CURRICULUM VITAE

Name : **Dr. DATTA MADAMWAR**

Designation : UGC BSR Faculty Fellow

Address : Post Graduate Department of Biosciences,
Vadtal Road, Satelite Campus
Sardar Patel University,
Bakrol- 388315, Anand
(Gujarat), INDIA.

Contact ☏ : +91(2692)234401 Ext.210
+91-9825686025 (M)

Fax +91(02692) 226865/236475

E. mail : datta_madamwar@yahoo.com

Date of Birth : April 1, 1955

Date of Superannuation : June 14, 2017

Nationality : Indian

Academic Qualifications:

M.Sc. in Microbiology, Nagpur University, Nagpur

Ph.D., Birla Institute of Technology and Science, Pilani

Professional Experience:

- UGC BSR Faculty Fellow, Post Graduate Department of Biosciences, Sardar Patel University, Vallabh Vidyanagar since June 15, 2017
- Dean, Faculty of Science, Sardar Patel University, Vallabh Vidyanagar from Dec. 5, 2014 to March 31, 2017.
- Head, Post Graduate Department of Biosciences, Sardar Patel University, Vallabh Vidyanagar from March 18, 2002 to March 17, 2007.
- Professor at Department of Biosciences, Sardar Patel University, Vallabh Vidyanagar from June 30, 1998 to June 14, 2017
- Reader (Associate Professor) at Department of Biosciences, Sardar Patel University, Vallabh Vidyanagar from Sept. 20, 1986 to June 29, 1998
- Lecturer at Birla Institute of Technology & Science, Pilani from Aug. 10, 1978 to Aug. 16, 1986.

Awards / Honors Received / Visits Abroad:

- Received several awards for research mainly Biotechnology Associateships and Visiting Scientist under European Commission.
- Visited Germany, U.K, Austria, Switzerland, France, Finland, Greece, China, Malaysia, Singapore, Brazil and U. S. A. under different visiting fellowships.
- Recipient of DBT sponsored project under **Center of Excellence and Innovation in Biotechnology** on "Molecular & Omics Technologies"
- Nominated by Government of India as one of the expert members of a team for bilateral collaboration on Bioresources and Environmental Biotechnology to visit Helsinki, Finland during May 4-5, 2007 through Department of Biotechnology, New Delhi.
- Recipient of Visiting Professorship at Swiss Federal Institute of Technology of Lausanne, EPFL-ENAC-SGC, Lausanne, Switzerland during Dec. 1- 31, 2009.
- Recipient of Visiting Professorship at University of Blaise Pascal, Clermont-Ferrand, France during June 1-30, 2016.
- Recipient of coveted honor of BHU Centennial Award of Biotech Research Society of India for the year 2016

Membership/Honorary Position Held:

- Member of American Association of Microbiologists, U.S.A.
- President, Biotech Research Society of India, BRSI, 2015-2017
- Life Member of Association of Microbiologists of India
- Life Member of Society of Biological Chemists (India)
- Life Member of Biotech Research Society of India
- Life Member of International Bioprocessing Association
- Life Member of Association of Biotechnology and Pharmacy

Awards / Special Attainments

- Member of Expert Committee under Fast Track Scheme in the are of Life Sciences of young scientist (2004-2007)
- Member of Biotechnology Council of Government of Gujarat
- Member of Programme Advisory Committee (PAC) of Department of Science & Technology, New Delhi for International Cooperation in the area of Life Sciences
- Expert Member of Advisory Committee of UGC-SAP Programme of Department of Microbiology & Biotechnology Centre, M. S. University of Baroda, Baroda, Department of Microbiology, Kakatiya University, Warangal and Department of Microbiology, Shivaji University, Kholapur, Department of Biosciences, Veer Narmad South Gujarat University, Surat.
- Member of Task Force Committee of DBT in the area of Environmental Biotechnology, Apex Committee for North Eastern Region Biotechnology Programmes
- Member of Council and Technical Board of Gujarat State Biotechnology Mission
- Fellow of Gujarat Science Academy
- Fellow of International Bioprocessing Association
- Fellow of Biotech Research Society of India
- Fellow of Association of Microbiologists of India
- Fellow of Association of Biotechnology and Pharmacy.

- Editorial Board Member of Bioresource Technology (Elsevier), Current Biotechnology (Bentham) and many national journals. Guest Editor of Special Issue BIOCATALYSIS of Bioresource Technology, Elsevier
- Editor of Algal Green Chemistry : Recent Progress in Biotechnology published by Elsevier, 2017

Research Specialization:

Professor Datta Madamwar currently UGC BSR Faculty Fellow at Post Graduate Department of Biosciences, at Sardar Patel University, Vallabh Vidyanagar, Gujarat, India, got his Ph.D from BITS, Pilani. He is a former Professor and Head, Department of Bioscience and former Dean, Faculty of Science. He has a vast research experience as a postdoctoral fellow at TIFR, Mumbai, Universistat Frankfurt, Germany, Universitstat Konstanz, Germany, and also served at BITS, Pilani. Professor Madamwar is a Microbial Biotechnologist with diverse research interest. His current main focus is on Non-aqueous Enzymology, Industrial Liquid Waste Management and Cyanobacterial Phybiliproteins. He has done significant contribution in developing different types of bioreactors for the treatment of industrial waste water. His major work involves molecular phylogenetic approach to determine both cultivable and uncultivable bacterial diversity and preparation of metagenomic library. Dr. Madamwar has provided a concept for the enzyme catalysis in apolar organic solvents without the loss of enzyme activity. He has reported various novel, efficient and rapid methods of purification of phycobiliproteins. The phycoerythrin has been purified to the highest purity level 5:70 ever achieved so far. This has laid to crystallization and structure determination of α-subunit of phycoerythrin. He has reported five more structures of various phycobiliproteins. He is a recipient of European Commission Visiting Scientist Fellowship, Fellow of International Bioprocessing Association, Fellow of Biotech Research Society of India, Fellow of Association of Microbiologists of India, Fellow of Association of Biotechnology and Pharmacy and Gujarat Science Academy and member of several academic bodies. Dr. Madamwar is a member of several taskforce and advisory committees of the National funding agencies like DBT, DST, GSBTM. He is also a member of editorial board of several national and international journals such as Bioresource Technology, Elsevier. Professor Madamwar

has more than 230 research publications in highly reputed international journals several book chapters and one provisional American Patent to his credit. He is a well traveled researcher with his research visits and gave invited talks in several countries including Germany, UK, Austria, Switzerland, France, USA, Malaysia, Singapore, Brazil, China, Finland and many others.

Publications:

1. **Total Publications - 238**
   Review articles - 11
   Research papers - 227

2. Book - One (In Process)

3. Paper Presentation - 93

No. of Ph. D. students guided: **46** (completed)
6 + 1 (as Co-guide**)** (presently working)
No. of Post-Doctral Students: **02**

Citation Index as per Google Scholar **6778**, **h-index 46**, **i10 index 137** as on 01-07-2017
Citation Index as per Scopus **4433**, **h-index 38** as on 01-07-2017

Patents

Richard Gross, Vishal Shah. Frantisek Nerud, Datta Madamwar. Sophorolipids as enzyme inducers, US Patent Filed 2007.

RESEARCH PROJECTS UNDERTAKEN

(All projects handled independently)

	Title of Project	**Funding Agency**	**Duration From -To**	**No. of Scientists**	**Amount In Rs.**
COMPLETED					
1	Energy Recovery from Water Hyacinth Using Biphasic Biogas Technology	DNES New Delhi	Mar. `88 to Jun. `91	Two JRF/SRF One Tech. Asst.	6,47,044/-
2	Glucose-Oxidase System	Gluco-Chem Industry, Baroda	Nov. `87 to Oct. `89	One JRF	10,000/- per annum
3	Activation and Stabilization of Enzymes Entrapped into Reversed Micelles of Surfactants on Organic Solvents	UGC New Delhi	Aug. `90 to Jul. `93	One JRF One Tech. Asst.	74,608/-
4	Photo-hydrogen Production Through Coupled System Containing Bacteriorhodopsin and other Pigments	CSIR New Delhi	Jul. `90 to Jun. `94	One JRF/SRF/RA	3,79,805/-
5	Biotechnology of Biomethanation of Salty Cheese Whey	GEDA Baroda	Apr. `94 to Mar. `96	Two JRF/ Tech. Asst.	2,30,000/-
6	Investigation into the Micellar Process for Enzymatic Reaction and Protein Recovery	DBT New Delhi	Nov. `96 to Mar. `00	One JRF	15,45,200/-
7	Development and Formulation of Microbial Ecosystem for Efficient and Faster Biodegradation of---- Neem Hulls	NTGCFL Anand	Aug. `97 to Aug. `99	One JRF	1,33,100/-
8	Integrated Use of Solar Energy and Waste Water for Biological Hydrogen Production	UGC New Delhi	Jul. ‘97 to Jun. ‘02	Two JRF	7,23,632/-
9	Biodegradation of Textile and Dyestuff Industrial Effluent	DBT New Delhi	Aug. ‘99 To Aug. ‘02	Two JRF, One SRF	30,44,000/-
10.	Development of Immobilization System of Lipase for Transformation of Non Traditional Oil	CSMCRI	Jan. ‘02 To Dec. 02	One JRF	1,00,000/-
11.	Strengthening of Food Biotechnology	DBT New Delhi	Apr. ‘98 To Mar. ‘03	Collaboration with Home Sciences Department	49,00,000/-
12	An Integrated Approach for Photo-Evolution of Hydrogen & Transformation of Textile Dyes Present in Waste Water by Cyanobacteria	UGC New Delhi	Apr. 02 To Mar ‘05	One Project Fellow	6,37,000/-
13.	Microbial Process for Treatment of Common Industrial Effluents: A CETP Concept	DBT New Delhi	April 03 to March 06	Two JRF & one Project Assistant	26,72,000/-

14.	Bioremediation and Decolorization of Distillery Spent Wash.	DBT New Delhi	Mar 04 to Apr 07	One JRF and One Laboratory Assistant.	16,19,000/-
15.	Preparation and Characterization of Immobilized Lipase for Flavor Production in Water Restricted Microenvironment	GSBTM	May2005 to Mar 2008	One JRF	8, 03,375/-
16.	Production, Purification, Characterization, Structure Determination and Application of Phycobiliproteins from Cyanobacteria.	DBT New Delhi	Aug 2006 to Oct. 2008	One JRF	29,19,600/-
17.	**"**Impact of Industrial Pollution on microbial Diversity in Region around Narmada estuary of Gujarat"	DST New Delhi	Aug 2005 to Jan 2009	One JRF	23,64,000/-
18.	Isolation, Identification and Characterization of Genes for Azo Dye Degradation: An Approach towards Construction of Efficient Bioremediation Strain	DBT New Delhi	Oct 2006 To Mar 2010	Two JRF & one Project Assistant	64,05,000/-
19.	Biotechnological process for synthesis of food esters in organic solvents using microemulsion based organogel entrapped lipases	UGC New Delhi	April 2008 to March 2011	One Project Fellow	11,66,300/-
20.	Metagenome analysis for metabolic pathways present in activated biomass at common effluent treatment plant (CETP)	DBT New Delhi	Jan. 2010 to May 2013	One JRF and One Project Assistant	61,32,000/-
21.	Molecular assessment of bacterial community structure of long term polluted sea coast near Alang ship breaking yard and exploitation of the bacterial wealth for PAH bioremediation	DST New Delhi	Sept.2010 to August 2013	One JRF	26,95,000/-
22.	Application of periodic discontinuous batch operation to enhance treatment efficiency of dye containing waste-water	DBT New Delhi	October 2010 to Sept. 2013	Two JRF	51,02,000/-
23.	Folding and stability of naturally truncated photosynthetic pigment, C-phycoerythrin from cyanobacteria *Phormidium tenue*	DST New Delhi	August 2012 to July 2015	One PF	3,60,000/-
24.	Molecular and '-omics' technologies to gauge microbial communities and bioremediation of xenobiotic contaminated sites.	DBT New Delhi	Sept. 2010 to Sept. 2016	One RA Three JRF One PA One FA	3,36,57,000/-
25.	Molecular assessment of bacterial community structures of long term oil contaminated soil and screening of lipase producers for lipase production and their application in ester synthesis in organic solvents	UGC New Delhi	April 2013 to March 2016	One PF	13,55,800/-

