC Press: Taylor & Francis. (**Submitted**).
- **15. Debasis Mitra**, Rittick Mondal, Divya Jain, Tanja Vasić, Komal Sharma, Bahman Khoshru, P Panneerselvam, AN Ganeshamurthy, Ei Mon Myo, Bhaswatimayee Mahakur and A Senapati (2019) Influence of Arbuscular Mycorrhizal fungi (AMF) on plant growth promotion and nutrient managnment. (Mitra *et al.* 2019 eds. Research Advancements and Beneficial effects of Plant Growth Promoting Microorganism in Agriculture; ISBN: 978-613-9-83608-6, Lambert Academic Publishing) Page 41-57.

- **16.** Ei Mon Myo, Divya Jain, **Debasis Mitra**, P. Panneerselvam, Snežana Anđelković, Ansuman Senapati, A. N. Ganeshamurthy, Rittick Mondal, Bhaswatimayee Mahakur and Navendra Uniyal (2019) Plant-endophytic bacterial associations help in plant growth promotion and protection against the fungal pathogens. (Mitra *et al.* 2019 eds. Research Advancements and Beneficial effects of Plant Growth Promoting Microorganism in Agriculture; ISBN: 978-613-9-83608-6, Lambert Academic Publishing) Page 1-33.
- 17. Rittick Mondal, Divya Jain, Ei Mon Myo, **Debasis Mitra**, Navendra Uniyal Vaishali Tyagi and Prabhakar Semwal (2019) Beneficial soil bacteria and fungi helps in plant growth promotion. (Mitra *et al.* 2019 eds. Research Advancements and Beneficial effects of Plant Growth Promoting Microorganism in Agriculture; ISBN: 978-613-9-83608-6, Lambert Academic Publishing) Page 34-40.
- **18.** Priya Chaudhary, Divya Jain and **Debasis Mitra** (2019) Actinomycetes Basics and beneficial role in agriculture. (Mitra *et al.* 2019 eds. Research Advancements and Beneficial effects of Plant Growth Promoting Microorganism in Agriculture; ISBN: 978-613-9-83608-6, Lambert Academic Publishing) Page 58-83.
- **19.** Priya Chaudhary, Divya Jain, Kumar Anand and **Debasis Mitra** (2019) Biofertilizers: A sustainable approach for plant and soil health. (Mitra *et al.* 2019 eds. Research Advancements and Beneficial effects of Plant Growth Promoting Microorganism in Agriculture; ISBN: 978-613-9-83608-6, Lambert Academic Publishing) Page 106-119.
- **20.** Snežana Anđelković, Devvret Verma, Tanja Vasić, and **Debasis Mitra** (2019) Bioinformatics application and advancement: plant microbes interaction. (Mitra *et al.* 2019 eds. Research Advancements and Beneficial effects of Plant Growth Promoting Microorganism in Agriculture; ISBN: 978-613-9-83608-6, Lambert Academic Publishing) Page 84-91.

#### RESEARCH WORK EXPERIENCE

## **Technique / Technical Experience:**

#### A.

- DNA / RNA Extraction from Blood/Tissue/Microorganisms.
- UV/Visible Spectrophotometer analysis and Chromatography.
- Atomic absorption spectrophotometer (AAS) nutrient analysis.
- Fiber Analyzer (enzymes) and muffle furnace
- *In vivo* and *In vitro* PGP activity.
- CHNS and Phenol-tannin analysis.
- Physico-Chemical Analysis.
- PCR PAGE SDS: PAGE.
- HPLC, ELISA (Microbial Biofilm and OD) and Gel Electrophoresis.
- Immunohistochemistry and Immunocytochemistry.

#### В.

- Isolation and characterization of arbuscular mycorrhizal fungi (AMF) and PGPM.
- AMF interaction with PGPR.
- Microbial Biofilm (Plant Microbes Interaction).
- Antagonistic activity and interaction of microbes (Biocontrol).
- Antibiotic markers profiling and Diversity.
- Compatibility test of microbes.
- Composting and Biofertilizers.
- Microbial composition, Diversity and Activity.
- Plant growth, colonization and disease control by microbes.
- Nitrogen Fixation and role of phosphate in PGP.

