

Curriculum Vitae of Dr. Mrs. Atya Kapley

Being nominated as Executive member of OWSD- Asian Region

Dr. (Mrs) Atya Kapley

Present Position Scientist Gp IV(4)
Principal Scientist

Environmental Genomics Division

NEERI, Nehru Marg Nagpur - 440 020, INDIA

Tel. +91-712-2249883 0712-2249885 ext.363 Fax +91-712-2249900

E. Mail: a_kapley@neeri.res.in atyadrd@hotmail.com atyakapley@gmail.com

Personal

Date of Birth : January 19th, 1965

Place of Birth: Hyderabad, India

Citizenship : Indian

Education: **B.Sc.** 1986, Osmania University, Hyderabad

Ist Class in Botany, Zoology, Chemistry

M.Sc. 1988, University of Roorkee, Roorkee

Ist Class in Biosciences

Ph.D. 1992, University of Hyderabad, Hyderabad

Title: Endogenous factors regulate the DNA binding of the receptor

estrogen complex in rat and goat uteri

Positions Held:

• Scientist Gp. IV(4), NEERI; Jan 2009 to date

- Scientist Gp. IV(3), NEERI; Jan 2005 to Dec 2008
- Scientist Gp. IV(2),, NEERI; 2001 to 2005
- Scientist Gp. IV(1), NEERI; 1996 to 2001
- Scientist Fellow, NEERI Dec `95 Oct `96
- Research Associate, NEERI Mar `94 Dec `95
- Senior Project Fellow, NEERI Nov `92 March `94

Research Experience:

PhD topic: Endogenous factors regulate the DNA binding of the receptor estrogen complex in rat and goat

uteri

Supervisor: Dr. R V Thampan

School of Life Sciences, University of Hyderabad Hyderabad, India

Aug 1988 – Aug 92

(currently, Ex-Director, Rajiv Gandhi Institute for Biotechnology, Thiruvananthapuram, Kerala)

Current Areas of Research:

Current research interest focusses on the field of environmental genomics. A multi-disciplinary approach is used by combining conventional microbiology tools with bioinformatics and molecular tools to address rising levels of environmental contamination. Specific area of interest relates to the bioremediation of pesticide contaminated soil, and use of metagenomics approach to study microbial communities in activated biomass of wastewater treatment plants with the aim to understand and improve biological treatment capacity. Gene expression studies and quantification analysis are used to analyze the catabolic potential of a contaminated niche as well as to follow the progress of bioremediation. Ongoing studies on microbial diversity analysis are also extrapolated to exploration of antibacterial agents from bacteria.

Awards:

'Young Scientist Award' in the field of environmental microbiology, presented by the 'Association of Microbiologists of India' for the year 2000, 41st Annual Meeting of AMI, Microbiotech 2000, Nov 25-27, 2000

"Woman Scientist Award' presented by the Biotech Research Society of India for the year 2008, at Benaras Hindu University, Nov 2009

Fellowship:

Fellow of "Maharashtra Academy of Sciences"

Affiliation to various professional groups

Life Member, Association of Microbiologists of India

Life Member, Society of Biological Chemists of India

Member, Third World Organization for Women in Science (TWAS), Italy

(Organization for Women in Science in the Developing World)

Member: Biotech Research Society of India

Interest to serve OWSD as Executive member- of Asia Pacific Region

Dr.Atya Kapley has been a member of OWSD for the last 10 years., a renowned Biotechnologist and had the opportunity to work in the country's foremost CSIR labs like CSIR-NEERI, which gave her an exposure to professional scientific environment. She also had the privilege to interact with some distinguished national and international scientists and Nobel Laureates. The numerous lectures attended, plenary and invited lectures presented at National & International conferences in different countries, and personal discussions, have helped her to develop scientific aptitude and skills in both Scientific and Administrative job. And with an interest in gender issues she has served the OWSD since last 10 years, as a National chapter treasurer. In the interest to serve the Women and Girls to achieve their desired goal she has been participated in arranging and organizing workshops and conferences- to discuss gender discrimination and enlighten women scientists and other professionals. She has encouraged them to participate in various activities like workshops, Conferences and visited to rural areas and attended health camps.