26.	Mapping of Research outcome and development of compendium in the area remediation of dye/dye intermediates and textile industrial waste.	DBT New Delhi	Nov. 2015 to May 2017	One RA One PA	12,37,599/-

ONGOING PROJECTS:					
	Title of Project	**Funding Agency**	**Duration From -To**	**No. of Scientists**	**Amount In Rs.**
1.	Ecological perspective of Rann of Kachchh: Studies on Physio-chemical and community structure of Soil	DBT New Delhi	August 2014 to August 2017	One JRF One PA	98,26,200/-
2.	Prospecting microalgae and cyanobacteria for high value pigments	DBT New Delhi	Sept., 2017 to Aug., 2020	One JRF One PA	56,62,200/-

LIST OF Ph. D. STUDENTS

ALL STUDENTS HAVE BEEN GUIDED INDEPENDENTLY

Sr. No.	Name	Title	Year	University
1	Seema Patel	Some Studies on Gluconic Acid Production by Fermentation and Immobilized Enzyme System	1991	S. P. University V. V. Nagar
2	Nikki Jain	Studies on Characterization of Bacteriorhodopsin and Other Pigments Using Liquid Membrane Bilayers and their Exploitation Towards H_2 – Production	1991	S. P. University V. V. Nagar
3	Vikram Patel	Some Studies on Biomethanation of Water Hyacinth-Cattle Dung	1991	S. P. University V. V. Nagar
4	Anami Patel	Some Studies on Optimization of Energy Recovery from Water Hyacinth-Cattle Dung Using Biogas Technology	1992	S. P. University V. V. Nagar
5	Sangeeta Patel	Some Studies on Biophysical Characterization of *Halobacterium halobium* and its Exploitation Towards Hydrogen Production Along with Cyanobacteria	1993	S. P. University V. V. Nagar
6	Manik Desai	Energy Recovery From Cheese Whey and Poultry Waste	1994	S. P. University V. V. Nagar
7	Pratisha Dave	Optimization of Process Parameters for Ca-Gluconate Production Using Free and Immobilized Microbes and Enzymes	1995	S. P. University V. V. Nagar
8	S. Subramani	Enzyme Catalysis in Organic Solvents Using Reverse Micelles - With Special Reference to Arginase and Invertase	1995	S. P. University V. V. Nagar
9	Chirag Patel	Some Studies on Biotechnology of Biomethanation for Energy Recovery from Cheese Whey	1997	S. P. University V. V. Nagar
10	Akshaya Gupte	Bioconversion of Lignocellulosic Waste by Co-Cultivation of *Aspergillus ellipticus* and *Aspergillus fumigatus* Under Solid State Fermentation	1997	S. P. University V. V. Nagar
11	Priti Patel	Some Studies on Energy Recovery from Cheese Whey using Anaerobic Biotechnology	1997	S. P. University V. V. Nagar
12	Rajvit Bagai	Biotechnological and Biophysical Aspects of *Halobacterium halobium* alongwith Cyanobacteria toward Photo-evolution of Hydrogen : Some Studies	1997	S. P. University V. V. Nagar
13	Claudia Shah	Reverse Molecullar System of a Total to Study Enzyme Catalysed Reactions in organic solvents study with reference to few fly - enzyme	1998	S.P. University V.V. Nagar
14	Hardik Patel	Biotechnological Aspects of Biomethanation of Acidic Wastewater of Petrochemical Industry	2001	S. P. University V. V. Nagar
15	Krishnakant Soni	Biocatalysis in Non-Conventional Media : Studies with Special Reference to Acid Phosphatase and Lipase	2001	S. P. University V. V. Nagar

16	Vishal Shah	Exploitation of Cyanobacteria for Photohydrogen Production and Wastewater Treatment	2001	S. P. University V. V. Nagar
17	Pradeep Verma	White Rot Fungi Mediated Integrated Approach For Lignocellulosic Waste Decomposition and Textile Dye Decolorization	2002	S. P. University V. V. Nagar
18	Nikhil Bhatt	Biodegradation of Textile & dyestuffs industrial waste water.	2002	S. P. University V. V. Nagar
19	Haresh Keharia	Bioremediation of Dyes in Textile and Dyestuff Industrial Wastewaters: Basic and Applied Aspects	2003	S. P. University V. V. Nagar
20	Amita Shah	Xylanase production by *Asperigillus foetidus* under solid-state fermentation and its biotechnological applications	2003	S. P. University V. V. Nagar
21	Amit Thakar	Some studies on engineering and applications of esterase.	2004	S. P. University V. V. Nagar
22	Amit Parikh	Biotechnological Exploitation of Cyanobacteria	2005	S. P. University V. V. Nagar
23	Sini Mathew	Biodegradation of Textile and Dyestuff Industrial Effluent	2005	S. P. University V. V. Nagar
24	Urvashi Thacker	Chromate reductase from environmental isolates : purification, characterization and identification of gene	2006	S. P. University V. V. Nagar
25	Safia Moosvi	Biotechnological approach for bioremediation of effluents containing textile dyes	2006	S. P. University V. V. Nagar
26	Rachna Dave	Biotechnological exploitation of lipase : Production, characterization and applications	2007	S. P. University V. V. Nagar
27	Sarayu Mohana	Studies of Biotechnological Treatment of Distillery Spent Wash and its use in Xylanase Production	2008	S. P. University V. V. Nagar
28	Badrish Soni	Cynobacterial Phycobiliprotieins : Production , Purification, Crystallization, Structure Determination and Application	2008 **As Co-guide**	S. P. University V. V. Nagar
29	Chirayu Desai	Molecular analysis of bacterial community structures to assess ecological impact of chromium pollution and utility of indigenous bacteria for environmental restoration. .	2008	S. P. University V. V. Nagar
30	Bhavik Acharya	Biotechnological Aspects of Biomethanation of Distillery Spent Wash	2010	S. P. University V. V. Nagar
31	Hilor Pathak	Diversity Studies of Amalkhadi Canal using 16S rDNA Approach	2010	S. P. University V. V. Nagar
32	Vrushali Dandavate	Microbial Lipases: Biotechnological Aspects of Non-aqueous Enzymology	2009	S. P. University V. V. Nagar
33	El-Tayib Hassan	Microbial Lipase Production using Culturable as well as Unculturable Microorganisms	2010	S. P. University V. V. Nagar
34	Asha Parmar	Cynobacterial Phycobiliproteins : Production Purification and Characterization	2011	S. P. University V.V. Nagar
35	Varun Shah	Metagenomics : Isolation, Identification and Characterization of Genes of Biotechnological Prospects	2012	S. P. University V.V. Nagar
36	Niraj Kumar Singh	Cyanobacterial phycobilisomes: A study with reference to optimization, purification and structural characterization of phycocyanin and influence of environmental stress on phycobiliproteins	2013	S. P. University V.V. Nagar
37	Tripti Raghavandra	Study of microemulsion based organogels and multiwalled carbon nanotubes as potential supports for lipase immobilization and application in non-aqueous catalysis	2013 **As Co-guide**	S. P. University V.V. Nagar
38	Vilas Patel	Taxonomic profiling of bacterial community structure from marine ecosystem of Alang-Sosiya ship breaking	2014	S. P. University V.V. Nagar

		yard, Gujarat and exploitation of the bacterial wealth for PAH bioremediation		
39	Kunal Jain	Exploration of novel genes for restoration of environmental sites contaminated with noxious pollutants : A Metagenomic approach	**Co-guide**	S. P. University V.V. Nagar
40	Sananda Chattaraj	Metagenome analysis to assess performance of activated sludge treatment plant and to improve treatment process at CETP	2015	S. P. University V.V. Nagar
41	Zeenat Khan	Biotechnological approach towards process development of common effluent treatment plant		S. P. University V.V. Nagar
42	Binal Shah	Bacterial remediation of textile dye containing effluent: Evaluation of community structure, dynamics and metabolic pathway	2016	S. P. University V.V. Nagar
43	Sagar Vaidya	Molecular analysis of bacterial community succession by seasonal changes of long term polluted Amlakhadi canal, Ankleshwar and its potential applications	2017	S. P. University V.V. Nagar
44	Vrutika Patel	Molecular assessment of bacterial community sttructures of long term oil contaminated soil and screening of lipase producers for lipase productoin and their applicatoin for ester synthesis in organic solvents	2016	S. P. University V.V. Nagar
45	Ravi Sonani	Structure determinatoin and characterization pf cyanobacterial phycobilisomes and study of other kigh value cyanobacterial compounds	2017	S. P. University V.V. Nagar
46	Avinash Narayan	Molecular analysis to assess microbial diversity of Rann of Kuchchh	**Co-guide** 2017	S. P. University V.V. Nagar
47	Jenny Johnson	Metagenomic analysis in gauging the innate microbial community structure and metabolic potential of a contaminated site – a study towards bioremediation		S. P. University V.V. Nagar
48	Shivani Amin	Functional and metagenomic analysis of environment polluted by anthropogenic activities		S. P. University V.V. Nagar
49	Neelam Devpura	Metagenome profiling and functional abundance of bacterial community residing at industrially contaminate site		S. P. University V.V. Nagar
50	Prachi Singh	Omics analysis of microbial life in hypersaline desert: Study of different metabolic pathways		S. P. University V.V. Nagar
51	Avani Patel	Analysis of microbial diversity and functional abilities of native community in environment contaminated through ship breaking activities and *in situ* bioremediation for developing feasible remediation approach		S. P. University V.V. Nagar
52	Hiral Patel	Assessing algal biodiversity in the gulf of Kutch for mining of therapeutically important biomolecules	**Co-guide**	S. P. University V.V. Nagar
53	Stuti Patel	Structural characterization and biomedical applications of Cyanobacterial phycobiliproteins		S. P. University V.V. Nagar

LIST OF PUBLICATIONS

1.Srivastava R. C., **Madamwar D. B**., Bhise S. B., Tandon A., and Sharma R. K., (1984). A new observation on *Halobacteriumhalobium:* Light induced volume flow through the whole organisms. *Experientia* **40**, 773-775. IF-5.694, cited – 11. (Now it is called Cellular and Molecular Life Sciences)

2. Srivastava R. C., Tandon A., Bhise S. B., and **Madamwar D. B.** (1985). Photo-osmosis through liquid membrane bilayer: generated by cytochrome-C. *Indian J. of Chemistry* **24(A**), 918-922. IF-0.729, cited – 7.

