Resume

Name:	Prof. Rajaran	n Choyal	
Date of Birth:	16-09-70		
Present Position :	Professor		
Department:	Environmenta	al Science	
Pay Scale + Grade Pay:	37400-67000	+10000	
Mailing Address:			
Office:-		Residence: - 48- 49	Vijay Vihar
Academic Block-I Maharaja Ganga Singh University, N.H. 15, Jaisalmer Road, Bikaner (Raj.) India- 334004		Behind Sophia School Jaipur Road, Bikaner. 334001, (Raj) India.	
Telephone No. : 0151-2230613 (F	R)	Mobile No. : 0941429	98123
Fax No. : 0151-2212042 (C))	E-mail: choyalrr@gm	nail.com
		choyalrr@mg	subikaner.ac.in
Qualifications:			
M.Sc. (Botany), Second Position	in MDS Unive	ersity, Ajmer, Ph.D.	
Specialization:			
Ecology, Plant Pathology			
Teaching experience		University, Bikaner . August, 1996 to June	Environmental Science, M.G.S. July 2011 to continuing. e, 2011 Degree and P.G. teaching biology as Lecturer at M.D. P.G agar.
Additional work	2	Chief ProctorConvener University	Advanced Studies of Thar Desert Flying Squad Committee paper Grievance and Redressal

S. No	Title		Grant Period	Cost (In lacs)	Funding Agency
1.	on "Diversi	a Minor Research Project ty and Habitat Ecology of in Northern irrigated Land ert"	2 Years	0.5	UGC
Public	cations:				
I. Boo	ks publishe	d: 08			
Authored: 1. Plant Anatomy and (ISBN. – 978-81-84) 2. Aromatic and esser (ISBN. 978-81-841) 3. Textbook of Envirusing Jaipur (ISBN. 978-84) 4. 4. Handbook of Plate 7611-631) (2012). 5. Medicinal plants of 978-93-82006-22-00. 6. Plant Ecology Green 85-5) (2013). 7. Handbook of Biofer 978-93-82036-68-5. 8. Ethnobotany "A Reesearch Papers Published:		ntial oil plants, Sonali Publications, New Delhi 11-478-2) (2012). ironmental Science and Technology, RBSA Publishers 3-81-7611-630-2) (2012). ant Nutrition, RBSA Publishers, Jaipur (ISBN. 978-81 cultivation Wisdom press publication, New Delhi ISBN 0) (2013). een leaf Publication Varanasi, India (ISBN. 978-93-8210 ertilizers and Biopesticides Black Prints New Delhi (ISBN 5)(2014). Lecent Approach" Madhu publications, Bikaner (ISBN. 81			
B. National Journals: Total Numbers of		paper- 15 (detail l	ist attached)		
C. Cha	Chapters in Edited 03 oks				
Confe	Papers Presented in onference / Seminar/mposium				
E. Inv	Invited Lectures 12				

Ph.D: 11			
S.No.	Name of Scholar	Title of Thesis	Year of Ph.D. Awarded
1	Mrs Nupur Sinha	Ecophysiological studies on <i>Boerhaavia</i> diffuse Linn. (Nyctaginaceae) with reference to Distt. Sriganganagar	2008
2	Mrs. Sawarn Rekha	Comparative studies on primary and secondary metabolities production by some parsitic Angiosperm and their hosts of Arid Zone of Rajasthan grown <i>in vivo & in vitro</i> .	2009
3	Mrs. Ruchi	Diversity and habitate Ecology of Bryophytes in Northern irrigated land of Thar Desert.	2009
4	Ms. Nidhi Sharma	Comparative Phytochemical Analysis of Bacopa moncieri L. in vivo and vitro conditions.	2010
5	Ms. Urmila	Effect of seasonal variations on Nutrient contents of some Medicinal weeds in District. Sriganganagar.	2011
6	Mr. Sanjay Kumar Sharma	Studies on Mosses of Dharmshala Thsil, Kangra, Dist- Himachal Pradesh"	2012
7	Ms. Rekha Karwasra	Diversity of soil microflora in district, Sriganganagar	(Microbiology) 2012
8	Nitesh Kumar	Ethnobotanical survey of District Hamirpur, Himachal Pradesh.	2013
9	Vishal Kumar Chhimpa	Studies on antimicrobial potential of arid zone plants of Northern Rajasthan.	2014 (Microbiology)
10.	Shailender Arora	Studies on the effect of roadside pollution on the photochemistry of certain plants in Southern Delhi.	2016 (Environmental science)
11.	Ved Prakash Siraw	Studies On Pollen Flora Of Irrigated Parts of SriGanganagar Rajasthan	2017 (Botany)

