

CURRICULUM VITAE

PROF. (DR.) NAVEEN KUMAR ARORA

Editor in Chief, Environmental Sustainability
Series Editor, Microorganisms for Sustainability
President, Society for Conservation of Wildlife
Secretary, Society for Environmental Sustainability
Head, Department of Environmental Science
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PRESENT ADDRESS-

Flat No. 201, Tower 06,
South City Gardens (Unitech Apartment),
South City, Rae Bareli Road,
Lucknow – 226025, Uttar Pradesh, India.

PERMANENT ADDRESS-

Shri Nath Kuti,
Lane No. 1, Block A,
Aryanagar, Haridwar – 249 407, Uttrakhand, India.

DATE OF BIRTH- 17th June, 1973

NATIONALITY- Indian

AREA OF SPECIALIZATION- Environmental and Agriculture Microbiology

EDUCATION

Ph.D. Microbiology	Influence of Physiological Stress Conditions on Rhizobia and Their Inoculant Production University – Gurukula Kangri Vishwavidyalaya, Haridwar.	1997 – 2001
M.Sc. Microbiology	First Division (73%) Dissertation – Studies on Nodulation of Two Strains of Rhizobia University – Gurukula Kangri Vishwavidyalaya, Haridwar.	1994 – 1996
B.Sc. (Hons.)	First Division (71.0%) Subjects – Zoology (subject in Honours), Botany and Chemistry University – Gurukula Kangri Vishwavidyalaya, Haridwar.	1991 – 1994
Scholarships	Qualified Joint CSIR-UGC Test for Junior Research Fellowship and Eligibility for Lectureship (NET) in June 1998	1998

RESEARCH INTERESTS

Currently working in the field of plant growth promoting microbes including endophytes. This includes isolation, screening, interactions of potentially useful rhizosphere microbes for use as biopesticide and biofertilizers for reclamation of wastelands and arid lands. Developed bioformulations using PGP microbes and their metabolites.

Also working on aquatic microbiology particularly microflora of lotic water habitats with emphasis on allochthonous populations (related to human health).

Reported two new species of root nodulating bacteria (rhizobia) first time from India.

RESEARCH/TEACHING EXPERIENCE

Head	Department of Environmental Science, BBA University, Lucknow	February, 2019 to Present
Professor	Department of Environmental Science, BBA University, Lucknow	November, 2017 to Present
Professor	Department of Environmental Microbiology, BBA University, Lucknow	June 2014 to October 2017
Head	Department of Environmental Microbiology, BBA University, Lucknow	August 2014 to August 2017
Associate Professor	Department of Environmental Microbiology, BBA University, Lucknow	June 2011 to July 2014
Reader & Head	Department of Microbiology, CSJM University, Kanpur Director-in-Charge, Institute of Biosciences & Biotechnology, CSJM University, Kanpur, Uttar Pradesh, India	July 2009 to June 2011
Lecturer	Department of Microbiology, CSJM University, Kanpur, Uttar Pradesh, India.	September 2004 to June 2009

Lecturer	Department of Microbiology, Sardar Bhagwan Singh PG Inst. of Bio-Medical Sciences and Research Balawala Dehradun, Uttarakhand, India.	April 2001 to August 2004
SRF (CSIR-NET)	Department of Botany and Microbiology, Gurukula Kangri University, Haridwar, Uttarakhand, India	Jan. 2001 to March 2001
JRF (CSIR-NET)	Department of Botany and Microbiology, Gurukula Kangri University, Haridwar, Uttarakhand, India	Jan. 1999 to Dec. 2000
Project Fellow	Deptt. of Botany & Microbiology, Gurukula Kangri University, Haridwar, Uttarakhand, India.	July 1997 to June 1998

THESIS SUPERVISION

- PhD Thesis Awarded – Nine
- PhD Guiding (currently) - Eight
- Guided 118 M.Sc. Dissertations and 01 M.Phil. in the field of Environmental Microbiology and Biotechnology