3. **Madamwar D. B**., and Mithal B. M., (1985). Adsorbents in anaerobic digestion of cattle-dung. *Indian Journal of Microbiology* **25(1&2),** 57-58. IF-0.988, cited – 6.

4. **Madamwar D. B**., and Mithal B. M., (1986). Effect of pectin on anaerobic digestion of cattle-dung. *Biotechnology and Bioengineering* U.S.A. **28 (4)**, 624-626. IF-4.164, cited – 24.

5. **Madamwar D. B**., and Mithal B. M., (1987). Effect of Surfactants on Anaerobic Digestion of Cattle Dung. *Indian Journal Microbiology* **27**, 81-84. IF-0.988, cited – 2.

6. Srivastava R. C., **Madamwar D. B**. and Singh V., (1987). Equation for the growth of *Halobacterium halobium*. *Indian Journal of Experimental Biology*, **25**, 497-498. IF-2.914.

7. Srivastava R. C., **Madamwar D. B**. and Vyas V. V., (1987). Activation of enzymes by reverse micelles. *Biotechnology and Bioengineering*, U.S.A. **29**, 901-902. IF-4.481, cited – 19.

8. **Madamwar D. B**., Bhatt J. P., Ray R. M. and Srivastava R. C., (1988). Activation and stabilization of invertase entrapped into reversed micelles of sodium lauryl sulfate and sodium tauroglycocholate in organic solvents. *Enzymes and Microbial Technology*, U.K. **10**, 302-305. IF-2.287, cited – 17.

9. **Madamwar D. B**., Patel S. and Parikh H., (1989). Solid state fermentation for cellulases and β-glucosidase production by *Aspergillus niger*. *Journal of Fermentation and Bioengineering*, Japan, **67(6)**, 424-426. IF-2.240, cited – 40.

10. **Madamwar D. B**., Patel A. R. and Patel V., (1990). Effect of temperature and retention time on methane recovery from Water Hyacinth-Cattle Dung. *Journal of Fermentation and Bioengineering*, Japan, **70(5)**, 340-342. IF-2.24, cited – 21.

11. **Madamwar D. B**., Patel V. and Patel A. R., (1990) Effect of agricultural and other wastes on anaerobic digestion of water hyacinth-cattle dung. *Journal of Fermentation and Bioengineering*, Japan, **70(5)**, 343-344. IF-2.24, cited – 7.

12. **Madamwar D. B**., Patel V. and Patel A. R., (1990) Biological pretreatment of water hyacinth for improved biogas production. In Twelfth Symposium on Biotechnology for Fuels and Chemicals, *Gatlinburg, Tennesse*, U.S.A. May 7-11.

13. **Madamwar D. B**., Patel A. R. and Patel V., (1991). Effect of various surfactants on anaerobic digestion of water hyacinth-cattle dung. *Bioresource Technology*, U.K. **37 (2),** 157-160. IF-5.651, cited – 12.

14. **Madamwar D. B**., Patel S. and Jain N. (1991) Activation and stabilization of *Aspergillus niger g*lucose oxidase entrapped into reversed micelles of surfactants in organic solvents. *Indian J. Microbiology*, **31 (1)**, (1991) 77-82. IF-0.899.

15. Patel K. D., **Madamwar D. B**. and Patel M. M., (1991). Magnetic, spectral, thermal, electrical and antimicrobial properties of some new polymeric chelates. *J. Polymer Materials*, **8**, 127-131. IF-0.308.

16. Patel K. D., **Madamwar D. B**. and Patel M. M. (1991). Magnetic, spectral and thermal properties of some new coordination polymers. *J. Indian Chem. Soc*., **68**, 521-523. IF-0.173.

17. **Madamwar D.**, Jain N. and Patel S. (1991). Activation and stabilization of enzymes by reversed micelles. In Book: *Recent Advances in Fungi and Biotechnology*, (Ed.) H. C. Dube, Today & Tomorrow's Printers and Publishers, India, 75-82, cited – 1

18. **Madamwar D.**, Patel V. and Patel A., (1991). Surfactants and adsorbents in anaerobic digestion of water hyacinth-cattle dung. In Thirteenth Symposium on Biotechnology for *Fuels and Chemicals*, May 6-10, Colorado Springs.

19. **Madamwar D. B.**, Patel V. and Patel A. R. (1992). Effect of adsorbents on anaerobic digestion of water hyacinth-cattle dung. *Bioresource Technology*, U.K. **40(2)**, 179-181. IF-5.651, cited – 22.

20. **Madamwar D.** and Patel S. (1992). Formation of cellulases by co-culturing of *Trichoderma reesei* and *Aspergillus niger on* cellulosic waste. *World J. Microbiology and Biotechnology* U.K. **8**, 183-186. IF-1.658, cited – 27.

21. **Madamwar D. B**. and Jain N., (1992). Photo-osmosis through liquid membrane bilayers generated by mixture of bacteriorhodopsin and cyanocobalamin. *Journal of Colloid and Int. Sci*., U.S.A. **153**, 152 – 156, IF-3.368 , cited – 6.

22. **Madamwar D**., Patel V and Patel A., (1992). Effect of mixture of surfactants and adsorbents on anaerobic digestion of water hyacinth-cattle dung. *Applied Biochemistry and Biotechnology*, U.S.A., **36**, 163 - 169. IF- 1.429, cited – 6.

23. Patel K. D., **Madamwar D. B.** and Patel M. M., (1992). Magnetic, spectral, thermal, electrical and antimicrobial properties of some new coordination polymers. *J. Indian Council of Chemistry*. **8(1),** 27 - 32.

24. Patel V. and **Madamwar D**., (1992). Two phase anaerobic fermentation of water hyacinth-cattle dung. *Fresenius Environmental Bulletin*, Switzerland. **1** (Supplementum), S86-S92. IF-0.36, cited – 1.

25. Patel V., and **Madamwar D**., (1993). Biological and thermochemical pretreatments of water hyancith for improved biogas production In: Cellulosics - Pulp, Fibre and Environmental Aspect (Eds.) J. F. Kennedy, G. O. Phillips, and P. A. Williams, Ellis Horwood Series in *Polymer Science and Technology*, Ellis Horwood Limited, U.K. pp. 365-370, cited – 52.

26. Patel S., Jain N. and **Madamwar D**., (1993). Production of α-Amylase from *Halobacterium halobium*. *World Journal of Microbiology and Biotechnology*, U.K. **9,** 25 - 28. IF-1.658, cited – 22.

27. Patel V. B., Patel A. R., Patel M. C. and **Madamwar D. B.**, (1993). Effect of metals on anaerobic digestion of water hyacinth-cattle dung. *Applied Biochemistry and Biotechnology*, U.S.A. **43(1)**, 45-50. IF-1.429, cited – 33.

28. Patel V., Desai M. and **Madamwar D**., (1993). Thermochemical pretreatment of water hyacinth for improved biomethanation. *Applied Biochemistry and Biotechnology*, U.S.A. **42, (1)** 67-74. IF-1.429, cited – 60.

29. Patel S. and **Madamwar D**., (1993). Photo-osmosis through liquid membrane bilayers generated by phyco-erythrin coupled with bacteriorhodopsin. *International Journal of Hydrogen Energy*, U.K. **18**, 291 - 295. IF- 3.313, cited - 4.

30. **Madamwar D. B**. and Jain N., (1993) Photo-osmosis through liquid membrane bilayers generated by phyco-cyanin. *Biological Membrane*, U.K. **10**, 188 - 193. IF- 2.457, cited- 3.

31. Desai M., Patel V. and **Madamwar D**., (1994). Effect of temperature and retention time on biomethanation of cheese whey-poultry waste- cattle dung. *Environmental Pollution*, U.K., **83**, 311-315. IF-4.839, cited – 48.

32. Patel V. and **Madamwar D**., (1994). Biomethanation of agrowastes in combination with cattle dung. *Energy and Environment* U.K., **5**, 121-125. IF-0.319.

33. Patel S. and **Madamwar D**., (1994). Photohydrogen production from a coupled system of *Halobacterium halobium*and *Phormidium valderianum. International Journal of Hydrogen Energy*, U.K., **19**, 733-738. IF-3.313, cited – 11.

34. Desai M. and **Madamwar D**., (1994). Anaerobic digestion of mixture of cheese whey, poultry waste and cattle dung: A study of the use of adsorbents to improve digester performance. *Environmental Pollution*, U.K., **86**, 337-340. IF- 4.839, cited – 33.

35. Desai M. and **Madamwar D**., (1994). Surfactants in anaerobic digestion of cheese whey, poultry waste, cattle dung for improved biomethanation. *Transactions of ASAE*, U.S.A., **37**, 959-962. IF-0.83, cited – 12.

36. Patel C. and **Madamwar D**., (1994) Effect of metals on biomethanation of mixture of cheese whey, poultry waste and cattle dung. *Fresenius Environmental Bulletin*, Switzerland. **3**, 604-609. IF-0.378. cited – 1.

37. Desai M., and **Madamwar D**., (1994). Anaerobic digestion of cheese whey, poultry waste and cattle dung - A study of the use of mixture of adsorbents and/or surfactants to improve digester performance. *Energy and Environment*, U.K., **5**, 379-385. IF-0.319.

38. Gupte A. and **Madamwar D**., (1994) High-Strength cellulase and β-glucosidase formation from *Aspergillus* spp. under solid-state fermentation. In: *Solid State Fermentation*, (Ed.) Ashok Pandey, Wiley Eastern Limited, New Delhi, pp. 130-133, cited – 7.

39. Patel S. and **Madamwar D**., (1995) Continuous hydrogen evolution by immobilized combined system of *Phormidium valderianum*, *Halobacterium halobium* and *Escherichia coli* in a packed bed reactor. *International Journal of Hydrogen Energy*, U.K. **20**, 631-634. IF-3.313 cited- 15.

40. Patel P., Desai M., Patel V. and **Madamwar D**., (1995) Biomethanation of cheese whey using upflow fixed film reactors - *Journal of Fermentation and Bioengineering*, Japan, **79**, 398-399. IF-1.964, cited – 32.

41. Garg N., and **Madamwar D**., (1995). Photo-osmosis through liquid membrane bilayers: Studies on mixture of bacteriorhodopsin with cytochrome C, myoglobin or haemoglobin. *Applied Biochemistry and Biotechnology*, U.S.A., **53**, 183-191. IF- 1.429, cited- 1

42. Subramani S. and **Madamwar D**., (1995). Stability of arginase in reverse micelles, *Biotechnology Techniques*, U.K., **9**, 45-48, cited – 3.

43. Patel C., Shastri N. V. and **Madamwar D**., (1996). Tegoprens in anaerobic digestion of mixture of cheese whey, poultry waste and cattle dung for improved biomethanation. *Applied Biochemistry and Biotechnology*, U.S.A., **56**, 89 -94. IF-1.429, cited – 5.

44. **Madamwar D.** Desai M, Patel P. and Patel V., (1995). Performance of anaerobic upflow packed - bed reactor for biomethanation of cheese whey using different supporting media, In: Biomass for Energy, *Environment, Agriculture and Industry*, Vol. 2, 8th E. C. Conference, Pergamon, Great Britain, pp. 1315-1320, cited - 1.

45. Patel S., Bagai R. and **Madamwar D**., (1996) Stabilization of halophilic α-amylase by calcium alginate immobilization. *Biocatalysis and Biotransformation*, U.K., **14**, 147-155. IF-0.893, cited - 12.

