




Faculty Details Proforma for DU Web-site

Title	Dr.	First Name	Dileep K.	Last Name	Singh	Photograph
Designation		Professor				
Address		Department of Zoology, North Campus, University of Delhi – 110 007				
Phone No Office		011-27667191				
		Residence	011-27666550			
		Mobile	09810258052			
Email		dileepksingh@gmail.com dksingh@zoology.du.ac.in dileepksingh2004@yahoo.com				
Web-Page		http://people.du.ac.in/~dksingh/				
Educational Qualifications						
Degree		Institution			Year	
Ph.D.		Ph.D. (Zoology), University of Delhi, Delhi			1993	
Career Profile						
Organization /Institution		Designation		Duration		Role
Department of Zoology, University of Delhi, Delhi		Professor		January 1, 2009 – Till Date		Teaching and Research
Department of Zoology, University of Delhi, Delhi		Associate Professor		January 1 st , 2006 – December, 31 st , 2008		Teaching and Research
Department of Zoology, University of Delhi, Delhi		Reader		February 20 th , 2002 to December 31 st , 2005		Teaching and Research
Department of Zoology, University of Delhi, Delhi		Lecture		October 15 th , 1996 to February 19 th , 2002		Teaching and Research
Department of Zoology, University of Delhi, Delhi		University Research Associate		February 17 th , 1993 to October 15 th , 1996		Research

Areas of Interest / Specialization

Environmental Toxicology; Pesticide Toxicology and Bioremediation; Soil microbiology, Food and Feed traceability and Food Adulteration.

Subjects Taught

1. Insect Toxicology :	Zoology, M.Sc. University of Delhi, Delhi
2. Insect Physiology :	Zoology, M.Sc. University of Delhi, Delhi
3. Principles of Ecology :	Zoology, M.Sc. University of Delhi, Delhi
4. Systematic, Biodiversity and Evolution :	Zoology, M.Sc. University of Delhi, Delhi
5. Environmental Pesticide Toxicology:	Zoology, M. Phil. Programme, University of Delhi, Delhi
6. Instrumentation (GLC, HPLC, TLC) and GLP :	Ph.D. Programme, University of Delhi, Delhi

Research Guidance/Awards/Fellowships/Memberships and other achievements and activities

Number of Post Doctorate Scholars, Ph.D. , M. Phil. M.Sc. Students guided /guiding: 144

- (i) Post Doctorate : 4
- (ii) Ph.D. Scholars : (a) Awarded : 23 (b) Submitted : 3 (c) Registered: 7
- (iii) M. Phil. Scholars : (a) Awarded : 33 (b) Submitted : 0 (c) Registered : 1
- (iv) Research Projects : 6
- (v) M.Sc. (for training and project work from the same/ other universities) : 77

Fellowships/Memberships and other achievement/activities

- (i) President Elect 2021, Association of Microbiologists of India, New Delhi.
- (ii) Member, Training, Research and Academic Council (TRAC) of Wildlife Institute of India, with effect from 10.5.2018 for three years.
- (iii) Member, Wildlife Institute of India - Society for three years with effect from September 25th, 2017
- (iv) Chairperson, Recruitment and Promotion Committee (Teaching), University of Delhi, Delhi, 2016 till present.
- (v) Chairperson, Recruitment and Promotion Committee (Non-Teaching), University of Delhi, Delhi, 2016 till present.
- (vi) Chairperson of Special Categories Admission Enabling committee (University of Delhi) for SC/ST/OBC and PH candidates to various undergraduate courses 2016-17.
- (vii) Member, Task Force Committee : Wealth of India, CSIR-NISCAIR, 2015
- (viii) *FAMI* (Fellow Association of Microbiologists of India), 2013.
- (ix) Expert/Judge for 6th Uttarakhand State Science & Technology Congress , SSJ Campus, Almorah, Kumaun University, November 14-16, 2011.
- (x) Treasurer , Association of Microbiologists of India (AMI), 2011-2014 and again elected for second term (2014-17).
- (xi) Joint Secretary, INSCR, November , 2011 –Continuing.
- (xii) Member, Project Evaluation/Review Committee, UCOST, Department of Science and Technology, Government of Uttarakhand, India, 2011.
- (xiii) Expert/Judge for 5th Uttarakhand State Science & Technology Congress , Doon University, Dehradun November 10-12,2010.
- (xiv) Member “The National Academy of Sciences, India (M.N.A.Sc.)”, (2008) Allahabad.

- (xv) Expert/Judge for Biology in 3rd Uttarakhand State Science & Technology Congress , at IIT Roorke November 10-11,2008.
- (xvi) Member review panel for biology video at Consortium for Education Communication (UGC), 2007
- (xvii) Executive Editor “ Indian J. Microbiology” (2006 -2011).
- (xviii) Life time member of “ Association of Microbiologist” India
- (xix) Member “ American Society for Microbiology”, USA,2011.
- (xx) Member “American Chemical Society”, USA, 2010.
- (xxi) Member of Board for Biology e-Courses “Sakshat” MHRD (Ministry of Human Resource and Development) , New Delhi (2006 and 2007).
- (xxii) Academic Council Member (elected for two terms), University of Delhi, Delhi, 2002-04, and 2004-06.
- (xxiii) UGC NET qualified 1986 .

Administrative/ Other Experiences :

1. Chairperson, Recruitment and promotion (Teaching and Non-teaching), University of Delhi, Delhi, 2016 till present.
2. Resident Tutor : Mansarover Hostel, University of Delhi, Delhi (1998-2002).
3. Elected member : Academic Council (2002-2004 and 2004-2006) and member of different committees as Academic Council Member in University of Delhi, Delhi.
4. Treasurer, Association of Microbiologists of India (2011-14 and 2014-17) : www.amiindia.info
5. DUSU (Delhi University Students Union) Advisor, 2017 till present.

