



Delhi University Faculty Details

Curriculum Vitae of Professor Ved Pal Singh

| Title | Professor | First Name | Ved Pal | Last Name | Singh | Photograph |
|---|----------------------------|--|---|-----------|-------|------------|
| Designation | | Professor | | | | |
| Department | | Department of Botany | | | | |
| Address (Campus) | | University of Delhi (Main Campus) | | | | |
| (Residence) | | A-29 Sadat Pur Colony, Karawal Nagar Road, Delhi – 110 094 | | | | |
| Phone No (Campus) | | +91-11-27662450 | | | | |
| (Residence) <small>optional</small> | | +91-11-27667573 (Departmental Office) | | | | |
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| Email | | vpsingh_biology@rediffmail.com | | | | |
| Education | | | | | | |
| Degree | Institution | Year/Division | Details | | | |
| B.Sc. (Hons) | A.M.U. Aligarh | 1972 (First Div.) | Subjects : Main: Zoology; Botany & Chemistry (Subsidiary) | | | |
| M.Sc. | G.B.P.U.A. & T. Pantnagar | 1975 (First Div.) | Subjects: Major: Genetics Minor: Biochemistry | | | |
| Ph.D. | University of Delhi | 1981 | Title of Thesis: "Investigations on the Phosphatases of <i>Thermoactinomyces vulgaris</i> " | | | |
| Career Profile | | | | | | |
| Organization / Institution | Designation | Duration | Role | | | |
| University of Delhi | UGC/CAS Research Associate | 1981-1984 | Teaching and research | | | |
| University of Delhi | UGC Research Scientist A | 1984-1986 | Teaching and Research | | | |
| University of Delhi | Lecturer | 1986-1994 | Teaching and Research | | | |
| University of Delhi | Reader/Associate Professor | 1994-2007 | Teaching and Research | | | |
| University of Delhi | Professor | 2007 – Cont... | Teaching and Research | | | |
| Research Interests / Specialization: Applied Microbiology and Biotechnology | | | | | | |
| [<i>Microbial Genetics, Microbial Adaptation (Thermophily) , Biotransformations and Biological Control</i>] | | | | | | |
| Teaching & Research Experience: ~ 32 Years | | | | | | |
| <u>Courses Taught:</u> | | | | | | |
| (i) Molecular Biology and Genetics (M.Phil.); (ii) Cytogenetics, Molecular Genetics & Biostatistics (M.Sc. Final); (iii) Microbial and Molecular Genetics (M.Sc. Final); (iv) Microbial Genetics (M.Sc. Final); (v) Microbes and Microbial Technology (M.Sc. Final); (vi) Genetics and Cytogenetics (M.Sc. Prev.); (vii) Microbiology (M.Sc. Prev.) | | | | | | |

International Awards:

- * **UNESCO/ROSTSCA Young Scientist Award** in the field of Applied Microbiology and Biotechnology – 1987.
- * **Commonwealth Academic Staff Fellowship** awarded to do Post-Doctoral Research at University of Strathclyde Royal College, Glasgow (U.K.) – 1990-1991.

National Awards:

- * **INSA Young Scientist Award** – 1985 (Presented by the Hon'ble Vice-President of India, Shri R. Venkataraman in the 73rd Session of Indian Science Congress, January 3-8, 1986 at University of Delhi).
- * **National Youth Development Award** – 2004 (Presented by the Hon'ble President of Khadi and Village Industries Development Agency of India, Shri Manish Kumar Shekhar, at National Youth Summit, January 21-22, 2004 at India International Centre, New Delhi).

Research Fellowships Awarded:

- * **UGC/CAS Junior and Senior Research Fellowships** – 1976-1980.
- * **CSIR Post-Doctoral Research Fellowship** – 1981.