Her professional activities includes her continued Research at CSIR- National Engineering Institute Research Institute (CSIR-NEERI). She has guided several PhD students has several International Projects and has developed Expertise in the area of Environmental Remediation and dealing with educating the public about the harzards of environmental pollotants and their health implications. few students are still working under her supervision for PhD degree. She has published more than 80 papers in journals of repute. She has been a Task force member in committee's and at the Department of Biotechnology (DBT)- Govt of India, She has several awards and honours to her credit, and she is a life member and fellow of several Academies, Scientific Associations and Academic Societies in which she is holding executive positions, She has travelled widely for participating and presenting her work in National & International conferences. She loves to serve the society through OWSD and has drawn many new plans to wards this goal.

Overseas visits:

Sr.	From	То	Institute and the	Purpose of Visit	
No.	DD MM YY	DD MM YY	Country of Visit		
1.	14 Jan,1999	22 Feb, 1999	EAWAG, Dubendorf,	Characterization of pHK17 clone	
			Switzerland	(Indo-Swiss Project)	
2.	1 Nov, 1995	15 Dec,1995	EAWAG, Dubendorf,	Screening of genomic library from	
			Switzerland	Pseudomonas SF1	
3.	21 Jan 2007	29 Jan 2007	Blaise Pascal University	On invitation for formalization of	
			and Institute Pasteur,	collaborative projects	
			France		
4.	02May 2007	05 May 2007	Academy of Finland,	as a member expert in	

			Finland	Bioremediation in the delegation from Department of Biotechnology, Ministry of Science and Technology, New Delhi, to attend the workshop on "Bioresources and Environmental Biotechnology"	
5.	15 August 2007	21 August 2007	Beijing, China	To attend the the International Workshop on Women for Science being organized by the Chinese Academy of Sciences (CAS), the Third World Organization for Women in Science (TWOWS) and TWAS at Beijing, China	
6.	01 May 2008	31 May 2008	Beijing, China	TWAS fellowship for carrying out R&D at State Key Lab. of Environmental Aquatic Chemistry, Research Center for Eco- Environmental Sciences, Chinese Academy of Sciences, Beijing, China	
7.	09 February 2009	14 February 2009	Helsinki, Finland	Under the Joint Research Project :Indo-Finland collaboration in biotechnology	
8.	28 October 2009	01 November 2009	Agriculture Research Centre Semongok, Kuching, Malaysia	On invitation to deliver a talk and explore possible collaboration	
9.	25 June 2010	01 July 2010	Beijing, China	To present a paper at the TWOWS conference.	
10.	01 April 2011	10 April 2011	Finnish Environment Institute, Helsinki, Finland	under the DBt sponsored Indo- Finland collaborative project	
11	19 August 2014	22 August 2014	Formas, Stockholm, Sweden	As member of DST panel to participate in the Indo-Swedish workshop on Bio-base Economy	

R & D Projects involvement as Principal Investigator (PI) or Co- Principal Investigator (Co-PI) : On-going projects:

S No	Project Title	Project Team	Sponsor	Period	Funds (Rs. In lakhs)
1.	Genomic and Biochemical Characterization of Bacterial Isolates Degrading Atrazine and its Application in Herbicide Bioremediation	·	DBT	Jan 2015 to Jan 2018	66.75
2.	Centre of Excellence for	Coordinators:		April	1400.00

	Molecular Environmental Science and Engineering Research	Dr Sadhana Rayalu Dr. Atya Kapley	CSIR	2012 To March 2017	
3.	Metagenomic insight into water biofilms: formation and dispersal	PI- Dr Asifa Qureshi, Co-PI's- Dr Anshuman Khardenavis, Dr Atya Kapley, Dr Hemant J. Purohit,	CSIR	April 2012 To March 2017	44.28
4.	Exploitation of microbial capacities for biofuel production using genomics tool	PL: Dr Hemant J Purohit Co-PL: Dr Atya Kapley:	CSIR	April 2012 To March 2017	320.457

CSIR: Council of Scientific and Industrial Research, New Delhi **DBT:** Department of Biotechnology, Ministry for Science & Technology, Govt. India, New Delhi

Completed projects:

S.No.	Project Title	Project Team	Sponsor	Period	Funds (Rs. In lakhs)
1.	Exploration and exploitation of microbial wealth of India	Dr. H.J.Purohit Dr. Atya Kapley	CSIR	Jan 2002 - Dec 2007	257.70
2.	Development of Simulation Model for Biodegradation of Mixed Waste Stream for Pesticides	Dr. Atya Kapley Dr. H J Purohit	DBT	Feb 2004- March 2007	13.95
3.	Assessment of Microbial Diversity of CETP	Dr. H J Purohit Dr. Atya Kapley	M/s JETL, Hyderabad (Jeedimetla Effluent Treatment Ltd.)	Jan 2005 - Dec 2006	14.50
4.	Study on catabolic assimilatory capacity and population dynamics of hydrocarbon remediating effluent treatment plant	Dr. Atya Kapley Dr. H J Purohit	DBŤ	May 2000 – April 2003	19.95
5.	Development of Biosensor and microbial tracking tools for nitrophenolic wastewaters	Dr. H J Purohit Dr. Atya Kapley	DBT	Oct, 2000 – Sept, 2003	21.51
6.	Development of user friendly water analysis protocol based on genetic determinants	Dr. H J Purohit Dr. Atya Kapley	DBT	Oct 2000 – Sept	23.49

				2003	
7.	Indo- Finland Collaborative project: Genomic tools in bioremediation: A case study with atrazine as pollutant	India: PL: Dr Atya Kapley: Finland: PL: Dr. Kirsten S.Jørgenser Finnish Environment Institute, Helsinki, Finland	DBT	October 2008 to Jan. 2012	65.94
8.	Mining the metagenome of activated biomass for new antibiotic molecules	PL: Dr Atya Kapley:	DBT	April 2008- March 2012	40.73
9.	Bioremediation of contaminated site using Genomics tool	PL: Dr Hemant J Purohit Co-PL: Dr Atya Kapley: Dr Asifa Qureshi Mr Anshuman Khardenavis	CSIR	April 2007- March 2012	153.00
10.	Stress Response in Bacteria: Role of salt and dissolved oxygen levels	PL: Dr Hemant J Purohit Co-PL: Dr Atya Kapley:	CSIR	April 2007- March 2012	78.00
11.	Screening for Bio-molecules from microbial diversity collected from different ecological niches	PL: Dr Hemant J Purohit Co-PL : Dr Atya Kapley :	DBT	Dec 2007- March 2014	179.76

CSIR: Council of Scientific and Industrial Research, New Delhi

DBT: Department of Biotechnology, Ministry for Science & Technology, Govt. India, New Delhi

List of Papers Accepted in National and International Journals:

Papers accepted in national / international journals:71

Sequences in GenData Bank (http://www.ncbi.nlm.nih.gov): 2118

Papers published in national / international conferences: **52** Activated sludge metagenome: 8 deposited at NCBI Gen Bank

Whole genome shotgun sequencing project submitted at NCBI GenBank: 20

^{74.} Nousiainen AO, Björklöf K, Sagarkar S, Nielsen JL, Kapley A, Jørgensen KS.