Resource Person :

1. CPDHE : Course in Zoology, Department of Zoology, University of Delhi, Entitled "*Pesticide and Soil Health.*" April 25, 2001.
2. IARI : Summer Course Entitled "*Pesticide degradation in soil and its impact on microflora and fauna.*" June 29, 2001.
3. CPDHE : Course in Zoology, Department of Zoology, University of Delhi, Entitled "*Trends in Physiology.*" 2002.
4. CPDHE : Expert in evaluation of projects in many programme 2006-2009.
5. NAAS meeting on "*Water in Agriculture*" May 31, 2011, National Academy of Agricultural Sciences, New Delhi
6. NAAS meeting with delegation of European Union on June 7, 2011, National Academy of Agricultural Sciences, New Delhi , presented work on "*Contaminated water used for irrigation in urban and peri-urban agricultural areas*"
7. CPDHE : *Waste water treatment*, August 13th, 2012.

Invited Lectures :

1. Invited Lecture, National Conference on “*Combating Industrial Pollution for Sustainable Environment – A Fusion of Industrial and Scientific Efforts*” on September 22, 2016 National Conference at Gargi College, University of Delhi, Delhi

2. Invited Lecture, UGC-sponsored National Conference in Chemistry: Environment & Harmonious Development (NCC 2016) being organized by the Department of Chemistry, Shyam Lal College, University of Delhi on 7-8th April 2016.
3. Invited Lecture, International Symposium, IAEA, Vienna, Austria (November 10-13, 2014).
 - a. AMI Platinum Jubilee Lecture, November, 20th, 2013, MD University, Rohtak, Haryana.
 - b. Invited Lecture, 53rd AMI Annual Conference, KIIT University, Bhubaneswar, Odisha, India Nov. 22-25, 2012.
4. Millennium Lecture series (invited lecture) at IASCA, Jiwaji University, Gwalior, February, 17th, 2011.

Coordinator of project advisory committee meetings / others :

- a. Refresher Course on 'Life Sciences' for CPDHE (2005-06) organized by the Department of Zoology, University of Delhi . December 20th, 2005 to January 9th, 2006.
- b. DST -PAC Animal Science, February 18th-19th, 2007.
- c. Coordinated ICAR -NFBSFARA group Project Advisory Committee Meeting, November 9th, 2012.
- d. Coordinated ICAR -NFBSFARA group Project Advisory Committee Meeting, November 29th, 2013.

Teaching and Research Experiences

1. Teaching : 24 years
2. Research : 24 years

Academic Collaborations :

(i) **International collaborations.**

Research collaboration under FAO/IAEA, CRPs (Coordinated Research Projects : 2011-2016, 2002-2008 and 1998-2000) with Institutes/Universities/Laboratories of following countries,

2017-2021

Vienna, USA, UK, India, China, Uganda, others

2013-2016

Collaboration with FAO/IAEA laboratory, Vienna, Austria

2011-2016

USA, UK, India, China, Singapore, Uganda, Chile, Portugal, Thailand, Lebanon, Botswana

2002-2008

Argentina, Brazil, Costa Rica, UK, China, Australia and Hungary.

1998-2000

Germany, Egypt, Pakistan, China, and Canada

(ii) **National collaborations.**

2009-2012

DU-DST PURSE SCHEME : "Development of indicators for Anthropogenic , Environmental and Chemical Stresses on Urban Ecosystem : A Study of Aquatic and Terrestrial Ecosystems of Yamuna River Catchment from National Capital region Delhi". Departments of Botany, Chemistry, Geology, Physics, Statistics of University of Delhi, Delhi-110007

2012-2016

NFBSFARA -ICAR (2012-2016) " Bioremediation of agrochemicals and heavy metals present in Yamuna and drainage water used for irrigation in urban and peri-urban agricultural areas". Delhi University , Delhi, (Lead Centre), IIT, Delhi (Cooperating Centre) and IARI, Delhi (Cooperating Centre).

2013-2017

NFBSFARA (ICAR) (2013-17) "Bioremediation of contaminants in polluted sites: use of weedy plants". Delhi University, Delhi (Cooperating Centre), DWSR Jabalpur (Lead Centre), Water Technology Centre, IARI (Cooperating Centre).

2013-2016

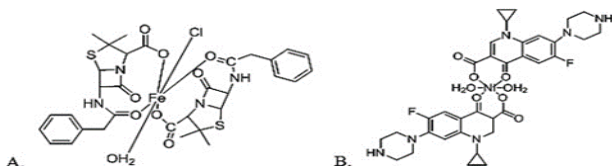
DBT research project (2013-16) " Biodegradation of chlorinated organics by extremophiles: Developing biocatalyst for effective remediation". IIT Delhi and University of Delhi, Delhi.

2018-2021

NASF (ICAR) (2018-2021) "Bioremediation of chemical contaminants and their complexes present in drainage waste water with high dynamic flux used for irrigation in urban and *peri*-urban agriculture", Delhi University, Delhi, (Lead Centre).

Development of Technology :

Research Group : University of Delhi (Lead Centre), WTC, Delhi (Cooperating Centre) and National Bureau of Soil Survey & Land Use Planning, Delhi has developed a proto-type bioreactor for Waste Water Treatment in research programme financed by NFBSFARA (ICAR), New Delhi



Antibiotics and Metal complex has been synthesized in our laboratory and published in *Environmental Nanotechnology, Monitoring & Management*, (2019) **available on online.**



The bioreactor has been installed in agricultural form at IARI, New Delhi

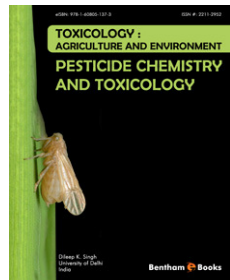
NASF (ICAR) (2018-2021) “Bioremediation of chemical contaminants and their complexes present in drainage waste water with high dynamic flux used for irrigation in urban and *peri*-urban agriculture”, Delhi University, Delhi, (Lead Centre).