46. Bagai R. and **Madamwar D**., (1996) Long-term production of photohydrogen in a packed-bed reactor using a combination of immobilized microbial cells, *PRAJNA* (Journal of Sardar Patel Univ.), **6**, 1-6.

47. Patel C. and **Madamwar D**., (1996). Biomethanation of a mixture of salty cheese whey and poultry waste or cattle dung a study of effect of temperature and retention time. *Applied Biochemistry and Biotechnology*, U.S.A., **60**, 157-164. IF-1.429, cited – 8.

48. Subramani S., Shah C. and **Madamwar D**., (1996) Stability of invertase in reverse micelles, *Applied Biochemistry and Biotechnology*, U.S.A., **60,** 33-39. IF-1.429, cited – 12.

49. Shah C., Subramani S. and **Madamwar D**., (1997) Role of environment on the activity and stability of a-amylase incorporated in reverse micelles, *Applied Biochemistry and Biotechnology*, U.S.A., **62**,183-191. IF-1.735, cited – 8.

50. Bagai R. and **Madamwar D**., (1997) Continuous production of halophilic α-amylase through whole cell immobilization of *Halobacteriumhalobium, Applied Biochemistry and Biotechnology*, U.S.A., **62**, 213-218. IF-1.429, cited – 22.

51. Gupte A. and **Madamwar D**., (1997). Production of cellulolytic enzymes by coculturing of *Aspergillus ellipticus* and *Aspergillus fumigates* grown on bagasse under semi solid state fermentation. *Applied Biochemistry and Biotechnology*, U.S.A., **62**, 267-274. IF-1.429, cited – 17.

52. Patel C. and **Madamwar D**. (1997). Biomethanation of salty cheese whey using anaerobic rotating biological contact reactor, *Journal of Fermentation and Bioengineering*, Japan. **83**, 502 -504. IF-1.964, cited – 16.

53. Patel H., Rawal D. A., **Madamwar D**. and Sinha T. J. M., (1997). Polymeric pro-drugs. Synthesis, release and antimicrobial properties of polymer-bound acriflavine, Die Angewandte Makromolekulare Chemie **245**, 1-8 (Nr. 4225). IF-2.781, cited- 12.

54. Gupte A. and **Madamwar D**. (1997). Solid-state fermentation of lignocellulosic waste for cellulase and β-glucosidase production by cocultivation of *Aspergillus ellipticus* and *Aspergillus fumigatus*, *Biotechnology Progress*, U.S.A.**13,** 166-169. IF-1.986, cited – 80.

55. Patel H, Raval D.A. and **Madamwar D**. (1997). Bioactive polymers: synthesis, characterization, release and antimicrobial property of macromolecular prodrug of ampicillin. *Indian Journal of Pharmaceutical Sciences*, India. 153-157. IF-0.762, cited – 4.

56. Patel C. and **Madamwar D**. (1998). Biomethanation of salty cheese whey using multichamber anaerobic bioreactor. *Energy and Environment*, U.K. **9**, 225 –231. IF-0.319, cited – 9.

57. Gupte, A. Huttermann, A. Majcherczyk and **Madamwar D.** (1998). Lignolytic enzyme production under solid-state fermentation by *Pleurotus ostreatus*and *Tramates versicolor*. In: *Advances in Biotechnology*, (Ed.) Ashok Pandey, Educational Publishers and Distributors, New Delhi, pp. 41-49., cited – 2.

58. Patel H., Raval D. A., **Madamwar D.** and Patel S. R., (1998). Polymeric prodrug: Synthesis, release study and antimicrobial property of poly (styrene-*co*-maleic anhydride)-boundacriflavine. Die Angewandte Makromolekulare Chemie **263**, 25 - 30. IF-2.781, cited – 31.

59. Bagai R. and **Madamwar D.** (1998). Prolonged evolution of photohydrogen by intermittent supply of nitrogen using a combined system of *Phormidium valderianum*, *Halobacterium halobium* and *Escherichia coli*, *International Journal of Hydrogen Energy*, U.K. **23**, 545-550. IF-3.313, cited – 23.

60. Patel P. and **Madamwar D.**, (1998). Surfactants in anaerobic digestion of salty cheese whey using upflow fixed film reactor for improved biomethanation. *Process Biochemistry*, U.K., **33,** 199 –203. IF-2.497, cited – 17.

61. Bagai R. and **Madamwar D.**, (1999). Long-term photo-evolution of hydrogen in a packed bed reactor containing a combination of *Phormidium valderianum*, *Halobacterium halobium*, *Escherichia coli* immobilized in polyvinyl alcohol, *International J. Hydrogen Energy*, U.K. **24**, 311 – 317. IF-3.313, cited – 37.

62. Patel P., Patel C. and **Madamwar D.**, (1999). Anaerobic upflow fixed film bioreactor for biomethanation of salty cheese whey, *Applied Biochemistry and Biotechnology*, U.S.A. **76**, 193-201. IF-1.429, cited – 17.

63. Chaturvedi M., Subramani S and **Madamwar D.** (1999). Fermentative production of gluconic acid using cheese whey, *J. Food Science and Technology*, **36**, 361 - 364. IF-1.262, cited – 6.

64. Shah V., Garg N. and **Madamwar D.**, (1999). Exopolysaccharide production by a marine cyanobacterium*Cyanothece*sp.and application in dye removal by its gelation phenomenon. *Applied Biochemistry and Biotechnology*. U. S. A, **82**, 81-90. IF-1.429, cited – 28.

65. Shah C., Subramani S. and **Madamwar D.,** (1999).Activity of trypsin entrapped in reverse micelles. *Journal for Science Technology*. India, **15**, 159-165.IF-1.002.

66. Soni K. and **Madamwar D.**, (1999). Reversed micellar extraction of an extracellular acid phosphatase from fermentation broth. *Process Biochemistry*, U.K. **36**, 311-315. IF-2.497, cited – 26.

67. Shah V., Garg N. and **Madamwar D.**, (2000). Record of the cyanobacteria present in the Hamisar pond of Bhuj, India. *Acta Botanica Malacitana*.Spain., **25**, 175-180. IF-1.000, cited – 9.

68. Shah C., Surbramani S. and **Madamwar D**. (2000). Entrapment of enzyme in water-restricted microenvionment - amyloglucosidase in reverse micelles, *Process Biochemistry*, U.K. **35,** 971 – 975. IF-2.497, cited – 22.

69. Soni K., Shah C and **Madamwar D**., (2000). Role of surfactants on the activity of acid phosphatase incorporated in reverse micelles. *Biocatalysis and Biotransformation*, U.K., **18**, 331 – 341. IF.0.836, cited – 6.

70. Shah V., Ray A., Garg N. and **Madamwar D**., (2000). Characterization of the extracellular polysaccharide produced by a marine cyanobacterium *Cyanothece*sp. ATCC 51142, and its exploitaion towards metal removal from solutions. *Current Microbiology*, USA. **40**, 274 – 278. IF-1.322, cited – 77.

71. **Madamwar D**, Garg N. and Shah V., (2000). Cyanobacterial hydrogen production. *World Journal of Microbiology and Biotechnology*, USA. **16**, 757-767. IF-1.658. cited – 61.

72. Patel H. and **Madamwar D**. (2000). Biomethanation of low pH petrochemical wastewater using up-flow fixed anaerobic bioreactors. *World Journal of Microbiology & Biotechnology*, U. K. **16**, 69– 75. IF-1.658, cited – 28.

73. Soni K. and **Madamwar D**. (2001). Ester synthesis by lipase immobilized on silica and microemulsion based organogels (MBGs) *Process Biochemistry*, UK. **36**, 607–611. IF-2.497, cited – 65.

74. Patel H. and **Madamwar D**. (2001). Single and multichamber fixed film anaerobic reactors for biomethanation of acidic petrochemical waste water. *Process Biochemistry*, UK. **36**, 613-619.IF-2.497, cited – 27.

75. Shah V., Garg N. and **Madamwar D**. (2001). Ultrastructure of the fresh water cynobacterium*Anabaena variabilis* SPU 003 and its application for oxygen free hydrogen production. *FEMS Microbiology Letters*, UK. **194**, 71-75. IF- 2.09 cited – 41.

76. Shah V., Garg N. and **Madamwar D**. (2001). An integrated process of hydrogen evolution and textile dye removal and hydrogen evolution using cynobacterium *Phormidium valderianum*. *World Journal of Microbiology & Biotechnology*, U.K. **17**, 499-504. IF-1.658, cited – 27.

77. Shah V., Garg N. and **Madamwar D**. (2001). Record of the marine cynobacteria from the rocky shores of Bet-Dwarka and Okha, India. *Acta Botanica Malacitana*, Spain. **26**, 188-193. IF-1.000, cited – 13.

78. Verma P. and **Madamwar D**. (2002). Decolorization of Synthetic Textile Dyes by Lignin Peroxidase of *Phanerochaete chrysosporium*. *Folia Microbiologia* Czech Republic. **43**, 283-286. IF-1.51, cited – 56.

79. Verma P. & **Madamwar D**. (2002) Comparative study on transformation of azo dyes by different white rot fungi. *Indian Journal of Biotechnology* **1**, 393-396. IF-0.287, cited – 21.

80. Patel H. and **Madamwar D**. (2002). Effects of temperature and organic loading rates on biomethanation of acidic petrochemical waste water using an anaerobic upflow fixed-film reactor. *Bioresource Technology*, USA. **82**, 65-71. IF-5.651, cited – 72.

81. Keharia H. and **Madamwar D**. (2002). Transformation of textile dyes by the White Rot Fungus *Trametesversicolor*. *Applied Biochemistry and Biotechnology*, U.S.A. **102-103**, 99-108. IF-1.429, cited – 17.

82. Verma P. and **Madamwar D**. (2002). Production of ligninolytic enzyme for dyes decolorization by co-cultivation of white rot fungi: *Pleurotus ostreatus* and *Phanerochaete chrysosporium*, *Applied Biochemistry and Biotechnology*, USA. **102-103**, 109-118. IF-1.429, cited – 59.

83. Shah V., Garg N. and **Madamwar D**. (2003). Ultrastructure of the cyanobacterium *Nostoc muscorum* and exploitation of the culture for hydrogen production. *Folia Microbiolgia*, Czech Republic. **48, (1)** 65-70. IF-1.51, cited – 16.

84. Keharia H., Patel H. and **Madamwar D**. (2003). Decolorization screening of synthetic dyes by anaerobic methanogenic sludge using a batch decolorization assay, *World Journal of Microbiology & Biotechnology*, The Netherlands, **20**, 365-370. IF-1.658, cited – 33.

85. Verma P. and **Madamwar D**. (2003). Decolourization of synthetic dye by a newly isolated strain of *Serratia marscenses*. *World Journal of Microbiology & Biotechnology*, 19, 1068-1075. IF-1.658 cited-178.

86. **Madamwar D.** and Thakar A. (2004). Entrapment of enzyme in water restricted microenvironment for enzyme mediated catalysis under microemulsion based organogels. *Applied Biochemistry &Biotechnology*, USA. **118**, 361-370. IF-1.429, cited – 15.

87. Mathew S. and **Madamwar D.** (2004). Decolourization of Ranocid Fast Blue dye decolorization by bacterial consortium SV5. *Applied Biochemistry & Biotechnology*, USA **118**, 371-381. IF-1.429, cited- 28.