- Bioremediation strategies for removal of residual atrazine in the boreal groundwater zone. Appl Microbiol Biotechnol. 2015 Aug 4. [Epub ahead of print]
- 73. Kapley Atya, Tanksale H, Sagarkar S, Prasad AR, Kumar RA, Sharma N, Qureshi A, Purohit HJ. Antimicrobial activity of Alcaligenes sp. HPC 1271 against multidrug resistant bacteria. Funct Integr Genomics. 2015 Oct 2. [Epub ahead of print
- 72. Sagarkar S, Bhardwaj P, Storck V, Devers-Lamrani M, Martin-Laurent F, Kapley Atya. s-triazine degrading bacterial isolate Arthrobacter sp. AK-YN10, a candidate for bioaugmentation of atrazine contaminated soil.Appl Microbiol Biotechnol. 2015 Sep 25. [Epub ahead of print]
- 71. Atya Kapley, Ruyin Liu, Niti B Jadeja, Yu Zhang, Min Yang, Hemant J Purohit. Shifts in microbial community and its correlation with degradative efficiency in a wastewater treatment plant. Applied Biochemistry and Biotechnology: 176, Issue 8 (2015), Page 2131-2143
- 70. Pooja Bhardwaj, Abhinav Sharma, Sneha Sagarkar, Atya Kapley (2015). Mapping atrazine and phenol degradation genes in Pseudomonas sp. EGD-AKN5. *Biochemical Engineering Journal*, 102: 125–134.
- 69. Trilok Chandra Yadav, Rajesh Ramavadh Pal, Sunita Shastri, Niti B. Jadeja, Atya Kapley. Comparative metagenomics demonstrating different degradative capacity of activated biomass treating hydrocarbon contaminated wastewater. Bioresour Technol. 2015 Feb 14. pii: S0960-8524(15)00207-2. doi: 10.1016/j.biortech.2015.01.141.
- 68. Niti B Jadeja, Ravi P More, Hemant J Purohit, Atya Kapley. Metagenomic analysis of oxygenases from activated sludge. Bioresource Technology 165:250-256. doi: 10.1016/j.biortech.2014.02.
- 67. Leena Agarwal, Asifa Qureshi, Vipin Chandra Kalia, Atya Kapley, Hemant J. Purohit, R. N. Singh. Arid ecosystem: Future option for carbon sinks using microbial community intelligence. Current Science, (Accepted in March) 2014
- 66. Trilok Chandra Yadav, Anshuman A. Khardenavis, Atya Kapley. Shifts in microbial community in response to dissolved oxygen levels in activated sludge. Bioresource Technology 165:257-64 doi: 10.1016/j.biortech.2014.03.007
- 65. Sneha Sagarkar, Aura Nousiainen, Shraddha Shaligram, Katarina Björklöf, Kristina Lindström, Kirsten S. Jørgensen, Atya Kapley. Soil mesocosm studies on atrazine bioremediation. J Environ Manage. 2014 Jun 15;139:208-16. doi: 10.1016/j.jenvman.2014.02.016
- 64. Aura O. Nousiainen, Katarina Björklöf, Sneha Sagarkar, Shinjini Mukherjee, Hemant J. Purohit, Atya Kapley, Kirsten S. Jørgensen. Atrazine degradation in boreal non-agricultural subsoil and tropical agricultural soil. Journal Soil Sediments, June 2014, Volume 14, Issue 6, pp 1179-1188
- 63. Sagarkar S, Bhardwaj P, Yadav TC, Qureshi A, Khardenavis A, Purohit HJ, Kapley A (2014) .Draft genome sequence of atrazine-utilizing bacteria isolated from Indian agricultural soil. Genome Announc. 2(1). pii: e01149-13. doi: 10.1128/genomeA.01149-13.

- 62. Qureshi A, Itankar Y, Ojha R, Mandal M, Khardenavis A, Kapley A, Purohit HJ. (2014). Genome Sequence of Lactobacillus plantarum EGD-AQ4, Isolated from Fermented Product of Northeast India. Genome Announc. 2(1). pii: e01122-13. doi: 10.1128/genomeA.01122-13.
- 61. Puranik S, Talkal R, Qureshi A, Khardenavis A, Kapley A, Purohit HJ. (2014). Genome Sequence of the Pigment-Producing Bacterium Pseudogulbenkiania ferrooxidans, Isolated from Loktak Lake. Genome Announc. 1(6). pii: e01115-13. doi: 10.1128/genomeA.01115-13.
- 60. Ravi P. More, Suparna Mitra, Sajan C. Raju, Atya Kapley, Hemant J. Purohit (2014) Mining and assessment of catabolic pathways in the metagenome of a common effluent treatment plant to induce the degradative capacity of biomass. Bioresource Technology 153 (2014) 137–146 doi: 10.1016/j.biortech.2013.11.065.
- 59. Atya Kapley, Sneha Sagarkar, Himgouri Tanksale, Nandita Sharma, Asifa Qureshi, Anshuman Khardenavis, Hemant J Purohit (2013) Genome Sequence of Alcaligenes sp. Strain HPC1271. Genome announcements. 01/2013; 1(1) doi:pii: e00235-12, 2013
- 58. Sneha Sagarkar, Shinjini Mukherjee, Aura Nousiainen, Katarina Björklöf, Hemant J. Purohit, Kirsten S. Jørgensen, Atya Kapley, (2013) Monitoring bioremediation of atrazine in soil microcosms using molecular tools. Environmental Pollution 172, 108-115
- 57. Sampada Puranik, Shraddha Shaligram, Vasundhara Paliwal, Dhananjay V. Raje, Atya Kapley, Hemant J. Purohit (2012) Demonstration of sequential adaptation strategy for developing salt tolerance in bacteria for wastewater treatment: A study using Escherichia coli as model. Bioresource Technology 121 (2012) 282–289
- 56. Sharma, N., Tanksal, H., Kapley, A., Purohit, H.J. (2012). Mining the metagenome of activated biomass of an industrial wastewater treatment plant by a novel method. Indian Journal of Microbiology, 52(4), 538-543, DOI 10.1007/s12088-012-0263-1
- 55. Asifa Qureshi, Atya Kapley, Hemant J. Purohit (2012). Degradation of 2,4,6-Trinitrophenol (TNP) by Arthrobacter sp.HPC1223 Isolated from Effluent Treatment Plant. Indian J Microbiol 52, Issue 4, 642-647. DOI 10.1007/s12088-012-0288-5
- 54. Chandra R, Naresh Bharagava R, Kapley A, Purohit HJ (2012) Characterization of Phragmites cummunis rhizosphere bacterial communities and metabolic products during the two stage sequential treatment of post methanated distillery effluent by bacteria and wetland plants. Bioresource Technology 103(1):78-86 (*IF*: 4.365)
- 53. S. Venkata Mohan, Agarwal, L, Mohanakrishna, S G.. Srikanth, Kapley, A, Purohit, HJ, Sarma P.N. (2011) Firmicutes with iron dependent hydrogenase drive hydrogen production in anaerobic bioreactor using distillery wastewater. International Journal of Hydrogen Energy, 36:(14), 8234-8242 (*IF*: 4.407)
- 52. Selvakumaran S, Kapley A, Kashyap SM, Daginawala HF, Kalia VC, Purohit HJ. (2011) Diversity of aromatic ring-hydroxylating dioxygenase gene in Citrobacter. Bioresource Technology, 102 (7): 4600-4609 (*IF:* 4.365)
- 51. Verma V, Raju SC, Kapley A, Kalia VC, Kanade GS, Daginawala HF, Purohit HJ. (2011) Degradative potential of Stenotrophomonas strain HPC383 having genes homologous to dmp operon. Bioresource Technology 102:3227-33. (*IF: 4.365*)