R & D PROJECT(S) COMPLETED

S.No.	Time Period	Title of Project	Funding Agency	Total Cost
1.	2014-2017	Fund For Improvement Of S&T Infrastructure In Universities And Higher Educational Institutes (FIST) Program Under Level 1	DST, New Delhi	29.0 lakhs
2.	2012-2015	Screening of sewage pollution in Ganga water and assessment of its impact on ground water along the path of river flow in Kanpur	CST (UP), Lucknow	9.0 lakhs
3.	2011-2014	Screening and identification of hot spots of sewage pollution containing multiple drug resistant E. coli in River Ganga at different locations of Kanpur	UGC New Delhi	9.88 lakhs
4.	2009-2012	Designing multifaceted bioformulation technology utilizing fluorescent pseudomonads for cultivation and productivity enhancement of sunflower crop in arid and semi-arid regions infested with <i>Macrophomina phaseolina</i>	CST, Lucknow	6.96 lakhs
5.	2007-2011	Revelation of mechanism and metabolites for biocontrol of deadly phytopathogens by plant growth promotory bacteria, designing reliable technology for future bioformulations and sustainable agriculture	CSIR, New Delhi	16.0 lakhs
6.	2007-2011	Developing broad spectrum biocontrol	DBT,	17.06

		technology by utilizing and optimizing secondary metabolites from indigenous PGP Pseudomonads for controlling soil borne phytopathogens and ecofriendly agriculture	New Delhi	lakhs
7.	2004-2007	Development of ecofriendly, multirole, cost effective microcosmic bioformulation capable to act as biopesticide for sustainable agriculture	DST, New Delhi	9.0 lakhs

CONSULTANCY SERVICES

Providing consultancy services to Eureka Forbes (Aquaguard) which will be further expanded in form of research project.

LECTURES DELIVERED IN SEMINARS/CONFERENCES

1.	19 th Conference of Indian Botanical Society /National Seminar on Biotechnology: New Trends and Prospects held at Gurukula Kangri University, Harwar, U.P., India	December 26-28, 1996
2.	TCDC International Workshop on Application of Biotechnology in Biofertilizers & Biopesticides held at Indian Institute of Technology, New Delhi.	October 15-18, 1997
3.	National Seminar on Bioinoculants for Holistic Sustainable Rural Developments held at Gurukula Kangri University, Haridwar.	September 23-25, 1998
4.	International Symposium on Microbial Sustainable Development and Productivity held at Rani Durgavati University, Jabalpur, India	November 14-16, 1998
5.	XXIII Botanical Conference, Ch. Charan Singh University, Meerut, India	October 14-16, 2000
6.	BIO-CON 2005 held at Sai College of Medical Science & Technology, Kanpur.	February 26-27, 2005
7.	Workshop on 'Medicinal Plants' held at Department of Adult Education, CSJM University, Kanpur.	March 22-23, 2005
8.	18 th World Congress of Soil Science, held at Philadelphia, USA. Organized by International Union of Soil Science. Travel support from Department of Science & Technology, New Delhi (No. SR/PF/423) and Council of Scientific and Industrial Research (No 27/209/169/2006/ISTAD)	July 9-15, 2006
9.	DST Group Monitoring Workshop held at Agharkar Research Institute, Pune	August 24-25, 2006
10.	First Asian PGPR Congress for Sustainable Agriculture, Acharya N G Ranga Agricultural University, Hyderabad.	June 21-24, 2009
11.	International Workshop on Rhizosphere Biology of Agriculture, Horticulture and Forestry: Present and Future, held at G.B. Pant University of Agriculture & Technology, Pantnagar.	February 25-27, 2010