Registered Ph.D. Scholars: 03

S. No.	Name of Scholar	Title of Research work
1.	Ms. Vinod Kumari	Study on vegetation and physicho -chemical properties of soil in
		water logged area of Indira Gandhi Canal in Stage- I
2.	Ashwani Kumar	Studies on impact of Indira Gandhi Nahar Pariyojana on
		Phytodiversity in division Bikaner, Rajasthan
3.	Mahendra Singh	Comparative Analysis of Heavy metals in selected herbivore's feces in different habitats of western Rajasthan

M.Phil Dissertation Supervised: 32

S.No.	Name of Candidate	Title of Dissertation
1.	Shiv Goutam Solanki (2007)	Effect of Saline Irrigation on Chickpea (Cicer Arietinuml.) Genotypes
2.	Suman Sharma (2007)	Effect of Air Pollution on Roadside Plant of Districtsri Ganganagar
3.	Ms. Ramndeep Kaur (2007)	Phytochemical Analysis of (<i>Chenopodium Album</i> And <i>Nicotina Plumbaginifolia</i>)
4.	Ms. Yogpreet Kaur (2007)	The Phytochemical Analysis of Some Plants From District Ganganagar
5.	Vinod Kumari (2008)	Ecological And Ethnobotanical Studies of Rajasthan Desert With Special Reference to Jhunjhunu District
6.	Surender Kumar(2008)	Ecological Study on Bryophytes of Sri Ganganagar District
7.	Miss Alisha Madan(2008)	Phytochemical Analysis of <i>Datura Stramonium</i> And <i>Trianthma Portulacastrum</i>
8.	Rajni Sharma(2008)	A Study of Environmental Awareness In Anupgarh Tehsil
9.	Sanjay Kumar(2008)	Physico-Chemical Characterization of The Sewage of Sri Ganganagar And Modeling of The Sewage Treatment System
10.	Suman Saini(2009)	Fluoride Distribution In Ground Water of Jhunjhunu District And Fluorosis In Rajasthan
11.	Mamta Arora(2009)	Physico-Chemical Characterization of The Soil of District Sri Ganganagar (Rajasthan)
12.	Sandeep Kumar(2009)	Study of Soil Microflora of Sri Ganganagar District With Special Reference to Algae And Fungi
13.	Surendra Singh(2009)	Bio Medical Waste Treatment With Special Reference To Bhagwandas Khetan Hospital, Jhunjhunu (Raj.)

	Other activities	As Convener of the National Seminar on Current Trends in Environmental Research (NSCTER-2015)
32.	Smt. Sharmishtha Sharma (2007)	Water Logging Problem In Hanumangarh District And Surrounding Areas
31.	Ms. Sheenu Booti (2008)	Comparative Studies on The Electrophoretic Pattern of Serum And Milk Whey Protien In Dromedary Camels
30.	Ms. Suman Sharma (2008)	Micropropagation of <i>Bacopa Monneiri</i> L. Penn An Importtant Medicinal Plant
29.	Mr. Dharmendra Kumarkuwal (2007-08)	Biodiversity And Ecological Investigations of Arid Zone Plants
28.	Ms. Rekha Karwasra (2006- 07)	Bacteriological Analysis of Urinary Tract Infection of Sri Ganganagar Zone
27.	Mr. Rajender Kumar (2006- 07)	Studies on Germination Behaviour of Weeds of Rabi Crop
26.	Ms. Rita Choudhary (2006-07)	The Phytochemical Study on Some Plants of The Desert Region
25.	Mr. Vikash (2006-07)	Phenological Study on Marsilea Population
24.	Moolchand Banyla (2011)	Studies of Two Meliaceae Trees With Reference To Nutrition Value.
23.	Abhishek Chra (2011)	Impact of Saline Water Irrigation on Physio-Chemical Properites of Soil in Hanumangarh District.
22.	Poonam Rajvi (2011)	A Study of Environmental Awareness in Sikar City.
21.	Sunita Sharma (2011)	Ethnobotanical Study of Rajasthan Desert With Special Reference to Bikaner District.
20.	Bhanwar Singh Hada (2010)	A Study of Environmental Awareness Among the Students of Kota City (Raj.)
19.	Lokesh Gautam (2010)	Ethnomedicinal Plants Of Jhalawar District (Rajasthan)
18.	Miss Madhu Sharma (2010)	Identification of Weed Flora In Rabi Crop in Sriganganagar
17.	Manuja (2010)	Impact of Saline Water Irrigation on Physico-Chemical Properties of Soil Around Sri Ganganagar City
16.	Miss Poonam Sharma (2010)	Physico-Chemical Analysis of Soil of Thar Desert
15.	Richa Sharma (2010)	Study of Medicinal Plants of Himachal Pradesh
14.	Kshama Sharma (2009)	Study of Morpho-Physiological Changes in Soyabean As Influenced by Climatic Changes of Himachal Pardesh