SPECIAL ATTAINMENTS / ACADEMIC DISTINCTIONS

International Honours / Distinctions:

- * **Represented India** in the Fifth, Sixth and Seventh International Symposia on Actinomycetes Biology held at Oaxtepec (Mexico, 1982), Debrecen (Hungary, 1985) and Tokyo (Japan, 1988), respectively.
- * **INSA/COSTED Travel Fellowship** to visit Hungary with Indo-Hungarian Cultural Exchange Programme – 1985 to act as **Chairman**, Biochemistry Session, Sixth International Symposium on Actinomycetes Biology, Hungary – 1985.
- * **British Council Visitor** to United Kingdom – 1987.

- * **Invited Member, High Level Review Committee** for Commonwealth Scholarship and Fellowship Programs, Chaired by Professor Cedric Hassall FRS at British Council Division, British High Commission, New Delhi, September 27, 1993.
- * **Chairman**, Session on Gender Bias, International Seminar on Challenges before Human Resource Development in this Millennium, New Delhi, January 18-20, 2002.
- * **Editor**, Elsevier's International Periodical: *Progress in Industrial Microbiology* [Volume 32 (1995) and Volume 36 (2002)].
- * **Member, Scientific Program Committee**, Microbial Diversity 2005 – International Conference on Microbial Diversity: Current Perspectives and Potential Applications, New Delhi, April 16-18, 2005.
- * **Organizing Secretary and Member Editorial Committee**, International Conference on Applied Psychology: Algae in Biotechnology and Environment, Delhi, February 14-15, 2006.
- * **Member, World Association of Young Scientists (WAYS; Formerly: World Academy of Young Scientists):** A Global Network under the aegis of UNESCO.
- * **Member, Advisory Committee**, International Society for Conservation of Natural Resources.
- * **Additional Secretary**, International Society of Plant Morphologists (ISPM) (2005-2009).
- * **Chairman, Life Science Section: Session 5**, International Congress of Environmental Research ICER-12), Kuala Terengganu, Malaysia, November 22-24, 2012
- * **Coordinator, Life Science Section: Session 6**, International Congress of Environmental Research ICER-12), Kuala Terengganu, Malaysia, November 22-24, 2012.
- * **Executive Editor**, Souvenir & Abstracts, International Conference on Biotechnology: A Rendezvous with Basic Sciences for Global Prosperity (BTBS-2012), New Delhi, December 26-27, 2012.
- * **Convener**, International Conference on Biotechnology: A Rendezvous with Basic Sciences for Global Prosperity (BTBS-2012), New Delhi, December 26-27, 2012.
- * **President**, International Society of Plant Morphologists (ISPM) (2010-2014).
- * **Editor**, VRI- Phytomedicine (VRI-PM), An International Scientific eJournal.
- * **Member, Editorial Board**, European Journal of Molecular Biology.
- * **Member, Advisory Board**, WebmedCentral (WMC), U.K. Publisher of many Peer-Reviewed International Journals "PUBLISHED ONLINE".

National Honours / Distinctions:

- * **Member, Organizing Committee and Editorial Board**, National Symposium on Biology of Reproduction in Plants”, Delhi, December 1-5, 1981.
- * **Resource Person**, National Workshop on Microbial and Molecular Genetics, Department of Botany, Patna University, Patna, February 6-26, 1983.
- * **Resource Person**, National Workshop on Microbial Genetics, Department of Microbiology, University of Poona, Pune, December 19-20, 1985.
- * **Organizing Secretary and Member Editorial Board** (Souvenir and Abstracts), National Symposium on Microbes in Plant Improvement and Environmental Protection, Delhi, December 23-24, 1997.
- * **Member, Organizing Committee**, National Symposium on Sustainable Aquaculture, Delhi, February 20-21, 1998.
- * **Resource Person** for the Course on Isolation of Transforming DNA from Prokaryotic Microorganisms in the Refreshers’ Course for Teachers of Indian Universities at H.P. University, Shimla, December 15, 1999.
- * **Member, Organizing Committee and Editorial Board** (Abstracts) and Treasurer of Golden Jubilee Symposium on Biotechnological Innovations in Conservation and Analysis of Plant Diversity, Delhi, February 7-9, 2001.
- * **Chairman**, Session on Genomics of Human Diseases, Annual Symposium in Biomedical Science, Delhi, April 13-14, 2001.
- * **Resource Person** for the Orientation Course for Botany Teachers at Academic Staff College, Himachal Pradesh University, Shimla on December 24-25, 2001.
- * **Member, Advisory Committee**, National Seminar on Genetically Modified and Transgenic Food Crops, Delhi, November 26-27, 2002.
- * **Member, Advisory Committee**, National Seminar on Climate Change in India and Impact on Plant Diversity and Productivity, Delhi, December 22-23, 2003.
- * **Member, Organizing Committee and Treasurer**, National Seminar on Genetically Modified Organisms –Biosafety Aspects, Delhi, March 10-11, 2005.
- * **Resource Person**, Workshop organized by Intel for School Teachers for Science Talent Discovery Fair, New Delhi, September 17, 2005.
- * **Co-Chairman**, Session on Young Scientists Award Presentations, 28th Annual Conference of Indian Botanical Society, Dehradun, October 24-26, 2005.