Publications Profile

1. Books (Authored/Edited)

Book : Academics

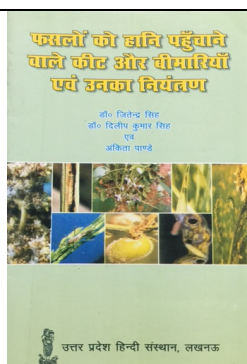
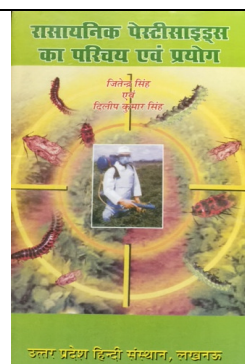
Series Title: TOXICOLOGY : AGRICULTURE AND ENVIRONMENT
Volume 1: PESTICIDE CHEMISTRY AND TOXICOLOGY
Author: Dileep K. Singh, *University of Delhi, India*



DOI: 10.2174/97816080513731120101, ISSN: 2211-2952, eISBN: 978-1-60805-137-3, 2012

Bentham Science Publisher, UAE/USA

Books : Pesticides usage in Agriculture



Published in 2004 and 2005 ; Uttar Pradesh Hindi Sansthan, 6, Mahatma Gandhi Marg, Lucknow-226001

2. Research papers published in Refereed/Peer Reviewed Journals

Publications : 76 + 12 + 106 + 6 + 2 + 2 + 1

International : 76

Impact factor: 1.020 to 7.297

S. No.	Journal	No. of Publications	Impact Factor
1.	J. Agric. Food Chemistry	2	3.154
2.	Chemosphere	5	5.108
3.	Environmental Science & Technology	1	7.149
4.	Canadian J. Microbiology	2	1.243
5.	Ecotoxicology and Environmental Safety	1	4.527
6.	J. Environmental Science Health Part B	12	1.390
7.	Bull. Environ. Contam. Toxicol.	3	1.480
8.	ACS Publication Environmental Chemistry and IAEA TECHDOC	10	
9.	Biodegradation	2	2.018

10.	Toxicological and Environmental Chemistry	1	1.020
11.	Annals of Microbiology	2	1.407
12.	Journal of Basic Microbiology	1	1.580
13.	Journal of Hazardous Materials	2	7.650
14.	International Biodeterioration and Biodegradation	2	3.824
15.	Food Control	2	4.06
16.	International Journal of Phytoremediation	5	2.237
17.	Environmental Science Pollution Research	1	2.741
18.	Environmental Nanotechnology, Monitoring & Management	1	1.317
19.	Environment International	1	7.297
20.	Archives in Microbiology	1	1.007
21.	Journal of Analytical Atomic Spectrometry	1	3.646
22.	Analytical Methods	1	2.073
23.	Enzyme and Microbial Technology	1	2.93
24.	Frontiers in Microbiology	1	4.259
25.	Current Microbiology	1	1.595
26.	Journal of Analytical Atomic Spectrometry	1	3.466

Impact factor 2016/2017/2018/2019/2020 issued by the Journals

Thomas Reuters JCR Report, 2016/2017/2018/2019/2020

National: 12

S. No.	Journal	No. of Publications	Impact Factor
1.	Pesticide Research Journal	5	
2.	Indian J. Entomology	1	
3.	Indian J. Microbiology	2	1.310
4.	Biopestic. International	1	
5.	Ann. Plant Protec. Sci	1	
6.	Indian J of Agricultural Science	1	0.18
7.	J. Adv. Res. Bio Chem. Pharma.	1	

- 5.3 **Conference/Symposium/Workshop : 106**
- 5.4 **Technical Documents (Published) : 6**
- 5.5 **Chapters in Book : 2**
- 5.6 **e-Chapters : 2 (chapters published) .**
- 5.7 **Books : 2 (pesticides and its application, written in Hindi)**
- 5.8 **eBook : Pesticide Chemistry and Toxicology, 2012, Bentham Science Publishers**

6. PUBLICATION CITATIONS: 2020-07-01

- 6.1 **Google Scholar:** Citations = 1699 **h** index = 21
- 6.2 **Researcher ID: B-1053-2011** Citations = 754, **h** index = 15
- 6.3 **Scopus :** Citations = 990, **h** index = 17
- 6.4. **ResearchGate :** Citations = 883
- 6.5. **<https://orcid.org/0000-0001-5522-523X>**

e. Five best publications : Impact factor 3.154 to 6.198

- (i) *J. Agricultural Food Chemistry* 40 : 1713-1716, **1992**.
- (ii) *Environmental Science & Technology* 29: 2301-2304, **1995**.
- (iii) *Chemosphere* 55 : 197- 205, **2004**.
- (iv) *Chemosphere* 60 : 32 - 42, **2005**.
- (v) *J. Hazardous Materials* 265: 233-241, **2014**.