#### C.

- NCBI-Gene bank submission and primer deign.
- DNA, RNA and Protein structure prediction.
- NT-SYS, PRISM and Heatmap plot analysis.
- T-Coffee, CLC workbench and molecular phylogenetic analysis.
- MSA and MEGA analysis.
- DNA barcoding: Ibol & BOLD Sys V3.

## RESEARCH PROJECT DETAILS

#### **Bachelor's Degree Project**

**Title:** Unique level of multidrug-resistance in *Pseudomonas aeruginosa* strain DEB1.

**Submitted:** Vidyasagar University, West Bengal and Oriental Institute of Science and Technology, VIH Campus, West Bengal.

**Supervision:** Dr. A. Mukhopadhaya, Asst. Professor, Oriental Institute of Science and Technology, VIH Campus, West Bengal.

#### Master's Degree Project

**Title:** Isolation and Characterization of potential nutrient mobilizer and plant growth promoters from some typical harsh environment of Karnataka.

**Submitted:** Graphic Era University, Dehradun and ICAR-IIHR, Karnataka.

**Supervision:** Dr. A. N. Ganeshamurthy, Principal Scientist and Head, Division of Soil Science & Agril. Chemistry, ICAR - Indian Institute of Horticultural Research, Bangalore-56008 India

<u>One year research works</u> on Phosphate solubilizing bacteria (*Bacillus* sp. & *Pseudomonas* sp.) and Plant growth promoting (OIST, Midnapur)

**Supervision:** Dr. A. Mukhopadhaya, Asst. Professor, Oriental Institute of Science and Technology, VIH Campus, West Bengal.

#### E - PUBLICATION AND MICROBIAL CULTURES DEPOSITED DETAILS

[1] <u>Strain Name:</u> *Pseudomonas aeruginosa* strain DEB1 16S rRNA gene, partial sequence.

Author: Mitra D., Mondal K. A., Mukhopadhyay A.

Accession No.: KF195926, Scheduled released: Sep 15, 2013.

DOI: 10.13140/RG.2.2.29825.76647.

[2] <u>Strain Name:</u> Phanerochaete chrysosporium isolate MaHaD1 5.8S subunit ribosomal RNA gene, partial sequence

NCBI Accession No.: MK172050 and Culture deposit NFCCI Accession No.: 4192

[3] <u>Strain Name:</u> Trichoderma longibrachiatum isolate MaHaD2 5.8S subunit ribosomal RNA gene, partial sequence

NCBI Accession No.: MK172051 and Culture deposit NFCCI Accession No.: 4193

[4] <u>Strain Name:</u> Aspergillus fumigatus isolate MaHaD3 5.8S subunit ribosomal RNA gene, partial sequence

NCBI Accession No.: MK172052 and Culture deposit NFCCI Accession No.: 4194

Author: Mitra, D., Uniyal, N., Sharma, K., Chauhan, A., Palni, L.M.S., Rani, A., Poonam, A. and Semwal, P.

Scheduled released: Nov 20, 2018.

[5] Strain Name: Bacillus cereus strain PKID1 16S ribosomal RNA gene, partial sequence

NCBI Accession No.: MT158702.1

Author: Das Mohapatra, P.K., Biswas, I. and Mitra, D.

Scheduled released: 12-MAR-2020.

[6] Strain Name: Pseudomonas putida strain PANS13 16S ribosomal RNA gene, partial sequence

NCBI Accession No.: MT020300.1

Author: Panneerselvam, P., Senapati, A., Sharma, L. and Mitra, D.

Scheduled released: 11-FEB-2020.

[7] Strain Name: Enterobacter cloacae strain PANS14 16S ribosomal RNA gene, partial sequence

NCBI Accession No.: MT158702.1

Author: Panneerselvam, P., Senapati, A., Sharma, L. and Mitra, D.

Scheduled released: 11-FEB-2020.

[8] Strain Name: Pseudomonas sp. strain PANS12 16S ribosomal RNA gene, partial sequence

NCBI Accession No.: MT020299.1

Author: Panneerselvam, P., Senapati, A., Sharma, L. and Mitra, D.