- * **Chairman**, Psychology Session, 9th National Conference on Life Span Development: Multidisciplinary Perspectives”, Delhi, November 5-6, 2005.
- * **Chairman**, Technical Session: Application of Biotechnology in the Management of Environmental Pollution in the Environmental Sciences Section, 93rd Indian Science Congress, Hyderabad, January 3-7, 2006.
- * **Co-Chairman**, Technical Session (IV) in the Plant Sciences Section, 93rd Indian Science Congress, Hyderabad, January 3-7, 2006.
- * **Member, Advisory Committee**, National Seminar on Relevance of Botany in the Conservation and Improvement of Plants, Delhi, February 8-9, 2006.
- * **Member, Organizing Committee**, Third HR Meet: Resourceful Humans: The New Mantra, New Delhi, February 26, 2006.
- * **Coordinator, Treasurer and Member, Editorial Board**, National Conference on Biodiversity Related International Conventions: Role of Indian Scientific Community, New Delhi, March 8-10, 2006.
- * **Sectional Committee Member (Elected)**, Environmental Sciences, Indian Science Congress Association (2006-2007).
- * **Member, Editorial Board**, Journal of Plant Development Sciences (An International Quarterly Journal).
- * **Member, Advisory Board**, Biotech Today.
- * **Members, Editorial Board**, LS – An International Journal of Life Sciences.
- * **Member, Editorial Board**, Journal of Environmental Research and Development.
- * **Guest of Honour**, National Conference on Innovative Research Trends in Biological Sciences, September 8-9, 2012, **Akola, India**.
- * **President**, Society for the Promotion of Plant Science Research (2013-2014).

Other Relevant Information

Research Supervisor (Guide):

Ph. D. : 11 (Awarded) 8 (in Progress)

M. Phil. : 19 (Awarded)

One Ph.D. thesis supervised was awarded **Prof. N.S. Rangaswamy Award** for best Ph.D. thesis.

Research Projects Handled as Principal Investigator:

- * **D.S.T. Young Scientist Project** entitled “Extracellular Amylase and Cellulase Enzymes of *Thermoactinomyces vulgaris* and Bioconversion of Non-conventional Substrates for Sugar Production”, 1984 – 1986.
- * **U.G.C. Research Scientist Project** entitled “Genetic Modification of Active Transport System in *Thermoactinomyces vulgaris*: Relationship Between Membrane-ATPase and Active Transport in Genetically Different Strains”, 1984 – 1986.
- * **I.N.S.A. Young Scientist Project** entitled “Biotechnological Potential of Thermophilic Actinomycetes”, 1985 – 1989.
- * **U.G.C. Sponsored Major Research Project** entitled “Evaluation of Antagonistic Potency of *Gliocladium virens* against some Tropical Pathogenic Fusaria for Biological Control”, 2001 – 2004.
- * **D.S.T. Sponsored Research Project** entitled “Biological Control of *Fusarium* Wilt of Pigeon pea (*Cajanus cajan*) by Rhizospheric Bacterial Soil Isolates: An Integrated Disease Management (IDM) Approach”, 2007 – 2010.