Seminars and Confere	ences 27	
(organized/attended)		
Membership	Life member, Indian Science Congress Association, Kolkata	
	Life Member, Indian Botanical Society	
	Life member, Indian Fern Society	
Awards	Uparashtrapati Award in Rovering as a rover leader.	
Others	Member District level Environemental Appraisal committee (DEAC)	
	Additional charge of dean student welfare of the University	
	Additional charge of the proctor of the University	
	Chairmen Grievance and reddressal committee of question paper at University level.	

Publications

Published paper in International/National Journals

- 1. Alelopathic effect of *Lantana camara* leaf extract on spore germination of *Marsilea* species. *Journal of Indian Botanical Society* 17-2, 1997.
- 2. Comparision in reproductive capacity of wild and cultivated populations of *Marsilea* species. *J.Phytol. Res.* 11 (2) 187-188, 1998.
- 3. Phenological Studies of wild and cultivated population of to *Marsilea* species, *Indian Fern. J.* 15:65-70, 1998.
- 4. Allelopathic effect of *Parthenium Hysterophorus* leaf extract on spore germination of *Marsilea* species. *J. Phytol. Res.* 13 (1): 2000.
- 5. Diversity of Microflora in paddy fields of Northern Rajasthan. Proceedings of conference on Biodiversity (UGC) held on Sept. 21-22, 2006, M.L.V. Govt. College, Bhilwara.
- 6. The Impact of Ethnobotany in conservation on Natural Resources, Proceedings of conference on Biodiversity (UGC) held on Sept. 21-22, 2006. M.L.V. Govt. College, Bhilwara.
- 7. Comparative Study of total phenol and total free amino acid in wild and cultivated population of *Marsilea* species. *Journal of Phytological Research* 17-1, 2004.
- 8. Stimulatory Effect of "Earthworm body fluid (Vermivash) on seed germination and seedling growth of two Legumes, *J. Phytol Res.* 18 (2): 219-222, 2005.
- 9. Agriculture Based Environmental Restoration, *Oikoassay*, Vol. 19 No. 1 and 2, 2006/13.
- 10. Nutritive contents of some halophytes of I.G.N.P. Phase-I command area Loonkaransar, Bikaner, Western Rajasthan, *J. Phytol Res.* Vol. 19 No. 1, 2006.
- 11. Studies on parthenogenesis in three *Marsilea sepecies*. *Journal of Phytological Research* vol. 19 No. 2, 2006
- 12. Value added processing of arid and semi arid legumes for export opportunities. Presented and published in proceeding of Indian Council of Agricultural Research, New Delhi- 28-30 June, 2008.
- 13. Biotechnology, Biosafety and Intellectual Property Rights and Issues. Presented and published in proceeding of Indian Council of Agricultural Research, New Delhi- 28-30 June, 2008.