88. Keharia H. and **Madamwar D**. (2004). Textile and dye effluent. *Concise Encylopedia of Bioresource Technology*. NY pp 167-175. (Ed. Ashok Pandey,The Haworth Press, New York).

89. Dave R. and **Madamwar D**. (2005). Esterification in organic solvents by silica – gel immobilized *Candida rugosa* lipase. Current Topic on *Bioprocesses in Food Industry* New Delhi pp 70-80 Chapter 6, (Eds. Christian Larroche, Ashok Pandey & Claude – Gilles Dussap, Asiatech Publishers Inc. New Delhi.) IF-2.619, cited – 8.

90. Shah A. and **Madamwar D**. (2005). Xylanase production by newly isolated *Aspergillus foetidus* strain and its characterization. *Process Biochemistry*, UK, **40**, 1763-1771. IF-2.497, cited – 134.

91. Shah A. and **Madamwar D**. (2005). Xylanase production under solid-state fermentation and its characterization by isolated strain of *Aspergillus foetidus* in India. *World Journal of Microbiology & Biotechnology*,The Netherlands, **21**, 233-243. IF-1.658, cited – 68.

92. Moosvi S., Keharia H. and **Madamwar D**. (2005). Decolorization and degradation of textile dye Reactive Violet 5 by a newly isolated bacterial consortium RVM11.1. *World Journal of Microbiology & Biotechnology*, the Netherlands **21**, 667-672. IF-1.658, cited – 240.

93. Thacker U. and **Madamwar D**. (2005). Reduction of toxic chromium and partial localization of chromium reductase activity in bacterial isolate DM1. *World Journal of Microbiology and Biotechnology*,The Netherlands **21**, 891-899. IF-1.658, cited – 78.

94. Thakar A. and **Madamwar D**. (2005). Enhanced ethyl butyrate production using surfactant coated lipase immobilized on silica. *Process Biochemistry*, U.K. **40**, 3263-3266. IF-2.517, cited – 47.

95. Bhatt N., Junnarkar N. S., Murty S. and **Madamwar D**. (2006). Decolorization of diazo dye Direct Red 81 by a novel consortium *World Journal of Microbiology & Biotechnology*, The Netherlands **22**,163-196. IF-1.658, cited – 83.

96. Bhatt N., Patel K. C., Keharia H. and **Madamwar D**. (2005). Decolourization of diazo dye Reactive Blue 172 by *Pseudomonas aeruginosa* NBAR 12, *Journal of Basic Microbiology*, Germany, **45**, 407-418. IF-1.395, cited- 68

97. Verma Pradeep and **Madamwar D**. (2005). Decolourization of azo dyes using Basidiomycetestrain PV 002 *Woruld Jounral of Microbiology & Biotechnology*, The Netherlands **21**, 481-485. IF-1.658, cited – 25.

98. Parikh A. P. and **Madamwar D**. (2005). Textile dye decolorization using cyanobacteria. *Biotechnology Letters* **27**, 323-326. IF-1.20, cited – 45.

99. **Madamwar D**. and Dave R., (2005). Lipase mediated catalysis in water – restricted catalysis in water-restricted microenvironment under microemulsion based organogels, *Chemica Oggi/Chemistry Today*, France, **23**, 16-23. IF-0.538, cited – 2.

100. Shah A., Shah R. K. and **Madamwar D**. (2006). Improvement of the quality of whole wheat bread by supplementation of xylanase from *Aspergillus foetidus. Bioresource Technology*, USA, **97**, 2047-2053. IF-5.651, cited – 103.

101. Parikh A. P., Shah V. and **Madamwar D**. (2006). Cyanobacterial flora from polluted marine shore. *Environmental Monitoring and Assessment*, USA 120, 407-414. IF-1.679, cited – 9.

102. Dave R. and Madamwar **D**. (2006). Esterification in organic solvents by lipase immobilized in polymer of PVA- alginate – boric acid. *Process Biochemistry*, UK **41**, 951-955. IF-2.517, cited – 106.

103. Thacker U., Parikh R., Shouche Y. and **MadamwarD**. (2006). Reduction of cell free extract of *Brucella* sp. isolated from Cr (VI) contaminated sites. *Bioresource Technology*. USA. **98(8)**, 1541-1547. IF-5.651, cited – 112.

104. Parikh A. and **Madamwar D**. (2006). Partial characterization of extracellular polysaccharides from cyanobacteria. *Bioresource Technology*. U.S.A. **97**, 1822-1827. IF-5.651, cited – 181.

105. Parikh A. Shah V. and **Madamwar D**. (2006). Cyanobacterial flora from polluted industrial effluents. *Environmental Monitoring and Assessment*. **116 (120)**, 407-414. IF-1. 679, cited – 16.

106. Shah V., Baldrian P., Eichlerova I., Dave R., Nerud F. and Gross R. **Madamwar D**. (2006). Influence of dimethyl sulfoxide on extracellular enzyme production by *Pleurotus ostreatus*. *Biotechnology Letters*, Netherlands. **28**, 651-655. IF-1.2, cited – 19.

107. Thacker U., Parikh R., Shouche Y. and **Madamwar D**. (2006). Hexavalent chromium reduction by *Providencia* sp. *Process Biochemistry.* U.K.**41,** 1332-1337. IF-2.497, cited – 148.

108. Soni B., Kalawadia B., Trivedi U. and **Madamwar D**. (2006). Extraction, purification and characterization of phycocyanin from *Oscillatoria quadripunctulata* – Isolated from the rocky shores of Bet-Dwarka, Gujarat, India. *Process Biochemistry.* U.K.**41,** 2017-2023. IF-2.497, cited – 107.

109. Dave R. and **Madamwar D**. (2006). Entrapment of lipase in polymer of polyvinyl alcohol-boric acid for esterification in organic media. *Indian Journal of Biotechnology*. **5**, 368-372. IF-0.386, cited – 9.

110. Mohana S., Desai C. and **Madamwar D**. (2007). Biodegradation and decolourization of anaerobically treated distillery spent wash by a novel bacterial consortium. *Bioresource Technology*. U.S.A. **98**, 333-339. IF-5.651. cited – 115.

111. Desai C. and **Madamwar. D**. (2006) Extraction of inhibitor-free metagenomic DNA from polluted sediments, compatible with molecular diversity analysis using adsorption and ion-exchange treatments. *Bioresource Technology*. U.S.A. **98,**761-768. IF-5.651, cited – 91.

112. Moosvi S., Kher X. and **Madamwar D**. (2007). Isolation, characterization and decolorisation of textile dyes by a mixed bacterial consortium JW-2. *Dyes and Pigments*, U.K. **74**, 723-729. IF-3.966, cited – 135.

113. Dandwate V. and **Madamwar D**. (2007). Novel approach for the synthesis of ethyl isovalerate using surfactant coated *Candida rugosa* lipase immobilized in microemulsion based organogels. *Enzyme and Microbial Technology.* U.S.A. **41**, 265-270. IF-2.287, cited – 25.

114. Moosvi S. and **Madamwar D**. (2007). An Integrated process for the treatment of CETP wastewater using coagulation, anaerobic and aerobic process. *Bioresource Technology.*U.S.A.**98**, 3384-3392. IF-5.651, cited – 52.

115. Mohana S. Srivastava S. Divecher J. and **Madamwar D**. (2008). Response surface methodology for optimization of medium for decolouriztion of textile dye Direct Black 22 by a novel bacterial consortium. *Bioresource Technology*, USA .**99**, 562-569. IF-5.651, cited – 142.

116. Dave R. and **Madamwar D.** (2007). *Candida rugosa* lipase immobilized in Triton-X 100 microemulsion based organogels (MBGs) for ester synthesis, *Process Biochemistry* U.K. **43**, 70-75. IF-2.497, cited – 20.

117. Soni B., Trivedi U. and **Madamwar D**. (2008). A novel method of single step hydrophobic interaction chromatography for the purification of phycocyanin from *Phormidium fragile* and its characterization for antioxidant property. *Bioresource Technology*, U.S.A. **99**, 188-194. IF-5.651, cited- 104.

118. Acharya B. K., Mohana S. and **Madamwar D**. (2008). Anaerobic treatment of distillery spent wash – A study on upflow anaerobic fixed film bioreactor. *Bioresource Technology*, USA, **99**, 4621-4626. IF-5.651, cited – 107.

119. Desai C., Jain K. and **Madamwar D.** (2008). Hexavalent chromate reductase activity in cytosolic fractions of *Psasdomonas* sp. G1DM21 isolated from Cr (VI) contaminated industrial landfill. *Process Biochemistry*,UK **43**, 713-721. IF-2.497, cited -79.

120. Mohana S., Shah A. and **Madamwar D.** (2008). Xylanase production by *Burkholderia* sp. DMAX strain under solid state fermentation using distillery spent wash *Bioresource Technology*, USA **99**, 7553-7564. IF-5.651, cited – 104.

121. Patel J, Patel H.R., Patel N.K. and **Madamwar D**. (2007). Preparation, characterization and antimicrobial activity of acrylate copolymer bound amoxicillin *Indian Journal of Pharmaceutical Sciences*, India **69**, 784-790. IF-0.762, cited – 2.

122. Dandvate V. and **Madamwar D.** (2008). Reusability of surfactant – coated *Candida rugosa* lipase immobilized in gelatin microemulsion -based organogels for ethyl isovalerate synthesis, *Journal of Microbiology & Biotechnology,* South Korea, **18**, 735-741. IF-3.337 cited –7.

123. Desai C., Jain K. and **Madamwar D.** (2008). Evaluation of *In vitro* Cr (VI) reduction potential in cytosolic extracts of three indigenous *Bacillus* sp. isolated from Cr (VI) polluted industrial landfill. *Bioresource Technology,* U.S.A .**99**, 6059-6069. IF-5.651, cited – 38.

124. Soni B., Visavadiya N. P. and **Madamwar D.** (2008). Ameliorative action of cyanobacterial phycoerythrin on CCl_4 - induced toxicity in rats. *Toxicology,* U.S.A. **248**, 59-65. IF-3.621, cited – 31.

125. Mohana S., Acharya B. and **Madamwar D.** (2009) A Review -Distillery spent wash: Treatment technologies and potential applications, *Journal of Hazardous Materials*, Ireland **163,** 12-25. IF-6.065, cited - 229.

126. Desai C. and **Madamwar D**. (2009) Expediency of bacterial mechanism in hexavalent chromium bioremediation. New Horizon in Biotechnology, Editor Ashok Pandey, Christian Larroche, Carlors R. Soccol and Claude-Gilles Dussap, Asiatech Publishers Inc., New Delhi, India, pp.230-253.

127. Singh N K., Parmar A. and **Madamwar D.** (2009). Optimization of medium components for increased production of C-phycocyanin from *Phormidium ceylanicum* and its purification by single step process. *Bioresource Technology,* U.S.A. **100**, 1663-1669. IF-5.651, cited – 47.

128. Desai C., Parikh R. Y., Vaishnav T., Shouche Y.S., **Madamwar D.** (2009). Tracking the influence of long term chromium pollution on soil bacterial community structures by comparative analyses of 16S rRNA gene phylotypes. *Research in Microbiology*, France. **160**, 1-9. IF-2.561, cited – 59.