Recent Publications : 2008-2013

1. Vig K., Singh D.K., Agarwal H.C., Dhawan A.K. and Dureja P. (2008) Soil microorganisms in cotton fields sequentially treated with insecticides. *Ecotoxicology and Environmental Safety* 69 : 263-276. **Impact factor : 3.743**
2. Dileep K. Singh (2008) Biodegradation and bioremediation of pesticides in soil : Concept, method and recent developments. *Indian J. Microbiology* 48 (1) :35-40, 2008 **Impact factor : 1.310**
3. Goswami S. and Singh D.K. (2009) Biodegradation of α and β Endosulfan in broth medium and soil microcosm by *Bordetella* sp.B9. *Biodegradation* 20: 199-200. **Impact factor : 2.410**
4. Goswami S. Komal Vig and Singh D.K. (2009) Biodegradation of α and β Endosulfan by *Aspergillus sydوني*, *Chemosphere* 75 : 883-888. **Impact factor: 4.208**
5. Rai Sandhya, Dileep K. Singh and K. Annapurna (2010) Dynamics of soil microbial community structure and activity during cropping period of cotton. *Proceedings 19th World Science Congress of soil Science*. Robert J. Gilkes and Nattapron Prakongkep (Eds.), pp 5-8, IUSS, (ISBN 978-0-646-5378-2), <http://www.iuss.org>
6. Singh N. Sarat and Dileep K. Singh (2011) Biodegradation of endosulfan and endosulfan sulfate by *Achromobacter xylosoxidans* strain C8B in broth medium. *Biodegradation* 22(5):845-857, DOI: 10.1007/s10532-010-9442-0, **Impact factor : 2.410**
7. Suman Pooja and Dileep K. Singh (2011) Estimating the uncertainty of pesticide residue analysis from mango using multi-residue analysis and validation of Method. *Toxicological and Environmental Chemistry* 93 (10) : 1880-1896, DOI: 10.1080/02772248.2011.606971. **Impact factor : 1.020**
8. Jitendra Singh, Dileep K. Singh, K.V.Sandhu, S.K.Jha and Madhuban Gopal (2012) Cyfluthrin biodegradation gene(s) associated in plasmid of *Pseudomonas stutzeri* (strain S1). *Indian Journal of Agricultural Sciences* 82 (10): 831–5, October 2012. **Impact factor : 0.18**

Publications: 2014

1. Shivani Tyagi and Dileep K. Singh (2014) *Azospirillum himalayense* sp. nov., a *nifH* bacterium isolated from Himalayan Valley soil, India. *Annals of Microbiology*, DOI: 10.1007/s13213-013-0658-1 **Impact factor : 1.407**
2. Madhu and Dileep K. Singh (2014) Endosulfan induced alteration in bacterial protein profile and RNA yield of *Klebsiella* sp. M3, *Achromobacter* sp. M6, and *Rhodococcus* sp. M2. *Journal of Hazardous Materials* 265 : 233-241, DOI 10.1016/j.jhazmat.2013.11.061. **Impact factor : 6.065**
3. Madhu and Dileep K. Singh (2014) Biodegradation of Endosulfan in broth medium and soil microcosm by *Klebsiella* sp. *Bull. of Environ. Contam. Toxicol.* 92:237–242 DOI: 10.1007/s00128-013-1168-3. **Impact factor : 1.412**

4. Shivani Tyagi and Dileep K. Singh (2014) *Pseudacidovorax austerolens* sp. nov., a nifH bacterium isolated from Himalayan valley soil, India. *Annals of Microbiology*, DOI: 10.1007/s13213-014-0852-9. **Impact factor : 1.407**

Publications : 2015

1. Sandhya Rai, Dileep K Singh and K. Annapurna (2015) Dynamics of soil diazotrophic community structure, diversity, and functioning during the cropping period of cotton (*Gossypium hirsutum*). *Journal of Basic Microbiology*, 54 : 1-12. DOI 10.1002/jobm.201300867. **Impact factor : 1.823**
2. Swati Bajaj and Dileep K Singh (2015) Biodegradation of Persistent Organic Pollutants in Soil, Water and Pristine sites by Cold-Adapted Microorganisms: Mini Review. *International Biodeterioration and Biodegradation* 100: 98-105 **Impact factor : 3.75**
3. Sumit Pal, Neelam Patel, Anushree Malik and D.K.Singh (2015) Heavy metal health risk assessment and microbial menaces via dietary intake of vegetables collected from Delhi and national capital regions peri-urban area, India. *Journal of Food Agriculture & Environment* 13 (2): 82-88. **Impact factor : 0.44**
4. Shivani Tyagi and Dileep K. Singh (2015) *Pseudacidovorax austerolens* sp. nov., a nifH bacterium isolated from Himalayan valley soil, India. *Annals of Microbiology*, 65 : 217-223, DOI: 10.1007/s13213-014-0852-9. **Impact factor : 1.407**
5. Jandrić, Z., Islam, M., Singh, D.K. and Cannavan, A. (2015). Authentication of Indian citrus fruit/fruit juices by untargeted and targeted metabolomics. *Food Control*, in press, published on line: doi:10.1016/j.foodcont.2015.10.044 **Impact factor : 4.06**

Publications : 2016

1. Priyadarshini Dey, Deepak Gola, Abhishek Mishra, Anushree Malik, Dileep Kumar Singh, Neelam Patel, Martin Von Bergen, Nico Jehmlich (2016) Comparative performance evaluation of multi-metal resistant fungal strains for simultaneous removal of multiple hazardous metals. *Journal of Hazardous Materials* <http://dx.doi.org/doi:10.1016/j.jhazmat.2016.07.025> **Impact factor : 6.065**
2. Neerja, Jasneet Grewal, Amrik Bhattacharya, Sumit Kumar, D.K.Singh and S.K. Khare (2016) Biodegradation of 1,1,1-trichloro-2,2-bis (4-chlorophenyl) ethane (DDT) by using *Serratia marcescens* NCIM 2919, *Journal Of Environmental Science And Health, PART B Pesticides, Food Contaminants, and Agricultural Waste*, (accepted July, 2016) **Impact factor : 1.362**

Publications (2017)