12.	Second Asian PGPR Congress for Sustainable Agriculture, Beijing, China. Organized by Asian PGPR Society. Travel support from Department of Science and Technology, New Delhi.	August 21-24, 2011
13.	National Conference on Microbes promoting plant health, productivity and sustainability and zonal meeting. Organized by CSIR-CIMAP and CSIR- NBRI Lucknow	October 26-27, 2013
14.	International conference on Environment, Health and Industrial BioSangam, Organized by Department of Biotechnology MNNIT, Allahabad	November 21-23, 2013
15.	Plenary Lecture at 101 st Indian Science Congress, University of Jammu, J&K	Feb 3-7, 2014
16.	International Conference on Environmental Technology and Sustainable Development: Challenges and Remedies. Organized by BBA University, Lucknow.	Feb 21-23, 2014
17.	National Workshop on advances in PGPR research at Banaras Hindu University, Varanasi	Oct 7-8, 2014
18.	4 th Asian PGPR Conference, Hanoi, Vietnam, Organized by Asian PGPR Society. Travel support from Department of Biotechnology, New Delhi (Grant No. DBT/CTEP/02/201500217).	May 3-6, 2015
19.	8 th ISS Congress, Lisbon, Portugal, Organized by International Symbiosis Society. Travel support from Department of Science and Technology, New Delhi (Grant No. ITS/1862/2015-16).	July 12-18, 2015
20.	Invited Talk at 3 rd Lucknow Science Congress LUSCON – 2015, Lucknow, UP, India	31 Oct – 2 Nov, 2015
21.	Invited Talk in National Workshop on Advanced Techniques for Bioremediation and Management of Salt Affected Soils at Central Soil Salinity Research Institute (CSSRI), Lucknow, UP, India.	Sept, 15-24, 2015
22.	Invited Talk at 103 rd Indian Science Congress, Mysore University, Mysore, Mysore, Karnataka, India.	Jan 3-7, 2016
23.	Invited Talk in International conference on Agriculture and Biotechnology, Pune	April 03, 2017
24.	Invited Talk in International conference on Pharmaceutical, Medical & Environmental Health Sciences, Pune	April 16, 2017
25.	Invited Talk in National Conference on Tourists and Green Spaces: Healthier lifestyle approaches from nature, BBA University, Lucknow	July 15-16, 2017
26.	Lead Talk in 58 th Annual Conference of AMI- 2017 on Plant growth promoting rhizobacteria for combating saline stress in diverse crops, BBA University, Lucknow	November 18, 2017
27.	Lead Talk in National Seminar on Transforming Agriculture to Doubling of Farmers Income, Organized by Samagra Vikas Welfare Society, BBA University, Lucknow.	Feb 10-11, 2018
28.	Invited Talk in National Conference on Climate Change, Environmental Pollution and Biodiversity Conservation, Organized by CGES, Lko. And CSIR-NBRI, Lko.	Feb 24-25, 2018

29.	Plenary Talk in International Conference on Innovations and Translational Dimensions: Food, Health and Environment Biotechnology (Biosangam-2018) at MNIIT, Allahabad.	March 09-11, 2018
30.	Invited Talk in National Conference on 4th National Conference on “PGPR For Sustainability of Agriculture and Environment”, organized by Department of Biotechnology, Mizoram University in association with Asian PGPR Society for Sustainable Agriculture (APSSA) at Aizawl, Mizoram.	May 11-12, 2018
31.	Invited Talk in National Conference on Microbial Inoculants for Agriculture and Environmental Sustainability (MAES-2018), organized by Department of Botany and Microbiology, Gurukul Kangri Vishwavidyalaya, Haridwar, Uttarakhand.	September 28-30, 2018
32.	Keynote Speaker in International Conference on Food, Agriculture and Animal Sciences (ICOFAAS-2018) organized by SIIRT University, Turkey, held in Antalya, Turkey.	October 3-7, 2018
33.	Invited talk in ISMPP 39 th Annual Conference & National Symposium on Plant and Soil Health Management: New Challenges and Opportunities, jointly organized by ICAR-IIPR, Kanpur and Indian Society of Mycology and Plant Pathology, Udaipur; held in IIPR, Kanpur.	November 16-18, 2018
34.	Lead Lecture in 6 th International Conference on Plants & Environmental Pollution (ICPEP-6) Jointly organized by International Society of Environmental Botanists (ISEB) & CSIR -NBRI, Lucknow.	November 27-30, 2018
35.	Keynote Lecture in International Conference on Sustainable Organic Agri-Horti Systems organized by Doctor’s Krishi Evam Bagwani Vikas Sanstha,(Doctor’s Agricultural and Horticultural Development Society), Lucknow.	November 28-30, 2018
36.	Invited Lecture in Two-week Inter-Disciplinary Capacity Building Program on “Environment and Sustainable Development” organized by Department of Sociology, Babasaheb Bhimrao Ambedkar University, Lucknow.	Nov. 27 to Dec. 7, 2018
37.	Invited Lecture in Mindshare Conclave on Environment & Cultural Conservation held in Lucknow.	January 23, 2019
38.	Invited Lecture in National Seminar on Biotechnology Interventions in Agriculture, Health and Industry (BIAHI-2019), Organized by Department of Biotechnology, Deen Dayal Upadhyay Gorakhpur University, Gorakhpur.	February 23-24, 2019
39.	Invited Talk in National Seminar on Microbial Bioremediation: Novel Approaches and Trends organized by Department of Microbiology, St. Xavier’s College, Mapusa, Goa.	February 27- March 01, 2019
40.	Invited Talk in National Conference on Recent Trends and Emerging Issues in Microbiology and Pharmaceutical Biotechnology at Gujarat University, Ahmedabad, Gujarat	March 15-16, 2019