129. Soni B., Visavadiya. N. and **Madamwar D.** (2009). Attenuation of diabetic complication by C-phycoerythrin in rats: Antioxidant activity of C-phycoerythrin including copper – induced lipoprotein and serum oxidation. *British Journal of Nutrition,* U.K. **102,** 102-109. IF-3.302, cited – 17.

130. Dandavate V., Keharia H. and **Madamwar D.** (2009). Ethyl isovalerate synthesis using *Candida rugosa* lipase immobilized on silica nanoparticles prepared in nonionic reverse micells. *Process Biochemistry,* U.K.**44,** 349 -152. IF-2.517, cited – 25.

131. Pathak H., Kanthariya D., Malpani A. and **Madamwar D.** (2009). Naphthalene degradation by *Pseudomonas sp.* HOB1: in vitro studies and assessment of naphthalene degradation efficiency in simulated microcosoms. *Journal of Hazardous Materials,* Ireland. **166,** 1466-1473. IF-6.065, cited –50.

132. Visavadiya N. P., Soni B., **Madamwar D**. (2009). Suppression of Reactive oxygen species and Nitric oxide by *Asparagus racemosus* root extract using in vitro studies. *Cellular and Molecular Biology*. U.S.A.**55**, 1083-1095. IF-4.398, cited- 18.

133. Dandavate V., Jinjala J., Keharia H. and **Madamwar D.** (2009). Production, partial purification and characterization of organic solvent tolerant lipase from *Burkholderia multivorans* V2 and its application for ester synthesis. *Bioresources Technology,* U.S.A. **100,** 3374-3381. IF-5.651, cited - 116.

134. Desai C., Jain K. and **Madamwar D.** (2009). Efficacy of bacterial consoertium-AIE2 for contemporaneous Cr (VI) and azo dye bioremediation in batch and continuous bioreactor systems, monitoring steady-state bacterial dynamics using qPCR assays. *Biodegradation,* U.S.A. **20,** 813-826.IF-2.016, cited – 20.

135. Pathak H. and **Madamwar D.** (2010). Biosynthesis of Indigo Dye by newly isolated naphthalene degrading strain *Pseudomonas* sp. HOB1 and its application in dyeing cotton fabric. *Applied Biochemistry and Biotechnology,* USA, **160**, 1616-1626. IF-1.429, cited – 34.

136. Parmar A., Singh N and **Madamwar D.** (2010). Allophycocyanin from a local isolate *Geitlerinema* sp. A28DM: A simple and efficient purification process. *Journal of Phycology*, U.S.A.**46,** 285-289.IF-2.239, cited – 16.

137. Ahmed E. H., Raghavendra T and **Madamwar D.** (2010). A thermostable alkaline lipase from a local isolate *Bacillus subtilis* EH 37: Characterization, partial purification and application in organic synthesis. *Applied Biochemistry Biotechnology*, U.S.A. **160** (7), 2102-2113.IF-1.429, cited – 33.

138. Desai C., Pathak H and **Madamwar D.** (2010). Advances in molecular and ''-omics" technologies to gauge microbial communities and bioremediation at xenobiotic/anthropogen contaminated sites. *Bioresources Technology*, U.S.A. **101,** 1558-1569.IF-5.651, cited – 96.

139. Ahmed E. H., Raghavendra T and **Madamwar D.** (2010). An alkaline lipase from organic solvent tolerant *Acinetobacter*sp. EH28: Application for ethyl caprylate synthesis. *Bioresources Technology*, U.S.A.**101**, 3628-3634. IF-5.651, cited – 61.

140. Srivastava D., **Madamwar D** and Subramanian R. B. (2010). Pentavalent arsenate reductase activity in cytosolic fractions of *Pseudomonas sp.*, isolated from arsenic-contaminated sites of Tezpur, Assam. *Applied Biochemistry Biotechnology*, U.S.A. **162(3),** 766-779. IF-1.429, cited – 9.

141. Raghavendra T., Sayania D and **Madamwar D.** (2010). Synthesis of the 'green apple ester' ethyl valerate in organic solvents by *Candida rugosa* lipase immobilized in MBGs in organic solvents: Effects of immobilization and reaction parameters. *Journal of Molecular Catalysis B: Enzymatic*. U.S.A. **63**, 31-38.IF-2.39, cited – 50.

142. Visavadiya N. P., Soni B., Dalwadi N. and **Madamwar D.** (2010). *Chlorophytum borivilanum*as potencial terminator of free radicals in various in vitro oxidation systems. *Drug and Chemical Toxicology*. U.K. **33 (1),** 173-182. IF-1.233, cited- 18.

143. Chapla D. G., Divecha J., **Madamwar D.** and Shah A. R. (2010). Utilization of agro-industrial waste for xylanase production by *Aspergillus foetidus* MTCC 4898 under solid state fermentation and its application in saccharification. *Biochemical Engineering Journal*, UK. **49(3),** 361-369. IF-2.892, cited – 70.

144. Acharya B., Mohana S., Jog R., Divecha J and **Madamwar D.** (2010). Utilization of anaerobically treated distillery spent wash for production of cellulases by solid-state fermentation. *Journal of Environmental Management*. U.S.A .**91,** 2019-2027. IF-4.010, cited – 15.

145. Soni B. R., Hasan Md. I., Parmar A., Ethayathulla A. S., Kumar R. P., Singh N. K., Sinha M., Kaur P., Yadav S., Sharma S., **Madamwar D.,** and Singh T. P. (2010). Structure of the novel 14 kDa fragment of a-subunit of phycoerythrin from the starving cyanobacterium *Phormidium tenue. Journal of Structural Biology*. U.S.A. **171(3)**, 247-255. IF-2.767, cited – 14.

146. Soni B. Visavadia N. P., Dalwadi N., **Madamwar D.** Winder C. and Khalil C. (2010). Purified c-phycoerythrin: safety studies in rats and protective role against permanganate-mediated fibroblast-DNA damage. *Journal of Applied Toxicology*. UK. **30(6)**, 542-550.IF-3.159, cited – 7.

147. Srivastava D., Subramanian R. B., **Madamwar D.** and Flora S. J. S. (2010). Protective effects of selenium, calcium and magnesium against arsenic – induced oxidative stress in male rats. *Archives of Industrials Hygiene and Toxicology*. Croatia. **60(1),** 153-159. IF-1.395, cited – 24.

148. Dave R. and **Madamwar D.** (2010). Preparation for the use of *Candida rugosa* lipase in non-conventional solvents. *Biocatalysis and Biotransformation*. UK. **28(3),** 157-166. IF-0.893, cited – 7.

149. Parmar A., Singh N. K., Kaushal A., Sonawala S. and **Madamwar D.** (2011). Purification, characterization and comparison of phycoerythrins from three different marine cyanobacterial cultures. *Bioresource Technology*. U.S.A. **102(2),** 1795-1802. IF-5.651, cited – 39.

150. Dandavate V., Keharia H. and **Madamwar D.** (2011) Ester synthesis using Candida rugosa lipase immobilized on magnetic nanoparticles. *Biocatalysis and Biotransformation*. UK. **29(2),** 37-45. IF-0.893, cited – 12.

151. Shah V., Jain K., Desai C. and **Madamwar D.** (2011). Metagenomics and integrative '-omics' technologies in microbial bioremediation: Metagenomics: Current Innovations and Future Trends. Editor Diana Marco. Horizon Scientific Press, UK. Chapter 12, 211-240.cited-2

152. Shah V., Jain K., Desai C. and **Madamwar D.** (2011). Molecular analyses of microbial activities involved in bioremediation: Current scenario and future applications. Microbes in Environmental Management and Biotechnology. Editors: Satyanarayan T., Johri B. & Prakash A. Springer Science Ltd., U.S.A. Chapter 11, 221-248. Cited-3

153. Acharya B. K., Pathak H., Mohana S., Shouche Y., Singh V. and **Madamwar D.** (2011) Kinetic modeling and microbial community assessment of anaerobic biphasic fixed film bioreactor treating distillery spent wash. *Water Research*. UK.**45,** 4248-4259. IF-5.323, cited – 31.

154. Parmar A., Singh N. K., Kaushal A. and **Madamwar D.** (2011). Characterization of an intact phycoerythrin and its cleaved 14kDa functional subunit from marine cyanobacterium *Phormidium* sp. A27DM. *Process Biochemistry*. UK. **46,** 1793-1799. IF-2.497, cited – 9.

155. Parmar A., Singh N. K., Pandey A. Gnansounou E and **Madamwar D.** (2011). Cyanobacteria and microalgae: A positive prospect for biofuels. *Bioresource Technology*. USA. **102,** 10163-10172.IF-5.651, cited – 278.

156. Patel V., Cheturvedula S and **Madamwar D.** (2012). Phenanthrene degradation by *Pseudoxanthomonas* sp. DMVP2 isolated from hydrocarbon contaminated sediment of Amlakhadi canal, Gujarat, India. *Journal of Hazardous Materials*, Ireland. **201-202,** 43-51.IF-6.065, cited – 43.

157. Patel V., Jain S and **Madamwar D.** (2012). Naphthalene degradation by bacterial consortium (DV-AL) developed from Alang-Sosiya ship breaking yard, Gujarat, India. *Bioresource Technology*. USA. **107,** 122-130. IF-5.651, cited – 36.

158. Chapla D., Patel H., **Madamwar D.** and Shah A. (2012). Assessment of a thermostable xylanase from *Paenibacillus* sp. ASCD2 for application in prebleaching of Eucalyptus kraft pulp. *Waster Mass Valorization.* **3** 269-274 IF-1.337, cited – 10.

159. Jain K., Shah V., Chapla, D. and **Madamwar D.** (2012). Decolorization and degradation of azo dye – Reactive Violet 5R by an acclimatized indigenous bacterial mixed cultures-SB4 isolated from anthropogenic dye contaminated soil. *Journal of Hazardous Materials*. Ireland. **213-214,** 378-386. IF-6.065, cited – 70.

160. Narra M., Dixit G., Divecha J., **Madamwar D.** and Shah A. (2012). Production of cellulases by solid state fermentation with Aspergillus terreus and enzymatic hydrolysis of mild alkali-treated rice straw. *Bioresource Technology*. USA. **121,** 355-361.IF-5.651, cited – 64.

161. Chapla D., Patel H., Singh A., **Madamwar D.** and Shah A. (2012). Production, purification and properties of a cellulase-free thermostable endoxylanase from newly isolated *Paenibacillus* sp. ASCD2. *Annals of Microbiology*. **62,** 825-834. IF-1.122, cited – 9.

162. Singh N.K., Parmar A., Sonani R.R. **Madamwar D**. (2012). Isolation, identification and characterization of novel thermotolerant*Oscillatoria* sp. N9DM: Change in pigmentation profile in response to temperature. *Process Biochemistry*. **47**, 2472-2479. IF-2.497, cited – 17.

163. Venkata S., Mohan, P. Suresh Babu, K. Naresh, G. Velvizhi and **Madamwar D**. (2012). Acid azo dye remediation in anoxic-aerobic-anoxic microenvironment under period discontinous batch operation: Bio-electro kinetics and microbial inventory. *Bioresource Technology*. USA. **119,** 362-372. IF-5.651, cited -21.

164. Mohana S., Acharya B.K. and **Madamwar D.** (2013). Bioremediation concepts for treatment of distillery effluent in Biotechnology of environment management and resource recovery. Chapter 14. Editor: Ramesh Chandra Kuhad, Springer India, cited – 2.