- 14. Enhancing Productivity, Nutritional Security and Export Potential through Organic Farming and Environment in Arid Legumes. Presented and published in proceeding of Indian Council of Agricultural Research, New Delhi- 28-30 June, 2008.
- 15. Alelopathic effect of *Lantana camara* (Linn.) on regeneration in Funaria hygrometrica. *Indian Journal of Fundamental and Applied Science* ISSN: 2231-6345 (Online) 2011, Vol. 1(3) July- September pp 177- 182 Choyal and Sharma.
- 16. Distribution of Mosses in the topography of Kangra District (H.P.), India. Indian journal of fundamental and Applied Life Science ISSN: 2231-6345 (Online) Vol. 1 (2) April-June, Page No.154-156 (2011).
- 17. Study of Moss Flora and Growth forms of Moss in varied Habitats in Dharamshala of Kangra District (H.P.), India. *Journal of Fundamental and Applied Science* ISSN: 2231-6345 (Online) 2011, Vol. 1(3) July-September pp 271-273 Choyal and Sharma.
- 18. Study of Bryophytes of Thar Desert with particular reference to Sri Ganganagar District (Rajasthan), India. *Journal of Fundamental and Applied Science* ISSN: 2231-6345 (Online) 2011, Vol. 1(3) July-September pp 239-245 Choyal and Sharma.
- 19. Impact of different culture media on regeneration in *Funaria hygrometrica* and *Pogonatum aloides. International Journal of current Biological and Medical Science*, 2011: 1(4): 154-157
- 20. Preliminary Phytochemical Analysis of some Bryophytes of District Kangra (H.P.) Research Journal of Pharmaceutical, Biological and Chemical Science: October-December, 2011: Vol. 2 Issue 4, Page No. 716 (Impact factor 0.35)
- 21. Evaluation of Allopathic effect of *Lantana camara* (Linn.) on regeneration of *Pogonatum aloiedes* in culture media. *Asian Journal of Plant Science and Research*, 2011, 1 (3): 41-48
- 22. Conservation of Alpine Pasture in Himachal Pradesh, India. Environmental Conservation Journal 12(3), 109-111, 2011, ISSN = 0972-3099 (*Impact factor 0.58*)
- 23. Ethnobotanical notes on some plants used in the treatment of arthritis, rheumatism and other inflammatory disorder. *Indian journal of plant sciences An online international journal Available At http://www.cibtech. Org/jps.htm 2012 vol. 1 (2-3) Jul.-Sept. & Oct.-Dec. 2012,pp.*
- 24. Traditional phototherapy for snake bites by the local rural people of Hamirpur district in Himachal Pradesh (India). *Biological forum An International Journal* 4(1): 98-106 (2012).
- 25. Ethnobotnical notes on some plants used for the treatment of Leucorrhoea and other Gynecolgical problems in Hamirpur district of Himachal Pradesh *Indian Journal of fundamental and applied Life Sciences, An online international Journal Available at http://www.cibtech. Org/jls.htm*(2012)vol.2 (4) October-December,pp. 126-133.
- 26. Traditional use of some plants of Hamirpur district of Himachal Pradesh for the treatment of Jaundice, Hepatitis and other Liver Disorders. *International Journal of theoretical & Applied Sciences*, 4(2): 201-205(2012)
- 27. Traditional health cure practices used for Respiratory Disorders by the rural people of Hamirpur district of Himachal Pradesh *Life Sciences Leaflets vol.* 4(2013) page no. 41-50.
- 28. Ethno- Medical uses of some plants of lower foot hills of Himachal Pradesh for the treatment of oral Health problems and other Mouth disorders. *International journal of advanced research* (2013), Volume 1, Issue 5,1-7. (Impact factor 1.659)
- 29. Ethnobotanical survey of medicinal plants used for the treatment of different diseases in Bikaner district of Rajasthan. *International Journal of advanced research* (2013), vol.1, Issue 8, 835-849(Impact factor 1.659)
- 30. Ethno -medicinal uses of some plants of Hamirpur district of Himachal Pradesh for the treatment of piles. *Life Sciences Leaflets* (2014) *Volume 49 Online & Print Page- 01 to 10.*

- 31. Traditional uses of some medicinal plants of Hamirpur district of Himachal pardesh for the treatment of Diabetes. *International Journal of advanced research* (2014), Volume 2, Issue 2, 131-139 (Impact factor 1.659)
- 32. Phytochemical monitoring of some Plants Exposed to vehicular pollution at Badarpur Ashram Road, New Delhi, India. *Asian Resonance(July-2014)* VOL-III, 91-96/
- 33. Evaluation of Air Pollution Tolerance Index (Apti) of Selected Plants Species at Sarita Vihar, New Delhi, India. *Periodic Research*(2014), VOL.-III, ISSUE-I, 178-185
- 34. Traditional Uses of Some Plants of Hamirpur District as a Blood Purifier. *Biological Forum An International Journal (2014,)* **6**(2): 357-363.
- 35. Traditional phytotherapy used by the rural peoples of Hamirpur District of HP in the treatment of sexually transmitted diseases mainly Gonorrhea and Syphilis. *Journal of Agriculture and Ecology* (2017) 4: 51-56
- 36. Study of heavy metals in soil, water and some crops of SriGanganagar (Rajasthan), India. *Journal of Phytological Research* (Accepted for Publication) 2017.