SEMINARS/CONFERENCES ORGANIZED

1.	Organizing Secretary and Convener of National Conference on ‘Scope and Application of Microbes in Agriculture and Environment – <i>New Horizons and Technologies</i>’ from 19th – 21st February, 2007. The conference was funded by Department of Biotechnology (DBT), Department of Science and Technology (DST), and Council of Scientific and Industrial Research (CSIR), New Delhi.	Feb 19-21, 2007
2.	Organized Exhibition ‘ Wild Splendor – An Awakening Call from Indian Jungles ’ at International Centre CSJM University, Kanpur with the theme on wildlife conservation. Approximately 2000 delegates visited the exhibition.	April 23-25, 2011
3.	Organizing Secretary of National Workshop Innovation and Technology Transfer to Industries: Role of Universities at BBA University, Lucknow.	March 10-11, 2014
4.	Organizing Secretary of National seminar on University-industry partnership: A March towards sustainable growth at BBA University, Lucknow.	March 12-13, 2015
5.	Organized A Workshop on Waste Management under ‘ Swacch Bharat Pakhwara ’ at BBA University, Lucknow.	September 15, 2016
6.	Organized One day Symposium on Science and Technology for Specially Abled Persons under ‘ National Science Day ’ at BBA University, Lucknow.	February 28, 2017
7.	Convener, 4th Lucknow Science Congress , held at BBA University, Lucknow.	March 3-4, 2017
8.	Co-organizing Secretary of 58th Annual Conference of AMI-2017 , BBA University, Lucknow.	November 16 – 19, 2017
9.	Convener, 1st North Indian Science Congress , held at BBA University, Lucknow.	January 10-11, 2018
10.	Organized Swachhta Awareness Programme- Seminar at BBA University, Lucknow.	September 14, 2018
11.	Organized One day Seminar on “Environmental Sustainability: Present Scenario and Future Aspects” on the occasion of 23 rd Foundation Day of BBA University, held at BBA University, Lucknow.	January 10, 2019