1. Anina James, Dileep K. Singh, P.J.Khankhane, R.Kaur (2017) Enhanced atrazine removal by hydrophyte-bacterium associations and in vitro screening of the isolates for their plant growth promoting potential. *International Journal of Phytoremediation* **Impact Factor: 2.085**
2. Swati Bajaj, Sunil Khare and Dileep K. Singh (2017) Biodegradation of γ -hexachlorocyclohexane (lindane) by halophilic bacterium *Chromohalobacter* sp. LD2 isolated from HCH dumpsite. *International Biodeterioration & Biodegradation*, Article reference: INBI4290 **Impact Factor : 3.75**
3. Tanvi Singh and Dileep K Singh (2017) Phytoremediation of organochlorine pesticides: Review. *International Journal of Phytoremediation*. **Impact factor : 2.085**

4. Tanvi Singh and Dileep K. Singh (2017) Phytoremediation of organochlorine pesticides: Concept, method, and recent developments. *International Journal of Phytoremediation* 17 : 834-843. **Impact factor : 2.085**
5. V.A.Walvekar, Swati Bajaj, Dileep K. Singh and Shilpi Sharma (2017) Ecotoxicological assessment of pesticides and their combination on rhizospheric microbial community structure and function of *Vigna radiate* *Environ Sci Pollut Res* DOI 10.1007/s11356-017-9284-y **Impact factor : 2.741**
6. Deepika Rashmi, Pallee Shree and Dileep K. Singh (2017) Stable isotope ratio analysis in determining the geographical traceability of Indian wheat, JFCO5526, Food Control, DOI information : 10.1016/j.foodcont.2017.03.025 **Impact factor : 4.06**

Publications (2018) :

1. Tanvi Singh and Dileep K Singh (2018) Assessing the bacterial community structure in the rhizoplane of wetland plants", *Bulletin of Environmental Contamination and Toxicology*. Accepted, 2018 **Impact factor: 1.412**
2. Tanvi Singh and Dileep K Singh (2018) Lindane degradation by root epiphytic bacterium *Achromobacter* sp. strain A3 from *Acorus calamus* and characterization of associated proteins. *International Journal of Phytoremediation*. Accepted, 2018 **Impact factor: 2.40**
3. Jitendra Singh, Dileep K Singh et. al. (2018) Growth Inhibitory Effect of Medicinal Plant Extracts on Insect Pests and Pathogenic Fungi. *J. Advance Research in Biochemistry and Pharmacology*. 1 : 20-27, 2018
4. Anina James and Dileep K Singh (2018) Assessment of atrazine decontamination by epiphytic root bacteria isolated from emergent hydrophytes. *Annals of Microbiology*. DOI: 10.1007/s13213-018-1404-5. **Impact factor: 1.407**

Publications (2019):

1. M Kumar, S Jaiswal, KK Sodhi, P Shree, D K Singh, PK Agrawal, P Shukla, Antibiotics bioremediation: Perspectives on its ecotoxicity and resistance (2019)
Environment International 124, 448-461 **Impact factor : 7.93**
2. M Kumar, KK Sodhi, P Singh, PK Agrawal, DK Singh, Synthesis and characterization of antibiotic-metal complexes [FeCl₃ (L₂) 2H₂O and Ni (NO₃)₂ (L₁) 2H₂O] and enhanced antibacterial activity (2019)
Environmental Nanotechnology, Monitoring & Management, 100209 **Impact factor : 1.137**
3. NS Singh, R Sharma, DK Singh, Identification of enzyme (s) capable of degrading endosulfan and endosulfan sulfate using in silico techniques (2019) *Enzyme and Microbial Technology* **Impact factor : 2.93**
5. S Jaiswal, DK Singh, P Shukla, Gene editing and systems biology tools for pesticide bioremediation: A review (2019), *Frontiers in Microbiology* 10, 87 **Impact Factor : 4.209**
6. AS Dhaulaniya, B Balan, PK Agrawal, DK Singh Cold survival strategies for bacteria, recent advancement and potential industrial applications (2019) *Archives of microbiology* 201 (1), 1-16 **Impact factor : 1.007**

7. R Sharma, NS Singh, DK Singh Soil microbial diversity of peri-urban agricultural field and riverbank along Yamuna river in Delhi, India (2019) *SN Applied Sciences* (Springer Nature) 1 (1), 22
8. Mohit Kumar, K.Sodhi and Dileep K. Singh, Bioremediation of Penicillin G by *Serratia* sp. R1, and enzymatic study through molecular docking. (2019) *Environmental Nanotechnology, Monitoring & Management* (Online).
Impact Factor : 1.317
9. Tanvi Sing and Dileep K. Singh, Rhizospheric Microbacterium sp. P27 Showing Potential of Lindane Degradation and Plant Growth Promoting Traits.. (2019) *Current Microbiology* (2019) 76:888-895 **Impact Factor : 1.595**
10. I Strashnov, JD Gilmour, A Cannavan, G Chen, C Dissanayake, ...Dileep K. Singh, et al. Atmospheric pressure chemical ionisation (APCI) and photoionisation (APPI) mass spectrometry for detection of unsaturated fatty acids: potential for rapid detection of ... (2019) *Analytical Methods* 11 (30), 3819-3828
Impact Factor : 2.073
11. I Strashnov, I Izosimov, JD Gilmour, MA Denecke, J Almirall, A Cannavan, ...Dileep K. Singh et al A Laser Ablation Resonance Ionisation Mass Spectrometer (LA-RIMS) for detection of isotope ratios of uranium at ultra-trace concentrations from solid particles and solutions (2019). *Journal of Analytical Atomic Spectrometry*
Impact Factor : 3.466
12. Kushneet Kaur Sodhi, Mohit Kumar, Biji Balan, Amit Singh Dhaulaniya1, Dileep Kumar Singh. Isolation and characterization of amoxicillin-resistant bacteria and amoxicillin-induced alteration in its protein profiling and RNA yield (2019) *Archives of microbiology* doi.org/10.1007/s00203-019-01737-6 **Impact Factor : 1.1007**

Publications (2020):