165. Oturkar C. C., Patole M.S., Gawai K. R. and **Madamwar D**. (2013). Enzyme based cleavage strategy of Bacillus lentus BI377 in response to metabolism of azoic recalcitrant. *Bioresource Technology*. USA. **130**, 360-365. IF-5.651, cited – 14.

166. Oturkar C. C., Othman M.A., Kulkarni M.J., **Madamwar D**. and Gawai K.R. (2013). Synergestic action of flavin containing NADH dependant azoreductage and cytochrome P450 monoxygenase in azoaromatic mineralization. *RSC Advances*. **3,** 3062-3070. IF-3.1.

167. Shah V. and **Madamwar D.** (2013) Community genomics: Isolation, characterization and expression of gene coding for azoreductase. *International Biodeterioration& Biodegradation*. U.K.**79,** 1-8. IF-2.962, cited – 5.

168. Parmar A., Singh N. K., Dhoke R. and **Madamwar D.** (2013). Influence of light on phycobiliprotein production in three marine cyanobacterial cultures. *Acta Physiol Plant.* 35(6): 1817-1826. IF-1.364, cited – 1.

169. Matkar K., Chapla D., Divecha J., Nighojkar A. and **Madamwar D.** (2013). Production of cellulase by a newly isolated strain of *Aspergillus sydowii* and its optimization under submerged fermentation. *International Biodeterioration & Biodegradation*. U.K.**78,** 24-33. IF-2.962, cited – 30.

170. Shah V., Zakrzewski M., Wibberg D., Eikmeyer F., Schlüter A and **Madamwar D.** (2013). Taxonomic Profiling and Metagenome Analysis of a Microbial Community from a Habitat Contaminated with Industrial Discharges. *Microbial Ecology*. USA. **66,** 533-550. IF-3.630, cited – 6.

171. Patel V., and **Madamwar D**. (2013) Biodegradation of phenanthrene in bioaugmented microcosm by consortium ASP developed using coastal sediment of Alang-Sosiya ship breaking yard, Gujarat. *Marine Pollution Bulletin*. **74,** 199-207. IF-3.149, cited – 19.

172. Raghavendra T., Basak A., Manocha L. M., Shah A. and **Madamwar D**. (2013). Robust nanobioconjugates of *Candida antarctica* lipase B – Multiwalled carbon nanotubes: Characterization and application for multiple usages in non-aqueous biocatalysis. *Bioresource Technology*, USA. **140,** 103-110. IF-5.651, cited – 27.

173. Chapla D., Dholakiya S., **Madamwar D**. and Shah A. (2013). Characterization of purified fungal endoxylanase its application for production of value added food ingredient from agroresidues. *Food and Bioproducts Processing*. USA.**91** 682-692. IF-1.970, cited – 2.

174. Narra M., Dixit G., Divecha J., Kumar K., **Madamwar D**. and Shah A. (2014). Production, purification and characterization of a novel GH 12 family endoglucanase from *Aspergillusterreus* and its application in enzymatic degradation of dignified rice straw. *International Biodeterioation and Biodegradation*. **88**, 150-161. IF-2.962, cited – 22.

175. Narra M., Balasubramanian V., Mehta H., Dixit G., **Madamwar D**. and Shah A. (2014). Performance evaluation of aerobic hybrid reactors with different packing media for treating wastewater of mild alkali treated rice straw in ethanol fermentation process. *Bioresource Technology*, USA. **152**, 59-65. IF-5.651, cited – 10.

176. Anwer K., Parmar A., Rahman S., Kaushal A., **Madamwar D**. Islam A., Hassan M.I., Ahmad F. (2014). Folding and stability studies on C-PE and its natural N- terminal truncant. *Archives of Biochemistry and Biophysics*. **545**, 9-21. IF-3.017, cited – 8.

177. Singh N. K. Hasan S.S. Kumar J., RajI., Pathan A.A., Parmar A., Shakil S., Gourinath S. and **Madamwar D**. (2014). Crystal structure and interaction of phycocyanin with β-secreatase: A putative therapy for a Alzheimer's diseases. *CNS & Neurological Disorders: Drug Target*. **13**, 691-698. IF-2.506, cited – 10.

178. Patel V., Munot H., Shouche Y.S. and **Madamwar D**. (2014). Response of bacterial community structure to seasonal fluctuation and anthropogenic pollution on costal water of Alang-Sosiys ship nreaking yard, Bhavnagar, India. *Bioresource Technology*. **161,** 362-370. IF-5.651, cited – 14.

179. Raghavendra T., Vahora U., Shah A. and **Madamwar D**. (2014). Enhanced conjugation of *Candida rugosa* lipase onto multiwalled carbon nanotubes using reverse micelles as attachment medium and application in no-aqueous biocatalysis. *Biotechnology Progress*. **30,** 828-836. IF-1.986, cited –4.

180. Raghavendra T., Panchal N., Divecha J., Shah A. and **Madamwar D**. (2014). Biocatalytic synthesis of flavor ester 'pentylvalerate' using Candida rugosa lipase immobilized in microemulsion based oraganogels: Effect of parameters and reusability. *Biomed Research International*. **Article ID:** 353845. IF-1.579, cited – 8.

181. Khan R, Kahn Z., Bhatt N, Devecha J and **Madamwar D.** (2014). Azo dye decolorization under microaerophillic conditions by a bacterial mixture isolated from anthropogenic dye-contaminated soil. *Bioremediation Journal*.**18,** 147-157. IF-1.00, cited – 4.

182. Patel V., Nambiar S. and **Madamwar D**. (2014). An extracellular solvent stable alkaline lipase from *Pseudomonas sp.* DMVR46: Partial purification, characterization and application in non-aqueous environment. *Process Biochemistry*. **49(10),** 1673-1681. IF-2.497, cited – 14.

183. Sonani R. R., Singh N. K., Kumar J., Thakar D. and **Madamwar D**. (2014). Concurrent purification and antioxidant activity of phycobiliproteins from *Lyngbya*sp. A09DM: An antioxidant and anti-aging potential of phycoerythrin in *Caenorhabditis elegans*. *Process Biochemistry*. **49(10**), 1757-1766. IF-2.497, cited – 27.

184. Balapure K. H., Jain K., Chattaraj S., Bhatt N.S. and **Madamwar D**. (2014). Co-metabolic degradation of diazo dye – Reactive blue 160 by enriched mixed cultures BDN. *Journal of Hazardous Materials*. **279:** 85-95. IF-6.065, cited – 11.

185. Khan Z., Jain K., Soni A. and **Madamwar D**. (2014). Microaerophilic degradation of sulphonated azo dye – Reactive Red 195 by bacterial consortium AR1 through co-metabolism. *International Biodeterioration& Biodegradation*. U.K. **94,** 167-175. IF-2.962, cited – 16.

186. Rastogi R. P., Incharoensakdia A. and **Madamwar D**. (2014). Responses of a rice-field cyanobacterium*Anabaena siamensis* TISTR-8012 upon exposure to PAR and UV radiation. *Journal of Plant Physiology*. Germany. **171,** 1545-1553. IF-3.121, cited – 11.

187. Sonani R. R., Singh N. K., Awasthi A., Prasad B., Kumar J. and **Madamwar D**. (2014). Phycoerythrin extends life span and health span of *Caenorhabditis elegans*. *Age*. **36(5),** 9717:1-16, IF-4.084, cited – 20.

188. Rastogi R. P. Sonani R. R. and **Madamwar D**. (2014). The high-energy radiation protectant extracellular sheath pigment scytonemin and its reduced counterpart in *cyanobacterium scytonema* sp. R77DM. *Bioresource Technology.* **171,** 396-400. IF-5.651, cited – 13.

189. Anwer K., Sonani R., **Madamwar D.** Singh P., Khan F., Bisetty K., Ahmed F., and Hassan M.F. I. (2015). Role of N-terminal residues on residues on folding and stability of C-phycoerythrin: simulation and urea-induced denaturation studies. *Journal of Biomolecular Science and Dynamics*. **33(1),** 121-133., IF-3.123, cited – 42.

190. Patel V., Gajera H., Gupta A., Manocha L. and **Madamwar D**. (2015). Synthesis of ethyl caprylate in organic media using *Candida rugosa* lipase immobilized on exfoliated graphene oxide: Process parameters and reusability studies. *Biochemical Engineering Journal*. **95,** 62-70.IF-3.05, cited – 12.

191. Balapure K., Bhatt N. and **Madamwar D.** (2015). Mineralization of reactive dyes present in stimulated textile waste water using down flow microaerophilic fixed film bioreactor. *Bioresource Technology*.**175,** 1-7. IF-5.651, cited – 35.

192. Sonani R. R., Rastogi R. P., Joshi M. and **Madamwar D**. (2015). A stable and functional peptide phycoerythrin (15.45 kDa) from *Lyngbya* sp. A09DM. *International Journal of Biological Macromolecules*. **74,** 29-35.IF-3.096, cited – 11.

193. Rastogi R. P., **Madamwar D**. and Incharoensakdi A. (2015). Multiple defense systems in cyanobacteria in response to solar UV radiation. In: Cyanobacteria: Ecological Importance, Biotechnological Uses and Risk Management. *Nova Publishers*, USA. **Chapter 6**, pp: 125-158.

194. Rastogi R. P., Sonani R. R. and **Madamwar D** (2015). Effect of PAR and UV radiation on the structural and functional integrity of phycocyanin, phycoerythrin and allophycocyanin isolated from the marine cyanobacterium *Lyngbya* sp. A09DM. *Photochemistry and Photobiology*. **91**, 837-844. I.F. – 2.673, cited – 12.

195. Singh N. K., Sonani R. R., Rastogi R. P. and **Madamwar D** (2015). The phycobilisomes: an early requisite for efficient photosynthesis in cyanobacteria. *EXCLI Journal.* **14,** *268-289.* I.F. – 1.462, cited – 18.

196. Sonani R. R., Gupta G. D., **Madamwar D**. and Kumar V. (2015). Crystal structure of allophycocyanin from marine cyanobacterium *Phormidium* sp.A09DM. *PLoS ONE* .DOI:10.1371/ journal.pone.0124580. I.F. – 2.806, cited – 11.

197. Shah B., Jain. K., Patel N., Pandit R., Patel A., Joshi C. G. and **Madamwar D**. (2015). Draft genome sequence of Paenibacillus sp. Isolated from Alang ship breaking yard, which harbors genes for xenobiotic degradation. *Genome Announcements.* 3, e00554-15, cited – 1.

198. Sonani R. R., Sharma M., Gupta G. D., Kumar V. and **Madamwar D**. (2015). Phormidium phycoerythrin forms hexamers in crystals: a crystallographic study. *Acta Cryst.* F71, 998-1004. I.F. – 0.799, cited – 7.

199. **Madamwar D**., Patel D. K., Desai S. N., Upadhyay K. K. and Devkar R. V. (2015). Apoptotic potential of c-phycoerythrin from *Phormidium sp.* A27DM and *Halomicronema sp.* A32DM on human lung carcinoma cells. *EXCLI Journal.* 14, 527-539. I.F. – 1.462, cited – 3.

200. Rastogi R. P., Sonani R. R. and **Madamwar D.** (2015). Cyanobacterial sunscreen Scytonemin: role in photoprotection and biomedical research. *Applied Biochemistry and Biotechnology.* **176**, 1551-1563, I.F. – 1.429, cited - 12.