HONORS AND AWARDS

1.	Travel support Department of Science and Technology, New Delhi (Grant No. ITS/2019/000593) to attend and deliver lecture in "The Fourth International Congress “Microbial Biotechnology for Development” (MICROBIOD 4), Morocco. (24 April, 2019 to 26 April, 2019)"	2019
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2.	<i>Lead Talk Award</i> National Seminar on Transforming Agriculture to Doubling of Farmers Income, Organized by Samagra Vikas Welfare Society, BBA University, Lucknow	2018
3.	<i>Young Achievers Award</i> Contribution in the field of Agricultural Microbiology by Asian PGPR society at BHU, Varanasi.	2014
4.	<i>Awarded Certificate</i> Appreciation in research by the Honorable Governor of Uttar Pradesh	2014
5.	<i>Awarded Travel Grant</i> Department of Biotechnology, New Delhi (Grant No. DBT/CTEP/02/201500217) to attend in 4 th Asian PGPR Conference, Hanoi, Vietnam, 3 rd to 6 th May, 2015, organized by Asian PGPR Society.	2015
6.	<i>Awarded Travel Grant</i> Department of Science and Technology, New Delhi (Grant No. ITS/1862/2015-16) to attend 8 th ISS Congress, Lisbon, Portugal, 12 th – 18 th July, 2015	2015
7.	<i>Travel support</i> DST and CSIR New Delhi to attend and deliver lecture in 18 th World Congress of Soil Science, held at Philadelphia, USA. Organized by International Union of Soil Science, 09-15 July, 2006	2006
8.	<i>Travel support</i> DST New Delhi to attend and deliver lecture in Second Asian PGPR Congress for Sustainable Agriculture, Beijing, China. Organized by Asian PGPR Society. Travel support from Department of Science and Technology, New Delhi, 21-24 August, 2011	2011

MEMBERSHIP OF LEARNED BODIES/SOCIETIES

- Life Member of Association of Microbiologists (AMI) of India.
- Life Member of Indian Science Congress Association, Kolkata, India.
- Life Member of Asian PGPR Society
- Life Member of Clean and Green Society, Lucknow
- President & Life Member, Society for Conservation of Wildlife
- Secretary & Life Member, Society for Environmental Sustainability

EDITOR IN CHIEF

- Editor in Chief, Environmental Sustainability (**Springer Nature**) 2018 - present

MEMBER EDITORIAL BOARD OF JOURNAL

- Guest Editor, Frontiers in Microbiology **2017**
- Associate Editor, Climate Change and Environmental Sustainability **2014 – present**
- Associate Editor, International Journal of Science, Technology and Society **2014 – present**
- Executive Member, Asian PGPR Society **2014 – present**
- Member, Editorial Board, Archives of Agriculture & Environmental Science

EXTRA/CO-CURRICULAR/ADMINISTRATIVE/RESEARCH ACTIVITIES

1.	Chairman ‘Vigilance Awareness Week’ at BBA University, Lucknow.	29 Oct. – 03 Nov., 2018
2.	Convener , ‘Swachh Bharat Pakhwada’ at BBA University, Lucknow.	2016-17
3.	Convener , ‘Swachhta Abhiyan’ at BBA University, Lucknow.	2017 - present
4.	Convener , ‘Ek Bharat Shrestha Bharat’, BBA University, Lucknow.	2017 - present
5.	Nodal Officer & Coordinator , Babasaheb Bhimrao Ambedkar University for Unnat Bharat Abhiyan Program of MHRD.	2018 - present
6.	Coordinator , Foundation Courses of BBA University, Lucknow.	2017 - present
7.	Member of Academic Council of CSJM University, Kanpur	2006 - 2011
8.	Head of Rate Contract Committee for Chemicals and Glassware, CSJM University, Kanpur.	2008 - 2011
9.	Member of Board of Faculty of Microbiology, CSJM University, Kanpur.	2006 – 2011
10.	Involved in designing of ordinance and curricula for PG courses in Biotechnology, Microbiology, Biochemistry and Environmental Sciences at CSJM University, Kanpur	2006 - 2011
11.	Member of technical and core committee for organization of CPMT examination	2010
12.	Coordinator Academics, CSJM University, Kanpur.	2009 - 2011
13.	Coordinator of Committee for designing of ordinances for campus courses of CSJM University, Kanpur.	2009 - 2011
14.	Head, Institutional Technical Committee, CSJM University	2007 - 2011
15.	Member, University Purchase Committee, CSJM University	2009 - 2011
16.	Member, Departmental Research Committee, DEM, BBA University	2011 – 2014
17.	Member, Departmental Purchase Committee, DEM, BBA University	2011 – 2014
18.	Member, Board of Post Graduate Studies, DEM, BBA University	2011 – 2014