Presentations/Participation/Keynote Addresses in International and National Seminars, Symposia, Conferences:

1. Singh A, **Singh VP** (2012) Effect of Ca^{2+} and Mn^{2+} on amylase production by an obligate thermophile, *Thermoactinomyces vulgaris*. International Conference on Biotechnology: A Rendezvous with Basic Sciences for Global Prosperity (BTBS-2012), December 26-27, 2012. **New Delhi, India.**
2. Kumar A, Ram H, Kohli, I, **Singh VP** (2012) Screening, identification and optimization of media composition for extracellular lipase production by soil bacteria from cow shade area. International Conference on Biotechnology: A Rendezvous with Basic Sciences for Global Prosperity (BTBS-2012), December 26-27, 2012. **New Delhi, India.**
3. Kashyap M, Rahman Z, Lal M, Thomas L, **Singh VP** (2012) Characterization of dye decolorizing bacteria from textile dye industry. International Conference on Biotechnology: A Rendezvous with Basic Sciences for Global Prosperity (BTBS-2012), December 26-27, 2012. **New Delhi, India.**
4. Kedia VK, **Singh VP** (2012) Mn^{2+} dependent thermophilic protease of *Thermoactinomyces vulgaris* Tsiklinsky. International Conference on Biotechnology: A Rendezvous with Basic Sciences for Global Prosperity (BTBS-2012), December 26-27, 2012. **New Delhi, India.**

5. Mathur P, Singh SD, **Singh VP**, Kapoor R (2012) Influence of elevated CO₂ on natural incidence and severity of three diseases in *Brassica juncea*. International Conference on Biotechnology: A Rendezvous with Basic Sciences for Global Prosperity (BTBS-2012), December 26-27, 2012. **New Delhi, India.**
6. Mandal S, **Singh VP**, Kapoor R (2012) Mycorrhizal technology to improve the steviol glycosides and biomass of an anti-diabetic plant *Stevia rebaudiana*. International Conference on Biotechnology: A Rendezvous with Basic Sciences for Global Prosperity (BTBS-2012), December 26-27, 2012. **New Delhi, India.**
7. **Singh VP** (2012) Microsome technology as a potential bioremediation option for health and environmental protection. International Congress of Environmental Research (ICER-12), November 22-24, 2012, **Kuala Terengganu, Malaysia.**
8. **Singh VP** (2012) *Keynote Address* on Global warming and dynamics of life at high temperature. National Conference on Innovative Research Trends in Biological Sciences, September 8-9, 2012, **Akola, India.**
9. Kumar A, **Singh VP** (2011) Optimization and production of extracellular thermophilic lipase from wild-type strain of *Thermoactinomyces vulgaris* 1227. 52nd Annual Conference of Association of Microbiologists of India (AMI-2011 – International Conference on Microbial Biotechnology for Sustainable Development, november 3-6, 2011, **Chandigarh, India.**
10. Laisram N, **Singh VP** (2010) Isolation and characterization of an antifungal compound from *Pseudomonas fluorescense* against *Fusarium* spp. 51st Annual Conference of Association of Microbiologists of India (AMI-2010), International Symposium on Recent Advances in Cross-disciplinary Microbiology: Avenues and Challenges, December 14-17, 2010, **Ranchi, India.**
11. **Singh VP** and Bhatnagar K (2008) Role of calmodulin and thiol compounds in genetic transformation in a thermophilic prokaryote – *Thermoactinomyces vulgaris*. XX International Congress of Genetics, July 12-17, 2008, **Berlin, Germany.**
12. Laisram N, Sharma M, Kumar R and **Singh VP** (2008) Biological control of plant pathogenic fusaria by rhizospheric bacterial soil isolates. First Indo-Danish DU-SDU Seminar on Emerging Trends in Interfacial Areas of Chemical, Biological and Environmental Sciences, March 17-18, 2008, **Delhi, India.**
13. Kedia VK, Laisram N. Singh A and **Singh VP** (2008) Antimicrobial activity of thermophilic prokaryote – *Thermoactinomyces vulgaris* against some selected bacteria and fungi. First Indo-Danish DU-SDU Seminar on Emerging Trends in Interfacial Areas of Chemical, Biological and Environmental Sciences, March 17-18, 2008, **Delhi, India.**