- 50. Chandra R, Bharagava RN, Kapley A, Purohit HJ. (2011) Bacterial diversity, organic pollutants and their metabolites in two aeration lagoons of common effluent treatment plant (CETP) during the degradation and detoxification of tannery wastewater. Bioresource Technology 102: 2333-41. (IF: 4.365)
- 49. Vinita Verma, Sajan C. Raju, Atya Kapley, Vipin Chandra Kalia, Hatim F. Daginawala, Hemant J. Purohit. Evaluation of genetic and functional diversity of Stenotrophomonas isolates from diverse effluent treatment plants. Bioresource Technology, 101: 7744-7753, 2010 (*IF: 4.365*)
- 48. Anshuman A Khardenavis, Atya Kapley, Hemant J Purohit Salicylic-Acid-Mediated Enhanced Biological Treatment of Wastewater. Applied Biochemistry Biotechnology, 160: 704-718, 2010 (*IF: 1.879*)
- 47. Nishant Dafale, Leena Agrawal, Atya Kapley, Sudhir Meshram, Hemant Purohit, Satish Wate Selection of indicator bacteria based on screening of 16S rDNA metagenomic library from a two-stage anoxic–oxic bioreactor system degrading azo dyes Bioresource Technology, 101: 476-484, 2010 (*IF: 4.365*)
- 46. Ram Chandra, Ram Naresh Bhargava, Atya Kapley, Hemant J Purohit Isolation and characterization of potential aerobic bacteria capabale for pyridine degradation in presence of picoline, phenol, and formaldehyde as co-pollutants

 World Journal of Microbiology and Biotechnology, 25: 21113 2119, 2009 (*IF: 1.214*)
- 45. Atya Kapley, Hemant J Purohit Genomic tools in bioremediation. Indian Journal of Microbiology, 49; 108-113, 2009 (*IF: 0.938*)
- 44. Atya Kapley and Hemant J Purohit.
 Diagnosis of Treatment Efficiency in Industrial Wastewater Treatment Plants: A Case Study at a Refinery ETP
 Environmental Science & Technology, 43:3789-95, 2009 (*IF: 4.827*)
- 43. Asifa Qureshi, Mohan M, Kanade GS, Atya Kapley, Hemant J Purohit In situ bioremediation of organochlorine-pesticide-contaminated microcosm soil and evaluation by gene probe.