19.	Member, Organizing committee Lucknow Science Congress	2013
20.	Member, University Space Auditing Committee, BBA University	2013
21.	Member, Editorial Board, University Newsletter, BBA University	2013
22.	Chairman, Departmental Research Committee, DEM, BBA University	2014 – present
23.	Chairman, Departmental Purchase Committee, DEM, BBA University	2014 – present
24.	Chairman, Board of Post Graduate Studies, DEM, BBA University	2014 – present
25.	Member, Board of Management, BBA University	12/07/2017 to 01/08/2017
26.	Editor, BBAU Research Bulletin	2015
27.	Member, Academic Council, BBA University	2014 to present
28.	Member, Purchase Committee (Anti-Plagiarism Software for BBAU)	

REVIEWER OF HIGH IMPACT JOURNALS

- Reviewer of Current Microbiology (Springer Publication)
- Reviewer of World Journal of Microbiology & Biotechnology (Springer Publication)
- Reviewer of Water Research (Elsevier)
- Reviewer of Chemosphere (Elsevier)
- Reviewer of Crop Protection (Elsevier)
- Reviewer of Archives of Agronomy and Soil Science (Taylor & Francis)
- Reviewer of African Journal of Microbiology Research
- Reviewer of Climate Change and Environmental Sustainability
- Reviewer of Journal of Environmental Biology
- Reviewer of African Journal of Agriculture Research
- Reviewer of African Journal of Biotechnology
- Reviewer of Applied Soil Ecology (Elsevier)
- Reviewer of Journal of Genetics
- Reviewer of Environmental Monitoring and Assessment
- Reviewer of Frontiers in Microbiology
- Reviewer of Physiology & Molecular Biology of Plants
- Reviewer of European Journal of Soil Biology (Elsevier)
- Reviewer of Symbiosis (Springer)
- Reviewer of Critical Reviews in Microbiology (Elsevier)
- Reviewer of Journal of Plant Interactions (Taylor and Francis)
- Reviewer of Biological Control (Elsevier)

BOOKS PUBLISHED

1. **Arora NK. 2013.** Splendid Wilds.....safari through Corbett. Shree Publisher, New Delhi, ISBN: 978-81-8329-507-9
2. **Arora NK. 2013.** Plant Microbe Symbiosis: Fundamentals and Advances, Springer. ISBN 978-81-322-1286-7
3. **Arora NK. 2015.** Plant Microbe Symbiosis: Applied Facets, Springer. ISBN 978-81-322-2067-1
4. **Arora NK, Mehnaz S, Balestrini R. 2016.** Bioformulations: for sustainable agriculture, Springer. ISBN 978-81-322-2777-9
5. Sobti RC, **Arora NK, Kothari R. 2018** Environmental Biotechnology: for sustainable future, Springer. ISBN 978-981-10-7284-0

Arora NK. 2016. Book Series “Microorganisms for Sustainability”

1. Microbial Models: From Environmental to Industrial Sustainability, Springer. ISBN 978-981-10-2555-6.
2. Rhizotrophs: Plant Growth Promotion to Bioremediation, Springer. ISBN 978-981-10-4861-6.
3. Vol. 1 Microorganisms for Green Revolution, Springer. ISBN 978-981-10-6240-7
4. Vol. 1 Advances in Soil Microbiology: Recent Trends and Future Prospects, Springer. ISBN 978-981-10-6178-3
5. Plant Microbiome: Stress Response, Springer. ISBN 978-981-10-5514-0
6. Vol. 2 Microorganisms for Green Revolution, Springer. ISBN 978-981-10-7146-1
7. Vol. 2 Advances in Soil Microbiology: Recent Trends and Future Prospects, Springer. ISBN 978-981-10-7380-9
8. Extremophiles in Eurasian Ecosystems: Ecology, Diversity, and Applications, Springer. ISBN 978-981-13-0329-6
9. Microbial Metabolism of Xenobiotic Compounds. Springer. ISBN 978-981-13-7461-6
10. Vol 1: Rhizobacteria in Abiotic Stress Management: Plant Growth Promoting Rhizobacteria for Sustainable Stress Management, Springer. ISBN 978-981-13-6536-2
11. Vol 2: Rhizobacteria in Biotic Stress Management: Plant Growth Promoting Rhizobacteria for Sustainable Stress Management, Springer. ISBN 978-981-13-6986-5