Scheduled released: 11-FEB-2020.

[9] Strain Name: Enterobacter cloacae strain PANS11 16S ribosomal RNA gene, partial sequence

NCBI Accession No.: MT020298.1

Author: Panneerselvam, P., Senapati, A., Sharma, L. and Mitra, D.

Scheduled released: 11-FEB-2020.

[10] Strain Name: [Pseudomonas] hibiscicola strain PANS9 16S ribosomal RNA gene, partial sequence

NCBI Accession No.: MT020297.1

Author: Panneerselvam, P., Senapati, A., Sharma, L. and Mitra, D.

Scheduled released: 11-FEB-2020.

[11] Strain Name: Enterobacter cloacae strain PANS5 16S ribosomal RNA gene, partial sequence

NCBI Accession No.: MT020296.1

Author: Panneerselvam, P., Senapati, A., Sharma, L. and Mitra, D.

Scheduled released: 11-FEB-2020.

[12] Strain Name: Pseudomonas aeruginosa strain PANA2 16S ribosomal RNA gene, partial sequence

NCBI Accession No.: MT020295.1

Author: Panneerselvam, P., Senapati, A., Sharma, L. and Mitra, D.

Scheduled released: 11-FEB-2020.

[13] Strain Name: Pseudomonas fluorescens strain PANSK10 16S ribosomal RNA gene, partial

sequence

NCBI Accession No.: MT020294.1

Author: Panneerselvam, P., Senapati, A., Sharma, L. and Mitra, D.

Scheduled released: 11-FEB-2020.

[14] Strain Name: Enterobacter cloacae strain PANSKM6 16S ribosomal RNA gene, partial sequence

NCBI Accession No.: MT020293.1

Author: Panneerselvam, P., Senapati, A., Sharma, L. and Mitra, D.

Scheduled released: 11-FEB-2020.

[15] Strain Name: Enterobacter mori strain PANAT 16S ribosomal RNA gene, partial sequence

NCBI Accession No.: MT020292.1

Author: Panneerselvam, P., Senapati, A., Sharma, L. and Mitra, D.

Scheduled released: 11-FEB-2020.

[16] Strain Name: Enterobacter sp. strain PANP3 16S ribosomal RNA gene, partial sequence

NCBI Accession No.: MT020291.1

Author: Panneerselvam, P., Senapati, A., Sharma, L. and Mitra, D.

Scheduled released: 11-FEB-2020.

[17] Strain Name: Enterobacter asburiae strain PANP2 16S ribosomal RNA gene, partial sequence

NCBI Accession No.: MT020290.1

Author: Panneerselvam, P., Senapati, A., Sharma, L. and Mitra, D.

Scheduled released: 11-FEB-2020.

[18] Strain Name: Bacillus subtilis strain PANA13 16S ribosomal RNA gene, partial sequence

NCBI Accession No.: MT020289.1

Author: Panneerselvam, P., Senapati, A., Sharma, L. and Mitra, D.

Scheduled released: 11-FEB-2020.

[19] Strain Name: Stenotrophomonas maltophilia strain PANA3 16S ribosomal RNA gene, partial

sequence

NCBI Accession No.: MT020288.1

Author: Panneerselvam, P., Senapati, A., Sharma, L. and Mitra, D.

Scheduled released: 11-FEB-2020.

[20] Strain Name: Azotobacter chroococcum strain PanAz3 16S ribosomal RNA gene, partial sequence

NCBI Accession No.: MT186700.1

Author: Panneerselvam, P., Senapati, A., Mitra, D., Sharma, L., Kumar, U. and Sagarika, M.S.

Scheduled released: 18-MAR-2020.

[21] Strain Name: Pseudomonas putida strain PanPs4 16S ribosomal RNA gene, partial sequence

NCBI Accession No.: MT186701.1

Author: Panneerselvam, P., Senapati, A., Mitra, D., Sharma, L., Kumar, U. and Sagarika, M.S.

Scheduled released: 18-MAR-2020.