 Pesticide Management Science, 65: 798-804, 2009 (*IF: 2.313*)
- 42. Anshuman A Khardenavis, Atya Kapley, Hemant J. Purohit Processing of poultry feathers by alkaline keratin hydrolyzing enzyme from Serratia sp. HPC 1383. Waste Management, 29: 1409-1415, 20009 (*IF: 2.358*)
- 41. Gowhar Shafi, Kaiser Jamil, Atya Kapley, Hemant J. Purohit and Mohana Ch Vamsy RNAi as a novel therapeutic platform technology for oncological solutions
 Biotechnology and Molecular Biology Review Vol. 4 (3), 055-070, 2008
 Available online at http://www.academicjournals.org/BMBR
- 40. Asha Rani, Shalini Porwal, Rakesh Sharma, Atya Kapley, Hemant J. Purohit, Vipin Chandra Kalia Assessment of microbial diversity in effluent treatment plants by culture dependent and culture independent approaches
 Bioresource Technology, 99: 7098-7107, 2008 (*IF: 4.365*)

- 39. Chandra R, Singh S, Krishna Reddy MM, Patel DK, Purohit HJ, Kapley A Isolation and characterization of bacterial strains Paenibacillus sp. and Bacillus sp. for kraft lignin decolorization from pulp paper mill waste.

 Journal of General Applied Microbiology, 54: 399-407, 2008
- 38. Amita Limaye, Rajpal S., Kashyap Atya Kapley., Sanjeev Galande, Hemant J Purohit, Hatim F Daginawala, Giridhar M Taori.

 Modulation of signal transduction pathways in lymphocytes due to sub-lethal toxicity of chlorinated phenol
 Toxicology Letters, 179: 23-28, 2008 (*IF*: 3.581)
- 37. Mummun Sinha, Atya Kapley, Hemant J Purohit Study of biodiversity of Klebesilla sp. World Journal of Microbiology and Biotechnology, 24: 203-207, 2008 (*IF: 1.214*)
- 36. Anshuman Khardenavis, Atya Kapley and Hemant J Purohit Phenol Mediated Improved Performance of Active Biomass for Treatment of Distillery wastewater International Biodeteroration Biodegradation, 62: 38-45, 2008 (*IF:1.750*)
- 35. Selvakumaran S. Atya Kapley, Vipin C Kalia, Hemant J Purohit,
 Phenotypic And Phylogenic Groups To Evaluate The Diversity Of Citrobacter Isolates From
 Activated Biomass Of Effluent Treatment Plants
 Bioresource Technology, 99:1189-95, 2008 (*IF: 4.365*)
- 34. Thangaraj K., Atya Kapley, Hemant J Purohit Characterization of diverse Acinetobacter isolates for utilization of multiple aromatic compounds Bioresource Technology, 99:2488-94, 2008 (*IF: 4.365*)
- 33. Abhay Raj, Ram Chandra, M.M.K. Reddy, Hemant J. Purohit and Atya Kapley Biodegradation of kraft lignin by a newly isolated bacterial strain, Aneurinibacillus aneurinilyticus from the sludge of a pulp paper mill World Journal of Microbiology and Biotechnology, 23: 793-799, 2007 (*IF: 1.214*)
- 32. Atya Kapley, Thierry B, Hemant J Purohit Eubacterial diversity of activated biomass from a CETP Research in Microbiology, 158,494-500, 2007 (*IF*: 2.405)
- 31. Asifa Qureshi, Vinita Verma, Atya Kapley, Hemant J Purohit Degradation of 4-nitroaniline by Stenotrophomonas strain HPC 135 International Biodeteroration Biodegradation, 60: 215-218, 2007 (*IF:1.750*)
- 30. Anshuman A. Khardenavis, Atya Kapley, Hemant J. Purohit Simultaneous Nitrification and Denitrification by Diverse Diaphorobacter sp. Applied Microbiology & Biotechnology, 77: 403-409, 2007 (*IF: 3.28*)
- 29. Abhay Raj, Ram Chandra, M.M.K. Reddy, Hemant J. Purohit and Atya Kapley Biodegradation of kraft lignin by Bacillus from the sludge of a pulp paper mill Biodegradation 18:783-92. 2007 (*IF: 2.012*)
- 28. Pravin Domde, Atya Kapley and Hemant J Purohit

Impact of Bioaugmentation with consortium of bacteria on the remediation of wastewater containing hydrocarbons

Environmental Science and Pollution Research, 14: 7-11, 2007 (IF: 2.87)

27. Ram Chandra, A. Raj, Hemant J. Purohit and Atya Kapley Characterisation and optimisation of three potential aerobic bacterial strains for kraft lignin degradation from pulp paper waste Chemosphere, 67: 839-846, 2007 (*IF*: 3.155)