1. R Jamwal, S Kumari, B Balan, AS Dhaulaniya, S Kelly, A Cannavan, ..Attenuated total Reflectance–Fourier transform infrared (ATR–FTIR) spectroscopy coupled with chemometrics for rapid detection of argemone oil adulteration in mustard oil
LWT 120, 108945 **Impact Factor : 3.79**
2. R Jamwal, S Kumari, AS Dhaulaniya, B Balan, S Kelly, A Cannavan Utilizing ATR-FTIR spectroscopy combined with multivariate chemometric modelling for the swift detection of mustard oil adulteration in virgin coconut oil *Vibrational Spectroscopy*, 103066 **Impact Factor : 1.900**
3. AS Dhaulaniya, B Balan, A Yadav, R Jamwal, S Kelly, A Cannavan, Development of an FTIR based chemometric model for the qualitative and quantitative evaluation of cane sugar as an added sugar adulterant in apple fruit juices
Food Additives & Contaminants: Part A 37 (4), 539-551 **Impact Factor : 2.107**
4. KK Sodhi, M Kumar, DK Singh Potential application in amoxicillin removal of *Alcaligenes* sp. MMA and enzymatic studies through molecular docking
Archives of Microbiology, 1-7 **Impact Factor : 1.808**
5. R Jamwal, S Kumari, S Kelly, A Cannavan, DK Singh Rapid detection of pure coconut oil adulteration with fried coconut oil using ATR-FTIR spectroscopy coupled with multivariate regression modelling
LWT, 109250 **Impact Factor : 3.79**
6. S. Kumari, R Jamwal, N Mishra, DK Singh Recent Developments in Environmental Mercury Bioremediation and its Toxicity: A Review *Environmental Nanotechnology, Monitoring & Management*, 100283 **Impact Factor : 1.312**

PUBLICATION CITATIONS: 2020-07-01

- | | |
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| 1 Google Scholar: | Citations = 1170, h index = 17 |
| 2 THOMSON REUTERS: Researcher ID: B-1053-2011 | Citations = 556, h index = 14 |
| 3 Scopus : | Citations = 700, h index = 15 |
| 4. Research Gate : | Citations = 865 |

Five best publications : Impact factor 3.154 to 6.198

- (vi) *J. Agricultural Food Chemistry* 40 : 1713-1716, **1992**.
- (vii) *Environmental Science & Technology* 29: 2301-2304, **1995**.
- (viii) *Chemosphere* 55 : 197- 205, **2004**.
- (ix) *Chemosphere* 60 : 32 - 42, **2005**.
- (x) *J. Hazardous Materials* 265: 233-241, **2014**.

Five most cited papers (Google Scholar) : 2020-07-01

1. D.K.Singh (**2008**) Biodegradation and bioremediation of pesticide in soil: concept, method and recent developments. *Indian Journal of Microbiology* 48 (1), 35-40. **Citation = 163**
2. D.K.Singh, S.Kumar (**2008**) Nitrate reductase, arginine deaminase, urease and dehydrogenase activities in natural soil (ridges with forest) and in cotton soil after acetamiprid treatments. *Chemosphere* 71 (3), 412-418. **Citation = 128**
3. S. Pandey, D.K. Singh (**2004**) Total bacterial and fungal population after chlorpyrifos and quinalphos treatments in groundnut (*Arachis hypogaea* L.) soil. *Chemosphere* 55 (2), 197-205. **Citation =133**
4. J.Singh , D.K.Singh (**2005**) Dehydrogenase and phosphomonoesterase activities in groundnut (*Arachis hypogaea* L.) field after diazinon, imidacloprid and lindane treatments. *Chemosphere* 60 (1), 32-42. **Citation = 98**
5. N.S.Singh and D.K.Singh (2011) Biodegradation of endosulfan and endosulfan sulfate by *Achromobacter xylosoxidans* strain C8B in broth medium *Biodegradation* 22 (5) : 845-857
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OTHER PUBLICATIONS : TECDOC-IAEA (United Nation Organization, Vienna, Austria)

1. Dileep K. Singh, Pramila Menon and Hari C. Agarwal Persistence of lindane in model cattle dips in sub-tropical climate of Delhi, India. IAEA publication IAEA-TECDOC 983 : 39-44, 1997,Vienna, Austria
2. Tanu Jindal, Dileep K. Singh and Hari C. Agarwal Dissipation and degradation of Coumaphos in model cattle dipping vats and soil in sub-tropical climate of Delhi. IAEA Publication, IAEA-TECDOC 983 : 27-38, 1997, Vienna, Austria.

3. Komal Vig, Dileep K. Singh and Hari C. Agarwal, Dissipation and leaching of ¹⁴C-mnicrotophos in soil columns. IAEA-TECDOC 1248 : 137-141, 2001, Vienna, Austria
4. Mausami Shrivastawa, Dileep K. Singh, Tanu Jindal and Hari C. Agarwal Mineralization and Volatilization of Ring Labeled ¹⁴C-2,4-D in three different soil. IAEA-TECDOC 1248 : 131-136, 2001, Vienna, Austria.
5. Komal Vig, Dileep K. Singh, Hari C. Agarwal, A.K. Dhawan and Prem Dureja, Effect of repeated pesticide application on soil properties in cotton field. (I) Impact on soil microbes, iron reduction capacity and respiration. of cotton field. IAEA-TECDOC 1248 : 97-117 2001, Vienna, Austria.
6. Komal Vig, Dileep K. Singh, Hari C. Agarwal, A.K.Dhawan and Prem Dureja, Effect of repeated pesticide application on soil properties in cotton field. (II) Insecticides residues and impact on dehydrogenase and arginine deaminases activity. IAEA-TECDOC 1248 : 119-129 2001, Vienna, Austria.