[22] Strain Name: Azotobacter beijerinckii strain PanAzb5 16S ribosomal RNA gene, partial sequence

NCBI Accession No.: MT186701.1

Author: Panneerselvam, P., Senapati, A., Mitra, D., Sharma, L., Kumar, U. and Sagarika, M.S.

Scheduled released: 18-MAR-2020.

[23] Strain Name: Rhizobium sp. strain PanRhiz6 16S ribosomal RNA gene, partial sequence

NCBI Accession No.: MT186701.1

Author: Panneerselvam, P., Senapati, A., Mitra, D., Sharma, L., Kumar, U. and Sagarika, M.S.

Scheduled released: 18-MAR-2020.

#### DETAILS OF TECHNOLOGY TRANSFERRED/ DEVELOPED

1. **Title:** Cocopeat with rice husk and saw dust compost as a nursery medium for growing vegetable seedlings

Author(s): TK Radha, AN Ganeshamurthy, Debasis Mitra, Komal Sharma, TR Rupa, G. Selvakumar

Submitted: KRISHI (ICAR RESEARCH DATA REPOSITORY FOR KNOWLEDGE

MANAGEMENT – An Institutional Publication and Data Inventory Repository)

https://krishi.icar.gov.in/jspui/handle/123456789/23661 https://krishi.icar.gov.in/jspui/bitstream/123456789/23661/1/The%20BioScan.pdf

#### WORKSHOP AND TRAINING

#### 1. International Peer Review Workshop - 2020

**Organized by:** Panelist of Excellent Academicians and Editors

**Sponsored by:** IP Innovative Publication Pvt. Ltd.

Date: 19th to 27th September, 2020

## 2. International Webinar: Recombinant DNA Technology

**Organized by:** Merck High-End Skill Development Centre, a CSIR-IMTech Initiative (Ministry of Science & Technology, Govt. of India)

**Sponsored by:** Merck Innovation Lab, Bangalore Chandigarh

Date: May-June, 2020

### 3. Rhizosphere Engineering: Genomes to Metagenomes

**Workshop Organized by:** Division of Microbiology & Plant Pathology, ICAR-Indian Agricultural Research Institute, New Delhi INDIA

**Theme:** High-throughput DNA sequencing technologies, metagenomes and Rhizosphere microbiome profiling and function

Sponsored by: National Agricultural Higher Education Project (NAHEP), Krishi Anusandhan

Bhawan - II, New Delhi - 110 012 INDIA

Date: 10th February 2020

#### 4. Cell, Molecular & Developmental Biology

**Workshop Organized by**: Department of Biotechnology, Graphic Era University, Dehradun 248002 Uttarakhand India

Sponsored by: Uttarakhand State Council for Science & Technology (UCOST), Vigyan Dham,

Dehradun Uttarakhand India **Date:** 26<sup>th</sup> Oct – 31<sup>st</sup> Oct 2015.

#### GRANTS, AWARDS, AND SCHOLARSHIPS

#### Swami Vivekananda Merit-cum-Means Scholarship

Funded by: Government of West Bengal, India For: Ph.D. Microbiology, Raiganj University, India

**ID:** WBP191584588825 **Date:** Jan, 2020 – till.

#### SEMINARS, WEBINAR, E-QUIZ AND CONFERENCE

1. International webinar on "Role of Soil Microorganisms in Sustainable Agriculture"

Organized by: Kumaraguru Institute of Agriculture, India

Date: 7th Nov, 2020

#### 2. <u>International Webinar on "Sustainable Environmental factor as immuno booster"</u>

Organized by: Dept. of Zoology. Fakir Mohan University, India

**Date:** 28<sup>th</sup> Sept, 2020

### 3. National Webinar on "opportunities of microbiologist in the new normal era"

Organized by: Department of Microbiology, Vidyasagar University, West Bengal India

Date: 26-27th Sept, 2020

## 4. International Webinar on "Immunity, and Vaccines: Microbiomes"

Organized by: Association of Microbiologists of India, India

Date: 20th Sept, 2020

## 5. <u>International Webinar on "Nutrition, Health and Stress Management in the Context of COVID 19 Pandemic"</u>

Organized by: Dept of Microbiology & Nutrition Jointly with IQAC, Bankura Sammilani College

**Date:** 7<sup>th</sup> Sept, 2020

#### 6. International webinar on "The Challenges and Scientific Advances of SARS – COV 2"

**Organized by:** Department of Microbiology, Assam University in collaboration with Springer Nature and Society of Environmental Sustainability.