RESEARCH PUBLICATIONS

1. Prakash J., **Arora NK.** 2019. Phosphate-solubilizing *Bacillus* sp. enhances growth, phosphorus uptake and oil yield of *Mentha arvensis* L **3Biotech**, DOI, 10.1007/s13205-019-1660-5
2. **Arora NK.**, 2019. Earth: 50 years challenge. **Environmental Sustainability**, DOI 10.1007/s42398-019-00053-5

3. **Arora NK.**, Fatima T, Mishra I, Verma M, Mishra J. 2018. Environmental Sustainability: challenges and viable solutions. *Environmental Sustainability*, DOI 10.1007/s42398-018-00038-w
4. Khare E, Mishra J, **Arora NK.** 2018. Multifaceted interactions between endophytes and plant: developments and prospects. *Frontiers in Microbiology*, DOI 10.3389/fmicb.2018.02732
5. **Arora NK.** 2018. Amylase assisted green synthesis of silver nano-cubes for antibacterial application. *Bioinspired, Biomimetic and Nanobiomaterials*
6. **Arora NK.** 2018. Bioremediation: a green approach for restoration of polluted ecosystems. *Environmental Sustainability*, DOI 10.1007/s42398-018-00036-y
7. **Arora NK.** 2018. Agricultural sustainability and food security. *Environmental Sustainability*, DOI 10.1007/s42398-018-00032-2
8. **Arora NK.** 2018. Environmental Sustainability—necessary for survival. *Environmental Sustainability*, DOI 10.1007/s42398-018-0013-3
9. **Arora NK.** 2018. Biodiversity conservation for sustainable future. *Environmental Sustainability*, DOI 10.1007/s42398-018-0023-1
10. Tewari S, **Arora NK.** 2018. Role of salicylic acid from *Pseudomonas aeruginosa* PF23EPS+ in growth promotion of sunflower in saline soils infested with phytopathogen *Macrophomina phaseolina*. *Environmental Sustainability*, DOI 10.1007/s42398-018-0002-6.
11. Upadhyaya S, Yadav D, Chandra R, **Arora NK.** 2018. Evaluation of antibacterial and phytochemical properties of different spice extracts. *African Journal of Microbiology Research*, DOI: 10.5897/AJMR2017.8731 pp- 27-37
12. **Arora NK**, Khare E, Singh S, Tewari S. 2018. Phenetic, genetic diversity and symbiotic compatibility of rhizobial strains nodulating pigeon pea in Northern India. *3Biotech*, DOI: 10.1007/s13205-017-1074-1 8: 52.
13. Verma M, Verma S, **Arora NK.** 2018. Application of Rhizobium-Pseudomonas consortia for enhanced production of mungbean in sustainable manner. *International Journal of Science Technology and Society* Vol. 3 pp. 54-61
14. Vimal SR, Singh JS, **Arora NK**, Singh S. 2017. Soil-Plant-Microbe Interactions in Stressed Agriculture Management: A review *Pedosphere* 27(2): 177–192, DOI 10.1016/S1002-0160(17)60309-6