201. Rastogi R. P. and **Madamwar D.** (2015). UV-induced oxidative stress in cyanobacteria: How life is able to survive? *Biochemistry &Analytical Biochemistry.* **4**, 1000173. I.F. – 2.63, cited – 8.

202. Sonani R. R., Rastogi R. P. and **Madamwar D.** (2015). Antioxidant potential of phycobiliproteins: role in anti-aging research. *Biochemistry & Analytical Biochemistry.* **4**, 1000172. I.F. – 2.63, cited – 10.

203. Rastogi R. P., Sonani R. R. and **Madamwar D.** (2015).Physico-chemical factors affecting the in vitro stability of phycobiliproteins from *Phormidium rubidium* A09DM. *Bioresource Technology* **190,** 219-226. I.F. – 5.651, cited – 4.

204. Rastogi R. P., **Madamwar D.** and Incharoensakdi A. (2015). Sun-screening bioactive compounds mycosporine-like amino acids in naturally occurring cyanobacterial biofilms: role in photoprotection. *Journal of Applied Microbiology.* **119**, 753-762. I.F. – 2.099, cited – 8.

205. Patel V. and **Madamwar D.** (2015). Lipase from solvent tolerant *Pseudomonas* sp. DMVR46 strain adsorbed on multiwalled carbon nanotubes: application for enzymatic biotransformation in organic solvents. *Applied Biochemistry and Biotechnology.* **117**, 1313-1326. I.F. – 1.429, cited – 5.

206. Patel V, Munot H, Shah V, Shouche Y, **Madamwar D.** (2015). Taxonomic profiling of bacterial community structure from coastal sediment of Alang–Sosiya shipbreaking yard near Bhavnagar, India. *Marine Pollution Bulletin*, **101,** 736–745. I.F. – 3.146, cited-3.

207. Rastogi R. P., **Madamwar D** and Incharoensakdi A. (2015). Bloom dynamics of cyanobacteria and their toxins: Environmental health impacts and mitigation strategies. *Frontiers in Microbiology*, **6**, 1254:1-22. I.F. – 4.169, cited-14.

208. Rastogi R P, Sonani R R, Patel A V, **Madamwar D**. (2015). Biosynthesis of functionally stable photo harvesting single peptide allophycocyanin α-subunit (16.4kDa) in the cyanobacterium *Nostoc sp.* R76DM. *RSC Advances*, **5**, 87598-87608. I.F. - 3.108, cited – 2.

209. Rastogi R. P, Sonani R. R,., **Madamwar D.,** Incharoesakdi A. (2015). The potential of mycosporin like amino acids as UV sunscreens In: Sunscreens:Proprties Role in skin cancer prevention and health effects. *Nova Publisher*, USA, 978-1-63482-160-5,pp 173-190.

210. Amin S, Shah B, Jain K, Patel A, Patel N, Joshi C G, **Madamwar D.** (2015) Draft genome sequence of Achromobacter sp. strain DMS1, capable of degrading polyaromatic hydrocarbons isolated from the industrially perturbed environment of Amlakhadi canal, India. Genome Announc **3(5),** e01264-15.

211. Chattaraj S, Johnson J, Madamwar D (2015). Biotransformation of mixture of dyes by enriched bacterial consortium AD. *Desalination and Water Treatment*.pp 21585-21597; vol-57. I.F-0.93.

212. Balapure K, Jain K, Bhatt N, **Madamwar D.** (2016). Exploring bioremediation strategies to enhance the mineralization of textile industrial wastewater through sequential anaerobic-microaerophilic process. *International Biodeterioration& Biodegradation*, **106**, 97-105. I.F. – 2.962, cited – 8.

213. Patel V, Shah C, Deshpande M, **Madamwar D.** (2016). Zinc oxide nanoparticles supported lipase immobilization for biotransformation in organic solvents: A facile synthesis of geranyl acetate, effect of operative variables and kinetic study. *Applied Biochemistry and Biotechnology*. Pp 1630-1651;vol-178. I.F. – 1.429, cited-4.

214. Sonani R. R., Rastogi R. P., Patel R, **Madamwar D.** (2016). Recent advances in production, purification and application of phycobiliproteins. *World Journal of Biological Chemistry*, **7,** 100-109, cited-1.

215. Patel V, Sharma A, Lal R and **Madamwar D.** (2016). Response and resilience of soil microbial communities inhabiting in edible oil stress/contamination from industrial estates. *BMC Microbiology*, **16**, 50, I.F. – 2.73, cited-2

216. Khalid A, Rahman S, Sonani R, Khan FI, Islam A, **Madamwar D.,** Ahmad F and Hassan I. (2016). Probing pH sensitivity of α C-phycoerythrin and its natural truncant: A comparative study. *International Journal of Biological Macromolecules.* Doi:dx.doi.org/10.1016/j.inbiomac.2016.01.046. I.F. – 3.671, cited-7.

217. Shah B, Mohan V, Jain K, **Madamwar D.** (2016). Microaerophillic symmetric reductive cleavage of reactive azo dye – Ramazole Brilliant Violet 5R by developed consortium VIE6: community synergism. *Applied Biochemistry and Biotechnology*. In Press IF-1.429, cited-1.

218. Kumar V, Sonani R. R., Gupta G. D, **Madamwar D.** (2016). Crystal structure analysis of C-phycoerythrin from marine cynobacterium *Phormidium* sp. A09DM. *Photosynthesis Research*. **129**, 17-28. IF – 4.122, cited-3.

219. Rastogi R. P., Sonani R. R., **Madamwar D.** (2016). Characterization and antioxidant function of mycosporin-like amino acids in the cyanobacterium Nostoc sp. R76DM. *Algal Research*, **16**, 110-118. I.F-5.014, cited-3.

220. Shah B, Patel A, **Madamwar D.** (2016). Kinetic modeling and community dynamics of microaerophillic treatment of textile dyes containing effluent by consortium VIE6. *Environmental Process*. Doi: 10.1007/s40710-016-0156-0. Cited-1

221. Johnson J, Shah B, Jain K, Parmar N, Hinsu A, Patel N, Joshi C, **Madamwar D.** (2016). Draft Genome Sequence of *Paenibacillus* sp. Strain DMB5, Acclimatized and Enriched for Catabolizing Anthropogenic Compounds. *Genome Announc* **4(2),** e00211-16. Cited-1.

222. Rastogi R. P, Sonani R. R, Incharoesakdi A., **Madamwar D.** (2016). Sun-screening biomolecules in microalgae: role in UV-photoprotection. In: *Mapping UV-B research from past to Recent Advancements*, (Ed) Singh V.P., Singh S., Prasad S.M., Parihar P. Wiley Blackwell. ISBN: 978-1-119-14360-4. pp-450.

223. Johnson J., Jain K., **Madamwar D.** (2016). Functional Metagenomics: Exploring Nature's Gold Mine. In: *Current Developments in Biotechnology and Bioengineering*. Volume 2, (Functional Genomics and Metabolic Engineering) Elsevier. Chapter2. Eds. P. Gunasekaran and Ashok Pandey.

224. Jain K., Deasi C., **Madamwar D.** (2016). Bacterial interaction with chromium and strategies for remediation of hexavalent chromium pollution. In: *Microbe interaction and bioremediation: Principal and applications for toxic metals*. CRC Press Taylor & Francis Group, Chapter 45, pp 719-729.

225. Sonani R. R, Rastogi R, Singh, Singh N.K, Thadani J, Patel P , Kumar J, Tiwari A, Devkar R and **Madamwar D.** (2016). Phycoerythrin averts intracellular ROS generation and physiological functional decline in eukaryotes under oxidative stress. *Protoplasma.* DOI 10.1007/s00709-016-0996-5.I.F.-2.87, cited-1.

226. Chattaraj S, Purohit H, Sharma A, Jadeja N, **Madamwar D** (2016). Treatment of Common Effluent Treatment Plant Wastewater in a Sequential Anoxic–Oxic Batch Reactor by Developed Bacterial Consortium VN11. *Applied Biochemistry & Biotechnology* . 179:514–529.I.F.-1.429.

227. Narayan A., Jain K., Shah A., **Madamwar D** (2016). An efficient and cost effective method for DNA extraction athalossohaline Soil using newly formulated cell extraction buffer. *3 Biotech*.6:62.I.F.-1.361.

228. Vaidya S., Jain K., Madamwar D. (2017). Metabolism of pyrene through phthalic acid pathway by enriched bacterial consortium composed of *Pseudomonas*, *Burkholderia*, and *Rhodococcus* (PBR), 3 *Biotech* 7:29.I.F.-1.361.

229. Patel V., Deshpande M., Madamwar D. (2017). Increasing esterification efficiency by double immobilization of lipase-ZnO bioconjugate into sodium bis(2-ethlhexyl) sulfosuccinatr (AOT)- reverse micelles and microemulsion based organogels. *Biocatalysis and Agricultural Biotechnology*, **10**, 182-188.I.F.-1.96.

230. Rastogi R. P., Sonani R. R., Madamwar D. (2017). UV protectants from algae – synthesis and bio-fuctionalities, in Algal Green Chemistry - Recent Progress in Biotechnology. Chapter 2, pp 17-38, Eds. Rastogi R. P., Madamwar D., Pandey A.. Elsevier.cited-1.

231. Sonani R. P., Rastogi R. P., Madamwar D. (2017). Natural antioxidants from algae: a therapeutic perspective, in Algal Green Chemistry – Recent Progress in Biotechnology, Chapter 5, pp 91-120 Eds. Rastogi R. P., Madamwar D., Pandey A.. Elsevier.

232. Rastogi R. P., Madamwar D. (2016). Cyanobacteria synthesize their own UV-sunscreens for photoprotection. Bioenergetics: Open Access 5:2233.cited-2

233. Devpura N., Jain K., Patel A., Joshi C., **Madamwar D**. (2017). Metabolic potential and taxonomic assessment of bacterial community of an environment to chronic industrial discharge. *International Biodeterioration & Biodegradation*. **123**, 216-227.I.F.-2.962.

234. Khetkorn W., Rastogi R. P., Incharoensakdi A. Lindblad P. **Madamwar D**. Larroche C. Pandey A. (2017) Microagal hydrogen production – A review. *Bioresource Technology*, **243**, 1194-2017.I.F.-5.651

235. Patel V. Deshpande M., Pandey A. Larroche C. **Madamwar D**. (2017). Nanobiocatalysis for synthesis of pentyl valerate in organic solvents; Characterization, optimization and reusability studies. *Current Biotechnology*, In Press.

236. Choubeh R. R. , Sonani R. R., **Madamwar D**., Struik P. C., Bader A. N., Robert B., van Amerongen. H. (2017) Picosecond excitation energy transfer of allophycocyanin studies in solution and in crystal. *Photosynthetic Research*. In Press.I.F.-4.122.

237. Sonani R. R., Patel S., Bhastana B., Jakharia K.,Chaubey M.G., Singh N. K., **Madamwar D**. (2017) Purification and antioxidant activity of phycocyanin from *Synechococcus* sp. R42DM isolated from industrially polluted site. *Bioresource Technology*. **245**, 325-331. I.F. 5.651

238. Sonani R. R., Roszak A. W., Northumberland C. D. de Percia, Madamwar D., Cogdell R. J. (2017) An improved crystal structure of C-phycoerythrin from the marine cyanobacterium *Phormidium* sp. A09DM. *Photosynthetic Research*. In Press. I.F. 4.122.