Edited book chapter:

- 1. Air-born microbio particles as allergens, Recent trends in Microbiology (Edited book), Madhu Publications, Bikaner. (Edited Book ISBN 81-86644-23-7, 2012)
- 2. Some important Ethnomedicinal plants of Hamirpur District, Himachal Pardesh. Ethobotany "A Recent Approach" 60-67 (**Edited book ISBN 81-86644-26-1, 2015**) Madhu Publications, Bikaner.
- 3. Ethnomedicinal Notes on some Magico- Religious plants of Himachal Pardesh. Ethobotany "A Recent Approach" 155-171 (**Edited book ISBN 81-86644-26-1, 2015**) Madhu Publications, Bikaner.

Presented paper in conferences:

- 1. Comparative Analysis of total soluble protein and total soluble sugars in wild and cultivated population's of *Marsilea* species. XXVIII Conference of Indian Botanical Society Oct. 24-26, 2005. BSI Dehradoon.
- 2. Plant of Thar Desert and Bio-pollution, Presented in National Seminar on Natural Resource management (UGC) Oct. 31-Nov. 2, 2006 Govt. Dungar College, Bikaner.
- 3. Bioinformatics: The foundation key of present and future biotechnology, presented in National Seminar on "Bioinformatics and Computer Applications Nov. 26-27, 2006, Organized by University of Bikaner and M.N. Institute of Applied Sciences, Bikaner.
- 4. Comparative study of Alkaliphiles of Natural and Alkaline Environment presented in National Conference on Emerging Trends in Microbiology and Biotechnology, 29-30 Jan., 2007, Organized by Dr. Tanveer Malawat College of Biosciences, Bikaner, Society of Basic and applied Microbiologist and University of Bikaner, Bikaner.
- 5. A study on Naso-bronchial allergy causing airborne fungal spores in Bikaner, presented in National Conference on Emerging Trends in Microbiology and Biotechnology, 29-30 Jan., 2007, Organized by Dr. Tanveer Malawat College of Biosciences, Bikaner, Society of Basic and applied Microbiologist and University of Bikaner, Bikaner.
- 6. Export potential in unutilized plants of desert area of Rajasthan "Desert Dwellers". Presented and published in proceeding of Indian Council of Agricultural Research, New Delhi. (28-30 June, 2008).

- 7. Effect of the air pollution on leaf optics of the road side plants of district Sriganganagar. Presented in 36th National conference (26-28 September 2008) changing Geographies and Overt for sustainability. Dr. B.R.A. Govt. College, Sri Ganganagar.
- 8. Study of Biodiversity in the Pong Wetland (Himachal Pradesh). International Conference on Advances in Ecological Research- Maharaja Ganga Singh University, Bikaner in Colloborational with Nature Conservators. (December 19-21, 2011).
- 9. Plant: Taxonomy and Diversity presented in National seminar on "National Workshop on Biodiversity: Measurement, Assessment, and Conservation" (sponsored by UGC, New Delhi) February 21-23, 2012 organized by Maharishi Dayanand College Sri Ganganagar.
- 10. English place vital role as medium of technical education presented in National symposium on "Interrogating new worlds of English language teaching" Department of English, Maharaja Ganga Singh University, Bikaner & English Language teaching Institute, IASE, Bikaner. (24-25 February 2012).
- 11. Role of Ethnic and Indigenous people of Himachal Pradesh in the Conservation of Phytodiversity. Presented in National Seminar on "Current Trends in Environmental Research" (February 28- March 02, 2015) Department of Environmental Science Maharaja Ganga Singh University, Bikaner.
- 12. Estimation of Phytochemical characters of some plants in response to vehicular Air Pollution Stress at kalaji, New Delhi, India. Presented in National Seminar on "Current Trends in Environmental Research" (February 28, March 02, 2015) Department of Environmental Science Maharaja Ganga Singh University, Bikaner.
- 13. Phytochemical change in some selected trees induced by automobile exhaust at Nehru Place, New Delhi, India. Presented in National Seminar on "Current Trends in Environmental Research" (February 28, March 02, 2015) Department of Environmental Science Maharaja Ganga Singh University, Bikaner.
- 14. Variation in Air Pollution Tolerance index of some plants at Malviya Nagar, New Delhi, India. Presented in National Seminar on "Overpopulation and its effects on Environment" (January 15-16, 2016) UGC Cell Gramin Mahila Mahavidalaya, Sikar Rajasthan.
- 15. Urbanization and Urban Climate: A Study of Synoptic Transformation of Spatial Environment. Presented in National Seminar on "Overpopulation and its effects on Environment" (January 15-16, 2016) UGC Cell Gramin Mahila Mahavidalaya, Sikar, Rajasthan.
- 16. Study on Medicinal Plants of the Thar Desert of Bikaner Division, Rajasthan. Presented in National Seminar on "Agriculture Resource Management for Sustainability and Eco-Restoration" (March 11-13, 2016) Society for Agriculture and Arid Research ICAR-CIAH, Bikaner, Rajasthan.
- 17. Survival strategies of plants in North-Western Desert of Rajasthan. Presented in National seminar on "Agriculture Resource Management for Sustainability and Eco-Restoration" (March 11-13, 2016) Society for Agriculture and Arid Research ICAR-CIAH, Bikaner, Rajasthan.
- 18. State Universities: Facing identity of crisis in whirlpool of political interference. Presented in National Seminar on "National Policy on Education 2016: Issues, Chanllenges and Suggestions"(17th October 2016) Organized by Maharaja Ganga Singh University, Bikaner Rajasthan.
- 19. Phytochemical changes in certain plants due to vehicular emission around sarita vihar, New Delhi, India. Presented in National Seminar on Environmental Management and Technology (8-9 March, 2017) Organized by Department of Environmental Science, Maharaja Ganga Singh University, Bikaner, Rajasthan.