- 26. Abhay Raj, Ram Chandra, M.M.K. Reddy, Hemant J. Purohit and Atya Kapley Biodegradation of kraft lignin by a newly isolated bacterial strain, Aneurinibacillus aneurinilyticus from the sludge of a pulp paper mill World Journal of Microbiology and Biotechnology, 23: 793-799, 2007 (*IF: 1.214*)
- 25. Atya Kapley, Sameera Siddiqui, Krishna Misra, Syed Masood Ahmad, Hemant J Purohit Preliminary analysis of bacterial diversity associated with the Porites coral from the Arabian Sea World Journal of Microbiology and Biotechnology, 23: 923-930, 2007 (*IF: 1.214*)
- 24. Atya Kapley, Sameera N Siddiqui and Hemant J Purohit
 A Bacillus subtilis strain HPC248 from Effluent Treatment Plant with Antimicrobial Activity
 World Journal of Microbiology and Biotechnology, 23, 879-882, 2007 (*IF: 1.214*)
- 23. Atya Kapley, Sumita Prasad, Hemant J Purohit
 Changes in microbial diversity in fed-batch reactor operation with wastewater containing
 nitroaromatic residues
 Bioresource Technology, 98: 2479-2484, 2007 (*IF: 4.365*)
- 22. Amit A. Agarwal, Atya Kapley, Yeltiwar R. K, Hemant J Purohit.
 Assessment Of Single Nucleotide Polymorphism At IL-1A+4845 And IL-1B+3954 As Genetic Susceptibility Test For Chronic Periodontitis In Maharashtrian Ethnicity
 Journal of Periodontology, 77: 1515-1521, 2006 (*IF: 2.479*)
- 21. Bhuvaneswari G, Padmanabhan P, Atya Kapley and Hemant J Purohit Study on Staphyloccoccus aureus Strain HPC-250 for associated Antibacterial property, Current Microbiology, 51: 287-91, 2005 (*IF: 1.51*)
- Gurpreet Narde, Atya Kapley and Hemant J Purohit Isolation and characterization of Citrobacter strain HPC 255 for broad range substrate specificity for chlorophenol Current Microbiology, 48: 419-23 2004 (*IF: 1.51*)
- 19. Hemant J Purohit, Dhananjay V Raje, Atya Kapley, Padmanabhan P and Rishi N Singh Genomics tools in environmental impact assessment Environmental Science and Technology, 37: 356-363, 2003 (*IF: 4.825*)
- Aditi Moharikar, Atya Kapley and Hemant J Purohit
 Detection of dioxygenase genes present in various activated sludge
 Environment Science and Pollution Research .10, 373-376, 2003 (*IF: 2.87*)
- 17. Hemant J Purohit, Dhananjay V Raje and Atya Kapley

Identification of signature and primers specific to genus Pseudomonas using mismatched patterns of 16S rDNA sequences

BMC Bioinformatics. 4:19 2003 (http://www.biomedcentral.com/1471-2105/4/19) (IF: 3.03)

- 16. Hemant J Purohit, Atya Kapley, Aditi A. Moharikar and Gurpreet Narde Extraction of activated biological sludge for PCR compatible DNA from effluent treatment systems Journal of Microbiological Methods, 52: 315-23, 2003 (*IF: 2.018*)
- 15. Hemant J Purohit and Atya Kapley
 Microbial Quality control of drinking water: PCR as an emerging option
 Trends in Biotechnology, 20, 325-326, 2002 (*IF: 9.644*)
- 14. Nandita Dhagat, L. Nene, Atya Kapley, Hemant J. Purohit, and A. S. Bal Role of nitrogen level on phenol degrading microorganisms in fixed film bioreactor Pollution Research, 21: 457-460, 2002
- 13. Atya Kapley, K. Lampel and H. J. Purohit
 Rapid Detection of Salmonella in Water Samples by Multiplex PCR
 Water Environment Research, 73: 461-465, 2001 (*IF: 0.89*)
- 12. Atya Kapley and Hemant J. Purohit
 Detection of etiological agent for cholera by PCR protocol
 Medical Science Monitor, 7: 242-245, 2001 (*IF: 1.699*)
- Atya Kapley and Hemant J. Purohit
 Tracking of phenol degrading genotype
 Environment Science & Pollution Research, 8: 89-90, 2001 (*IF: 2.87*)
- Razia Kutty, Atya Kapley and Hemant J Purohit
 Pseudomonas sp. strain RM2: strain with diverse physiology for aniline and chlorophenol utilization
 Asian Journal Microbiology Biotechnology & Environment, 3: 117-121, 2001
- Atya Kapley, Aradhana Tolamare, Hemant J Purohit
 Role of oxygen in partial utilization of phenol in continuous culture
 World Journal Microbiology and Biotechnology, 17: 801-804, 2001 (*IF: 1.214*)
- 8. Atya Kapley, K. Lampel and Hemant J Purohit Thermocycling steps and optimization of multiplex PCR Biotechnology Letters, 22: 1913-1918, 2000 (*IF: 1.768*)
- 7. Atya Kapley, K. Lampel and Hemant J Purohit Development of Duplex PCR for Salmonella and Vibrio World Journal Microbiology and Biotechnology, 16: 457-458, 2000 (*IF: 1.214*)
- 6. Atya Kapley, Hemant J Purohit, S. Chhatre, R. Shanker, T. Chakrabarti and P. Khanna Osmotolerance and hydrocarbon degradation by genetically engineered bacterial consortium Bioresource Technology, 67: 241-245, 1999 (*IF: 4.365*)
- 5. Hemant J Purohit, Atya Kapley, and P. Khanna Detection of enteropathogens by PCR