Book Chapters :

1. Jitendra Singh, Ajeet Singh, Dileep K. Singh, Anju Jain, Mahendra Singh, Bharat Bhushan and S.K.Dubey (2013) An Introduction of Plant Nutrients and Foliar Fertilization: A Review, Precision Farming (ICAR: Book : 2013)
2. Dileep K. Singh and N. Sarat Singh, Endosulfan a Cyclodiene Organochlorine Pesticide: Possible Pathways of its Biodegradation, Springer : January 2017 DOI: 10.1007/978-3-319-45156-5_5 , In book: Microbe-Induced Degradation of Pesticides, pp.105-130

Conference Organization/ Presentations (2010-2016)

51st AMI Conference at BIT, Misra, Ranchi, India, December 14-16, 2010

1. Effect of different amendments on soil nutrients and microbial Population Ananda Shankar Bhattacharjee, Shivani Tyagi, D.K. Singh, AMI 2010 pp 36-37.
2. Comparative study on microbial diversity of Yamuna River in Delhi and NCR regions. Ranju Sharma and D. K. Singh., AMI 2010 pp 33-34
3. Microbial Diversity of Yamuna River soil in Delhi, India Sushma Sharma and D. K. Singh, AMI 2010 pp 190
4. Biodegradation of Endosulfan and Endosulfan Sulfate by *Achromobacter Xylosoxidans* strain C8D in Broth medium. Ngangbam Sarat Singh and D. K. Singh, AMI 2010 pp 233.
5. Optimization of environmental parameters for biodegradation of α and β - endosulfan by *Klebsiella* sp. M3, Madhu, and D. K. Singh, AMI 2010, addendum.
6. Effect of Bt- endotoxin on the protein profile of two *nifH* containing bacterial strains isolated from soil. Ritu Mishra, and D.K. Singh, AMI 2010 addendum

52nd AMI Conference at Delhi University, Delhi , February 9-11, 2011

7. Dileep K. Singh, Studies on biodegradation of endosulfan by soil isolated bacteria. International Conference " Recent trends in developing bioremediation strategies for HCH and other chlorinated contaminants" February, 9-11, **2011**, DU, Delhi , pp 60.

8. Pooja Deopa and Dileep K. Singh, Phylogenetic diversity of bacterial population in the soil of Chamba Valley, Himanchal Pradesh, nternational Conference " Recent trends in developing bioremediation strategies for HCH and other chlorinated contaminants" February, 9-11, **2011**, DU, Delhi, pp 96.

9. Ranju Sharma and Dileep K. Singh, Effect of pollution on soil microbial diversity of Yamuna River in Delhi and NCR region. nternational Conference " Recent trends in developing bioremediation strategies for HCH and other chlorinated contaminants" February, 9-11, **2011**, DU, Delhi, pp 95.

10. N. Sarat Singh and Dileep K. Singh , Biodegradation of endosulfan sulfate a toxic metabolite of endosulfan by *Achromobacter xylosoxidans* C8B. nternational Conference " Recent trends in developing bioremediation strategies for HCH and other chlorinated contaminants" February, 9-11, **2011**, DU, Delhi, pp 91.

11. Sushma Sharma and Dileep K. Singh. Study of microbial diversity of the Yamuna Soil in Delhi, India. nternational Conference " Recent trends in developing bioremediation strategies for HCH and other chlorinated contaminants" February, 9-11, **2011**, DU, Delhi , pp 86.

12. Madhu and Dileep K. Singh. Accelerated Biodegradation of alpha and beta Endosulfan. nternational Conference " Recent trends in developing bioremediation strategies for HCH and other chlorinated contaminants" February, 9-11, **2011**, DU, Delhi , pp 83.

13. Sushma Sharma and Dileep K. Singh. Study of microbial diversity of the Yamuna Soil in Delhi, India. nternational Conference " Recent trends in developing bioremediation strategies for HCH and other chlorinated contaminants" February, 9-11, **2011**, DU, Delhi , pp 86.

14. Madhu and Dileep K. Singh. Accelerated Biodegradation of alpha and beta Endosulfan. nternational Conference " Recent trends in developing bioremediation strategies for HCH and other chlorinated contaminants" February, 9-11, **2011**, DU, Delhi , pp 83.

53rd AMI Conference at KIIT University, Odisha, November 22-25, 2012

15. Ritu Mishra, Madhu, Tanvi Singh, Ashmita Singh, Dileep Kumar Singh . Variation in the soil bacterial community associated with Bt and non-Bt crop by PCR-DGGE Analysis. November 22-25, **2012**, 53rd, AMI Conference, KIIT University, Odisha, India pp 208.

16. Dileep K. Singh and M. Thoibi Devi. Biodegradation of Endosulfan by *Klebsiella pneumoniae* IW1.

November 22-25, 2012, 53rd, AMI Conference, KIIT University, Odisha, India, pp 39.

54th AMI Conference at KIIT University, Odisha, November 17-20, 2013

17. Dileep K Singh and Thoibi Mayanglambam (2013) Biodegradation of Endosulfan isomers and Endosulfan Sulfate by *Klebsiella pneumonia* IW1. 54th AMI Conference MD University Rohtak, November 17-20th, 2013 p32.

18. Ritu Mishra and Dileep K. Singh (2013) Variation in nitrogen fixing soil bacterial community associated with Bt- and non-Bt crops by PCR-DGGE Analysis. 54th AMI Conference MD University Rohtak, November 17-20th, 2013 p 12.

19. Deepika Rashmi, Pallee Shree and Dileep K Singh (2013) Aflatoxin contamination in *Citrus sinensis* by *Aspergillus* sp. 54th AMI Conference MD University Rohtak, November 17-20th, 2013 p 12.

20. Khushboo Singh, Anushree Malik, Neelam Patel Dileep K Singh (2013) Determination of HCH residues in wastewater and soil of Nazafgarh drain ,Delhi and isolation of potential lindane degrading bacteria. 54th AMI Conference MD University Rohtak, November 17-20th, 2013 p 393.