Date: 27th August, 2020

#### 7. International webinar on "Phytochemistry by design"

Organized by: Amity International Society for Natural Products, Health & Allied Sciences Domain,

Amity University Uttar Pradesh, Noida (INDIA).

Date: 19th August, 2020

## 8. <u>International Webinar on "COVID-19 Pandemic and Co-infections: Challenges, Prospective Treatments and Societal Impact"</u>

Organized by: Department of Microbiology, Raiganj University, WB, India

**Date:** 29<sup>th</sup> August, 2020

## 9. National Level Sports Quiz Competition (NSQC-2020)

Organized by: Bankura Sammilani College, Bankura, WB, India

Date: 29th August, 2020

## 10. <u>National Webinar: Environmental Sustainability in Present Scenario- A Multidisciplinary Approach</u>

Organized by: Department of Geography and Department of Botany Santal Bidroha Sardha

Satbarshiki Mahavidyalaya, West Bengal

Date: 29th August, 2020

#### 11. International Webinar: Weed Science: Challenges in the California Rice Systems

Organized by: Bioingene, India

Date: 28th August, 2020

#### 12. International Webinar: Science, Biology and World's Future

Organized by: Department of Botany & IQAC Dinabandhu Andrews College, Garia, Kolkata

Date: 25th August, 2020

#### 13. International Webinar: COVID-19 Infection: Origin and Transmission

Organized by: Association of Microbiologists of India (AMI), Hisar-Unit

Date: 15th August, 2020

#### 14. National Webinar: Changes in The International Order in The Wake of Covid-19 Pandemic

Organized by: Bagnan College and IQAC, Bagnan College

Date: 22th August, 2020

#### 15. International Webinar: Current Insights on Global Pandemic

Organized by: Department of Microbiology, Kulti College and IQAC, Kulti College

**Date:** 16<sup>th</sup> August, 2020

### 16. International Webinar: MicroProteins: Novel tool to bioengineer future ready plants

**Organized by:** Bioingene **Date:** 17<sup>th</sup> August, 2020

## 17. International Webinar on "Viral Infection and Immunity: Physiological Aspects and Preventive Strategy"

Organized by: Dept. of Physiology, Belda College, West Bengal

**Date:** 14<sup>th</sup> August, 2020

## 18. <u>International Webinar</u>: <u>Role of Agricultural & Environmental Biotechnology for a Sustainable Future</u>

**Organized by:** Bioingene **Date:** 11<sup>th</sup> August, 2020

## 19. <u>International Webinar</u>: <u>Covid-19 Treatment and Understanding of Human Immune</u> <u>Response-A Complex Circuit For Vaccine Research</u>

Organized by: Vivekananda Mahavidyalaya, Hoogly, West Bengal, India

Date: 1st August, 2020

#### 20. International Webinar: The International Webinar on Himalayan Biodiversity

**Organized by:** Department of Life Sciences and Biotechnology, Graphic Era (Deemed to be University), Dehradun and Uttarakhand Science Education & Research Centre, Uttarakhand

Date: 8th August, 2020

#### 21. International Webinar: Host-Microbe Interactions: Present and Future Perspectives

**Organized by:** School of Biotechnology, Department of Life Sciences, Presidency University, Kolkata

**Date:** 6-7<sup>th</sup> August, 2020

#### 22. International Webinar: Battle Against Novel Coronavirus

Organized by: Promega Biotech India Pvt. Ltd and Biotecnika info labs Pvt. Ltd

Date: 5<sup>th</sup> August, 2020

#### 23. International Webinar: Mainstreaming underutilized crops: The story of foxtail millet

**Organized by:** Bioingene **Date:** 6<sup>th</sup> August, 2020

## 24. <u>International Webinar on "Facing the Truth : Judging Epidemics and Pandemics in Modern Bengal from the Lens of History</u>