15. **Arora NK**, Verma M. 2017. Modified microplate method for rapid and efficient estimation of siderophore produced by bacteria. *3Biotech* DOI: 10.1007/s13205-017-1008-y. (IF – 1.36).
16. Adnan M, Shankar S, Shikha, **Arora NK**. 2017. Optimization of Process Parameters for Laccase Production from *Pleurotus ostreatus* for the Decolourization of Malachite Green. *Indian Journal of Environmental Protection*, UEP 37 (11): 920-928
17. Upadhyaya S, Srivastava P, Chandra R, **Arora NK**. 2017. Microbiological assessment and hazardous effect of ready-to-eat foods presented for sale in Lucknow City, *India*. *African Journal of Food Science*, DOI: 10.5897/AJFS2017.1630 pp. 346-352
18. Mishra J, **Arora NK** 2017. Secondary metabolites of fluorescent pseudomonads in biocontrol of phytopathogens for sustainable agriculture. *Applied Soil Ecology*, **125**: 35-45 (Accepted, IF – 2.8)
19. Mishra J, Singh R, **Arora NK** 2017. Alleviation of Heavy Metal Stress in Plants and Remediation of Soil by Rhizosphere Microorganisms. *Frontiers in Microbiology* DOI: 10.3389/fmicb.2017.01706 (IF-4.07)
20. Singh U, **Arora NK** 2017. Simultaneous biodegradation of phenol and cyanide present in coke-oven effluent using immobilized *Pseudomonas putida* and *Pseudomonas stutzeri*. *Brazilian Journal of Microbiology* DOI.org/10.1016/j.bjm.2016.12.013 (IF-1.09)
21. **Arora NK**, Singh R., 2017 Growth enhancement of medicinal plant *Withania somnifera* using phosphate solubilizing endophytic bacteria *Pseudomonas* sp. as bioinoculant *East Asian Science Technology and Society an International Journal* 2(2):13-18
22. **Arora NK**, Mishra J. 2017. **Microbial Inoculants in Sustainable Agricultural Productivity Vol. 1: Research Perspectives**. Dhananjaya Pratap Singh, Harikesh Bahadur Singh and Ratna Prabha (eds). Springer, New Delhi. 2016. xviii + 343 pp. Price: 139.99€/ £104.50/US\$ 179.00. ISBN: 978-81-322- 2645-1 *Current Science* 112(2).
23. **Arora NK**, Mishra J 2016. Prospecting the roles of metabolites and additives in future bioformulations for sustainable agriculture. *Applied Soil Ecology*. DOI 10.1016/j.apsoil.2016.05.020.
24. Tewari S, **Arora NK** 2016. Fluorescent *Pseudomonas* sp. PF17 as an efficient plant growth regulator and biocontrol agent for sunflower crop under saline conditions. *Symbiosis*. DOI 10.1007/s13199-016-0389-8
25. Mishra J, Rajnandani M, **Arora NK** 2016. Biocontrol of ear rot fungi by plant growth promoting fluorescent pseudomonads. *Inter J Sci Tech Soc* 1(2) 45-52.

26. Mishra J, Prakash J, **Arora NK**. 2016. Role of beneficial soil microbes in sustainable agriculture and environmental management. *Climate Change Environ. Sustain.* 4(2): 137-149.
27. Tewari S, **Arora NK** 2015. Plant growth promoting fluorescent *Pseudomonas* enhancing growth of sunflower crop. *Inter J Sci Tech Soc* 1(1) 51-54.
28. Tewari S, **Arora NK** 2014. Ameliorating the growth of sunflower using stress-tolerant *Pseudomonas aeruginosa* PF23. *Climate Change Environ. Sustain.* 2(2): 116-121.
29. Tewari S, **Arora NK** 2014. Talc based EPS formulation enhancing growth and production of *Helianthus annuus* under saline conditions. *Cell. Mol. Biol.* 60 (5): 67-75
30. **Arora NK**, Tewari S, Singh R 2014 Comparative study of different carriers inoculated with nodule forming and free living plant growth promoting bacteria suitable for sustainable agriculture. *J. Pharma. Chem Biol Sci* 2(2):143-149
31. Tewari S and **Arora NK** 2014 Multifunctional exopolysaccharides from *Pseudomonas aeruginosa* PF23 involved in plant growth stimulation, biocontrol and stress amelioration in sunflower under stress conditions. *Current Microbiology* 69(4), 484-494.
32. Singh S, Gupta G, Khare E, Behal K K and **Arora NK** 2014. Effect of enrichment material on the shelf life and field efficiency of bioformulation of *Rhizobium* sp. And P-solubilizing *Pseudomonas fluorescens*. *Science Research Reporter* 4(1), 44-50.
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