20. The interactive whiteboard in English as a Foregin Language (EFL) Classroom. Presented in National Seminar by Internal Quality Assurance Cell on Quality Improvement and Assessment in Education (13-14 May, 2017) Organized by J.B.T.T. Institute, Sadulsahar.

Invited lectures

- 1. An invited talk "Methods of Data collection" Ph.D. course work (MPCET-2013) at MGS University, Bikaner on 12-07-2014.
- 2. Rajasthan desert and impact of canal in north-western Region. National Seminar on Current Trends in Environmental Research (February 28, March 02, 2015) Department of Environmental Science Maharaja Ganga Singh University, Bikaner.
- 3. An invited talk "Guidelines for writing a Research paper on 30-11-2015 at Ph.D. Course work MPCET-2014 phage I at MGS University, Bikaner.
- 4. An invited talk "Higher education and women's rights "one day National workshop on women's Rights as Human Rights (25th January, 2016) at Maharaja Ganga Singh University, Bikaner.
- 5. A workshop attended on "Climate Change Mitigation and Adaptiation in Hot Arid Region" (26th February, 2016) Central Arid Zone Research Institute, Regional Research Station, Bikaner
- 6. An invited talk on National policy on Education and Human rights two days National Seminar (14-15 May, 2016) at J.B.T.T. Institute, Sadulsahar.
- 7. A invited lecture "Time and stress Management" on 27/09/2016 at Ph.D. Course Work-2015, Phase- I Organized from 11/08/2016- 22/10/2016 in Maharaja Ganga Singh University, Bikaner.
- 8. A invited lecture "women's role in education as a vital national building" in National Seminar on Education and Gender Sensitivity (October 16-17, 2016) Organized by Kanoria B.Ed. College, Mukundgarh, Rajasthan.
- 9. A invited lecture "Traditional practices of natural resources conservation" at SKD College for higher education, Hanumangarh, Rajasthan (December 10, 2016).
- 10. A invited lecture on "New trends in Research in Present Education Scenario" in National Workshop on Research Methodology (20 December, 2016) Organized by Gramotthan Vidyapeeth College of Education (CTE), Sangaria, Distt.- Hanumangarh Raj.
- 11. A invited lecture "Use of Biotechnology for the Human Welfare" in National Conference on Biotechnology for sustainable Development (December 23-24, 2016) Organized by Maharshi Dayanand College Sri Ganganagar, Rajasthan.
- 12. A invited talk on "KEY TO A VIRTUOUS LIFE" at Ph.D. Course Work, (MPCET-2016) 03-10-2017 in Maharaja Ganga Singh University, Bikaner.

Date: 13.04.2018

Place: Bikaner Rajaram Choyal