Organized by: The Department of History, Raghunathpur College, Raghunathpur, Purulia, WB, India

**Date:** 5<sup>th</sup> & 6<sup>th</sup> August, 2020

#### 25. International Webinar: Symbiosis: When living together is a win-win

**Organized by:** International Symbiosis Society

**Sponsored by:** Springer Nature

**Date:** 30<sup>th</sup> July, 2020

#### 26. National Webinar: Commercial Values of Medicinal Plants in the field of Siddha medicine

Organized by: Dept. of Microbiology and Commerce, Rathinam College, Coimbatore

Date: 29th July, 2020

#### 27. National Webinar on Environmental Issues

Organized by: Siddhinath Mahavidyalaya, West Bengal, India

**Date:** 9th July, 2020

### 28. Two Day International Level Webinar: History of Bengal From Micro To Macro

Organized by: Department of History, Manikchak College

**Date:** 24st – 25th July, 2020

#### 29. Scanning COVID-19 Pandemic through Gender Lens

Organized by: SAHELI and IQAC, Garhbeta College, Paschim Medinipur WB

**Date:** 20st July, 2020

#### 30. Advancing Scientific Research for Future Healthcare: Special Emphasis on Gene Therapy

**Organized by:** Amity International Society for Natural Products, Health & Allied Sciences Domain, Amity University Uttar Pradesh, Noida (INDIA).

Date: 21st July, 2020

## 31. Oncology Scientific update in COVID 19 pandemic

**Organized by:** International Association of Oncology (IAO)

Date: 18th July, 2020

### 32. Advanced ovarian cancer prolonging survival in the present decade

**Organized by:** International Association of Oncology (IAO)

**Date:** 25<sup>th</sup> July, 2020

## 33. International Webinar on: CRISPR-Cas Precision Genome Engineering

Organized by: BIOINGENE

**Date:** 24<sup>th</sup> July, 2020

## 34. <u>International Webinar on Plant Science Research: Role of reactive oxygen species and antioxidant machinery in crop plants</u>

Organized by: BIOINGENE

Date: 17th July, 2020

#### 35. PRACTICE OF FOLK-CULTURE IN PRESENT SOCIO-ECONOMIC CONCEPT

Organized by: Department of Bengali & IQAC, Hazi A.K. Khan College

**Date:** 14 - 15<sup>th</sup> July, 2020

#### 36. National Webinar: Pandemics and Disaster Management: Understanding And Coping

Organized by: Xavier's College (Autonomous), Kolkata

**Date:** 11 - 12<sup>th</sup> July, 2020

## 37. <u>Multidisciplinary Approach to Manage the Lifestyle & Stress related Disorders in COVID-19</u> <u>Pandemic Condition</u>

**Organized by:** Helpmate India Charitable trust, Madhavbagh Cardiac Care Mumbai, Fiton Healthcare Pvt Ltd Lucknow, Jyoti Herbals and Recycloopy Club.

**Date:** 12<sup>th</sup> July, 2020

#### 38. COVID-19 COMBATANT

Organized by: Faculty Tick, India

**Date:** 6<sup>th</sup> July, 2020

## 39. Awareness Quiz Contest on Pandemic COVID-19 (QCPC-2020)

Organized by: Department of Microbiology, Bankura Sammilani College Bankura, West Bengal, India

**Date:** 5<sup>th</sup> July, 2020

#### 40. Public Health, Epidemics and State: A legacy of Colonial Bengal

Organized by: Department of History Gokhale College Memorial College, Kolkata

**Date:** 27<sup>th</sup> June, 2020

#### 41. Pollution: national level E-quiz

E-quiz organized by: Womens Christian College, Nagercoil, Tamil Nadu

**Date:** 2<sup>nd</sup> July, 2020

### 42. Vedic Microbiology in today's world: Preparing for a new normal

Organized by: Department of Microbiology, Dolphin (PG), Institute of Biomedical and Natural