21. Neha Mishra, Anil Roy, Anushree Malik, Neelam Patel Dileep K Singh (2013) Biodegradation of DDT by Soil Bacterium. 54th AMI Conference MD University Rohtak, November 17-20th, 2013 p 452.

22. Sushma Sharma and Dileep K Singh (2013) Molecular characterization of nitrogen fixing bacteria and nifH gene expression in uninoculated and inoculated wheat grown soil. 54th AMI Conference MD University Rohtak, November 17-20th, 2013 p 457.

55th AMI Conference, TNA University Coimbatore, November 12 -14, 2014

23. Tanvi Singh, P.J. Khankhane, Ravinder Kaur, Dileep Kumar Singh (2014) Rhizoremediation of lindane by bacteria isolated from weedy plants. 55th AMI Conference TNA University Coimbatore, November 12-14, 2014 EM 26 http://www.ami2014.org/wp-content/uploads/2014/10/Poster2_Environmental-Microbiology.pdf

International Symposium, IAEA, Vienna, Austria, 2014

24. Traceability of Rice and Wheat to ensure quality using molecular and isotopic techniques. Invited Lecture, at IAEA, Vienna, Austria, November 10-13, 2014

56th AMI Conference, JNU New Delhi, December 7-10, 2015

25. Tanvi Singh, Dileep Kumar Singh, P.J. Khankhane, Ravinder Kaur (2015) Lindane Degradation by Root

Epiphytic Bacteria of Weeds. 56th AMI Conference, JNU New Delhi, December 7-10, 2015 EMP74 Page No. 627.

26. Neha Dhingra, Dileep Kumar Singh, P.J. Khankhane, Ravinder Kaur (2015) Expediency of Rhizoremediation. 56th AMI Conference, JNU New Delhi, December 7-10, 2015 EMP75 Page No. 628.

27. Neha Mishra , Dileep k Singh, Anushree Mallik , Neelam Patel (2015) Isolation of DDT Degrading Bacteria From Yamuna River Water And Its Differential Expression Of Proteins. 56th AMI Conference, JNU New Delhi, December 7-10, 2015 IMP77 Page No. 855.

Research Projects (Major Grants/Research Collaboration)

Research Collaborations : International

Research collaboration under FAO/IAEA, CRPs (Coordinated Research Project : 2013-2016, 2011-2016, 2002-2008 and 1998-2000) with Institutes/Universities of the following countries,

2013-2016

Collaboration with FAO/IAEA laboratory, Vienna, Austria

2011-2016

USA, UK, Austria, India, China, Morocco, Chile, Portugal, Singapore, Thailand, Botswana, Lebanon, Uganda.

2002-2008

Argentina, Australia, Brazil, Columbia, Costa Rica, Hungary, Thailand and U.K.

1998-2000

Brazil, USA, China, Egypt, Germany, Pakistan and Thailand.

Research Collaborations : National

1. DU-DST Purse Scheme (**2009-2013**), "Development of indicators for Anthropogenic , Environmental and Chemical Stresses on Urban Ecosystem : A Study of Aquatic and Terrestrial Ecosystems of Yamuna River Catchment from National Capital region (Delhi)" . Different Departments of Delhi University, Delhi

2. NFBSFARA (ICAR) (**2012-2016**) " Bioremediation of agrochemicals and heavy metals present in Yamuna and drainage water used for irrigation in urban and peri-urban agricultural areas". Delhi University , Delhi, (Lead Centre), IIT, Delhi (Cooperating Centre) and IARI, Delhi (Cooperating Centre).

3. NFBSFARA (ICAR) (**2013-17**) "Bioremediation of contaminants in polluted sites: use of weedy plants". Delhi University, Delhi (Cooperating Centre).

4. DBT research project (**2013-16**) " Biodegradation of chlorinated organics by extremophiles: Developing

biocatalyst for effective remediation". IIT Delhi and University of Delhi, Delhi.

Research Projects : Completed

1. DST (2010-2013) "*Studies on the impact of Bt toxin on soil microbes, nematodes, annelids and arthropods*". Rs. 37,26,800/-
2. DBT (2011-2014) " Diversity of nitrogen metabolizing bacteria based on *nifH*, *nar G* and *amo A* genes" Rs. 42,43,000/-

Academic visits :

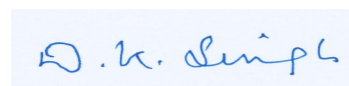
Academic visits : 11

1. Thailand : FAO/IAEA Training Programme, 1992
2. China : FAO/IAEA Research Committee Meeting, 1999
3. Austria : FAO/IAEA Research Committee Meeting, 2002
4. Argentina : FAO/IAEA Research Committee Meeting, 2007
5. Sweden : FEMS 2009
6. Austria : FAO/IAEA Research Committee Meeting, 2011
7. Portugal : FAO/IAEA Research Committee Meeting, 2014
8. Austria : IAEA International Symposium, 2014
9. Uganda : FAO/IAEA Research Committee Meeting, October, 26-30, 2015
10. Austria : FAO/IAEA Research Committee Meeting, November, 7-11, 2016
11. Austria : FAO/IAEA Research Committee Meeting, May, 15-19, 2017

Association with Professional Bodies

1. Life Member, Association of Microbiologists of India
2. Treasurer, Association of Microbiologists of India (April, 2011- March, 2014).
3. Treasurer, Association of Microbiologists of India (April, 2014- March, 2017).
4. Joint Secretary, INSCR, November , 2011 – Continuing.

Detail information is on ; University of Delhi website [http:// people.du.ac.in/~dksingh/](http://people.du.ac.in/~dksingh/)



Signature of Faculty Member