Indian Journal Clinical Biochemistry, 12: 111-114, 1998

- 4. Hemant J Purohit, Suneel Chhatre, Atya Kapley and Purushottam Khanna Microbial consortia: an approach for management of oil spill/ pollution ENFO News Letter, 19: 2-3, 1997
- Thampan R.V, Atya Zafar , N.S.Imam, S.Sreeja, K.Suma , and M.Vairamani An Endogenous Inhibitor in the Goat Uterus Prevents the Dimerization Between the .Non Activated Estrogen Receptor (naER) and the Estrogen Receptor Activation Factor (ERAF) and Inhibits their Nuclear Entry. Journal of Cellular Biochemistry, 77: 382-395, 2000 (*IF*: 3.122)
- Atya Zafar and Thampan, R.V
 Association of cytoskeletal proteins with estrogen receptor in rat uterine cytosol: Possible role in receptor movement into the nucleus.
 Biochemistry and Molecular Biology International. 36: 1197-1206, 1995
- 1. Atya Zafar and Thampan, R.V. A Four step inexpensive protocol for large scale purification of goat uterine estrogen receptor. Protein expression and purification. 4: 534-539, 1993 (*IF: 1.644*)

Chapters in Books:

- Hemant J Purohit and Atya Kapley
 Salmonella: Monitoring and Detection in Drinking Water
 Encyclopedia on Water, Wiley Publications, USA, 2005
- Hemant J Purohit, Atya Kapley and Dhananjay V Raje
 Dynamics of microbial community: an environmental perspective
 In: Microbial diversity: Current perspectives and potential applications. *Kluwer Publishers*, Editors, Satyanarayana, T. and Johari, B.N.; I.K. International Pvt. Ltd. Pp 559-572, 2005
- 3. Purohit HJ, Kapley A, (2008). Microbial Treatment; In book 'Environmental Status of India', Editors S. Devotta and CV. Chalapati Rao, Atlantic Publishers & Distributors (P) Ltd; 19; pp139-144.
- 4. Purohit HJ, Kapley A, (2008). Microbial Diversity; In book 'Environmental Status of India', Editors S. Devotta and CV. Chalapati Rao, Atlantic Publishers & Distributors (P) Ltd; 37; pp269-275.
- 5. Atya Kapley, Niti B. Jadeja, Vasundhara Paliwal, Trilok C. Yadav, Hemant J Purohit (2015) Microbial Genomics and Bioremediation of Industrial Wastewater in **Environmental Waste Management**. **Editor**. **Ramchandra**. Taylor and Francis
- 6. Pooja Bhardwaj, Atya Kapley (2015)

Bioremediation of Pesticide Contaminated Soil: Emerging Options. In Microbial Factories, Editor, V.C. Kalia, Springer Publication.

List of patents filed/ granted

- H.J. Purohit, A Kapley, D.V. Raje, S. Devotta
 User friendly detection of E-Coli on indicator bacterium for drinking water quality
 Provisional US Patent Filed Patent application No. 0367NF2004
- H.J. Purohit, A Kapley, D.V. Raje, S. Devotta RAPD kit for genetic fingerprinting of bacteria isolates Provisional US Patent Filed Patent application No. 0001NF2005
- 3. H.J. Purohit, A Kapley, D.V. Raje, S. Devotta A method for the screening of bacterial isolates Available Online: No. WO/2007/105041