Sciences, Manduwala, Dehradun-248007, Uttarakhand, India

**Date:** 26<sup>th</sup> June, 2020

## 43. <u>Two –Day International Webinar On "Trajectory of COVID-19 Pandemic: Awareness,</u> <u>Treatment and Genomic Insight for Future Development</u>

**Organized by:** Department of Microbiology, Bankura Sammilani College Bankura, West Bengal, India

**Date:** 14<sup>th</sup> –15<sup>th</sup> June, 2020

#### 44. World Food Safety Day: Theme 2020-Food safety, everyone's business

E-quiz organized by Help Mate India NGO (Lucknow-UP) and Recycloopy Club

**Date:** 07<sup>th</sup> June 2020

#### 45. Environment, Health and Covid-19 (EHC-2020): National webinar

**Organized by:** Department of Chemistry and Geograpy, Sardar Vallabhbhai Patel Arts and Science College, Ainpur, Tal. Raver, Dist. Jalgaon, Maharashtra.

**Date:** 18<sup>th</sup> June 2020

#### 46. National Conference on Emerging Trends in Plant Science Research

**Poster Presentation (title):** Isolation and Characterization of Dominant microbes from Rhizospheric Soil of *Saussurea obvallata* (DC.) Edgew. (Brahma Kamal) of the Indian Himalayan Region

**Author(s): Debasis Mitra**, Dr. Anju Rani and Prof. (Dr.) Lok Man S. Palni

Organized by: Department of Botany & Biotechnology, Ravenshaw University, Cuttack - 753 003

Odisha

**Date:** 1 – 3<sup>rd</sup> March 2020

#### 47. Global Cleanup Congress: INDIA 2018

Title: Lignocellulolytic microbial consortia for rice straw residue management

**Conference dates:** 22–24<sup>th</sup> October 2018

Presented By: Dr. P. Panneerselvam, ICAR-NRRI

**Author(s):** P. Panneerselvam, U. Kumar, A. Senapati, K. Haritha, A. Jahan, **D. Mitra**, Sagarika M.S., P.K. Nayak and A.K. Nayak

#### 48. 59th Annual Conference of Association of Microbiologists of India (AMI- 2018)

Title: Analyzing 18S rRNA SSU hypervariable region of AM fungi using Illumina MiSeq platform

Conference dates: 09<sup>th</sup> December 2018 Presented By: A. Senapati, ICAR-NRRI

Author(s): Ansuman Senapati, Chidambaranathan Parameswaran, Annamalai Anandan, Debasis

Mitra and Periyasamy Panneerselvam.

## 49. Entrepreneurship Awareness Drive: Annual Business Model Competition

Organized by: Entrepreneurship Cell, IIT KGP (IBMC) & DIT University Dehradun

**Date:** 9<sup>th</sup> Oct 2015.

## 50. <u>International Symposium on Horticulture: Priorities and Emerging Trends ICAR-IIHR Bangaluru</u>

**Title:** Feasibility of substituting cocopeat with rice husk and saw dust compost as a nursery medium for growing vegetable seedlings.

Authors: Debasis Mitra, Komal Sharma, Ganeshamurthy A.N., Radha T.K., T. R. Rupa and G.

Selvakumar.

**Date:** 6<sup>th</sup> Sept 2017

### 51. Advancement in Biological Science

**Title:** Effective utilization of fly-ash, produced by thermal power plants, in cultivated land by extracting its useful nutrients using *Pseudomonas sp.* isolated from cow dung.

Author(s): G, Rana; D, Mitra; M, Mondol; S, Acharya; T. Roy; A, Singha; M; Jana; & T, Mondal Organized by:

 $Department \ of \ Biotechnology \ \& \ Microbiology, \ Panskura \ Banamali \ College, \ W.B. \ India.$ 

Biotech Research Society, India.

**Date:** 23<sup>rd</sup> March 2013; **Status:** Achieved top position in presentation.

# INTERNATIONAL COLLABORATION FOR REVIEW PAPER WRITING AND RESEARCH HELP (PERSONAL)

1. Dr. Snežana Anđelković Senior Research Associates, Institu	ut Za Krmno Bilje, Kruševac, <mark>Serbia</mark>
2. Dr. Tanja Vasić Assistant Professor, Faculty of Agr	riculture, University of Niš, Serbia
Institut Za Krmno Bilje, Kruševac,	Serbia

3.	Bahman Khoshru	Ph.D. Scholar, Department of Soil Science-Soil Biology and Biotechnology
		University of Tabriz, Tabriz, Iran
4.	Dr. Ei Mon Myo	Deputy Director, Biotechnology Research Department (BRD), Ministry of
	,	Education, Kyaukse, Mandalay Region, Myanmar.
5.	Prof. Beatriz Elena	Full Professor, University of Santander – UDES Santander, Colombia
	Guerra	
6.	Hanane Boutaj	Ph.D. Scholar, Department of Biology, Cadi Ayyad University, Marrakesh, Morocco
7.	Dr. Claudia Krüger	Postdoctoral researcher, Institute of Botany, Academy of Sciences of the Czech
	· ·	Republic, Průhonice, Czechia.
8.	Prof. Sergio de los	Researcher, Laboratorio de Biotecnología del Recurso Microbiano, Instituto
	Santos-Villalobos	Tecnológico de Sonora, Ciudad Obregón, Mexico
9.	Dr. Faride Noroozi	Department of Production Engineering and Plant Genetics, Razi University,
	shahri	Kermanshah, Iran
10.	Dr. Marika Pellegrini	Postdoctoral researcher, Department of Life, Health and Environmental Sciences,
		Università degli Studi dell'Aquila, 2 Palazzo Camponeschi, 67100 L'Aquila AQ, Italy
11.	Djebaili Rihab	Laboratory of Microbiological Engineering and application, University of Brothers
		Mentouri, Constantine 1, Chaâbat Erssas Campous, Ain El Bey Road, Constantine
		25000 Algeria
12.	Adeyemi N.	Department of Plant Physiology and Crop Production, University of Agriculture,
	Olatunbosun	Abeokuta, Abeokuta, Nigeria
13.	Shokufeh Moradi	Faculty of Chemistry, University of Tabriz, Tabriz, Iran
14.	Prof. Abdel Rahman	Full Professor, Plant Science, Department of Biological Science, Al-Hussein Bin Talal
	Mohammad Al Tawaha	University, Ma'an, Jordan
15.	Prof. Martha Viviana	Professor (Full), Instituto de Ciências Agrárias e Ambientais (ICAA), Universidade
	Torres Cely	Federal de Mato Grosso (UFMT), Cuiabá, Brazil
16.	Aniruddha Sarker	School of Applied Biosciences, College of Agriculture and Life, Sciences, Kyungpook
		National University, Daegu 41566, Republic of Korea.
17.	Enas M. El-Ballat	Lecturer and Researcher of Microbiology, Department of Botany and Microbiology,
		Tanta University, Egypt
18.	Prof. Mohamed A. El-	Professor, Botany Department, Faculty of Science, Tanta University, 31527 Tanta,
	Esawi	Egypt
		University of Cambridge Cambridge, United Kingdom
19.	Prof. Maddalena Del	Professor (Full), Environmental Microbiology, Department of Life, Health and
	Gallo	Environmental Sciences, University of L'Aquila, Coppito, 67010 L'Aquila, Italy
20.	Prof. Erika Lorena	Professor, Universidad Nacional Experimental del Táchira, San Cristóbal, Táchira,
	Blanco C.	Venezuela
21.	Wiem Alloun	Department of Applied Biology, University of Constantine 1, Constantine, Algeria
22.	Dr. Mayra C. García-	Laboratory of Microbiology (Cuahtemoc Unit), Research Center for Food and
	Anaya	Development A.C., Hermosillo, Mexico
23.	Vanessa Lopes Lira	Departamento de Micologia, Federal University of Pernambuco, Recife, Brazil

I hereby declare that all the information contained in this curriculum vitae is in accordance with facts or truths to my knowledge. I take full responsibility for the correctness of the said information

(Signature)

Acais With



Date: Nov, 2020