14. Laisram N and **Singh VP** (2006) Screening of rhizospheric soil isolates of *Gliocladium virens* for biological control of pathogenic *Fusarium* spp. 93rd Indian Science Congress, January 3-7, 2006, **Hyderabad, India.**
15. **Singh VP**, Mohanta HS and Kedia VK (2005) Strain-specificity of phosphatases in an obligately thermophilic actinomycete – *Thermoactinomyces vulgaris*. Microbial Diversity-2005: International Conference, Microbial Diversity: Current Perspectives and Potential Applications. April 16-18, 2005, **New Delhi, India.**
16. Kumar R, Singh I and **Singh VP** (2005) Quantitative and qualitative studies of peroxidase in toxigenic and non-toxigenic *Aspergillus flavus* strains. Microbial Diversity-2005: International Conference, Microbial Diversity: Current Perspectives and Potential Applications. April 16-18, 2005, **New Delhi, India.**
17. Laisram N, **Singh VP** and Sharma M (2005) Isolation and screening of bacteria against *Aspergillus flavus* and *Fusarium* spp. International Symposium on Integrated Management of Fungal Diseases(IMF), February 24-27, 2005, **Varanasi, India.**
18. Singh I and **Singh VP** (2004) Comparative studies of phosphatases in toxigenic and non-toxigenic strains of *Aspergillus flavus*. Microtech-2004: 45th Session of Association of Microbiologists of India, November 23-25, 2004, **Karnal, India.**
19. Agrawal V, Singh S and **Singh VP** (2004) Isolation of a bioactive compound (psoralen) from *Psoralea corylifolia* Linn. and its biotechnological applications. IUPAC International Conference on Biodiversity and Natural Products: Chemistry and Medical Applications, January 26-31, 2004, **New Delhi, India.**
20. Bhatnagar K and **Singh VP** (2001) β -Lactam antibiotics influence colonial patterns in *Thermoactinomyces vulgaris* as revealed by scanning electron microscopic studies. Thermophiles – 2001: International Symposium on Biology and Biotechnology of Thermophilic Microbes, December 3-7, 2001, **New Delhi, India.**
21. Kidwai M, Kumar R, **Singh VP** and Bala M (1997) Fungicidal activity of Organomercurials. National Symposium on Microbes in Plant Improvement and Environmental Protection, December 23-24, **Delhi, India.**
22. **Singh VP** (1997) Thermolabile enzymes in obligate thermophile - *Thermoactinomyces vulgaris*. National Seminar on Plant Physiology for Sustainable Agriculture, March 19-21, **New Delhi, India.**
23. **Singh VP** (1997) Biotransformations of pesticides: An aspect of bioremediation Technology on Herbal and Microbial Pesticides, February 14-16, 1997, **Varanasi, India.**
24. **Singh VP** and Bhatnagar AK (1996) Role of microbes in waste utilization. First International Symposium on Microbial Exploitation, March 13-16, 1995, **Varanasi, India.**

25. **Singh VP** (1994) pH- and temperature-dependent aflatoxin degradation by the toxigenic *Aspergillus flavus*. National Symposium on Emerging Technologies in Environmental Conservation, March 29-30, **New Delhi, India.**
26. **Singh VP** and Smith JE (1991) Biotechnological implications of high temperature metabolism in microorganisms. 60th Jubilee Conference of Society of Applied Bacteriology, July 16-18: Society of Applied Bacteriology Meetings (Published in *J. Applied Bacteriology* 71: xix), **Bristol, U.K.**
27. Kapoor A, **Singh VP** and Mukerji KG (1988) Studies on the phosphatases of mycorrhizal and non-mycorrhizal *Trigonella* roots. First Asian Conference on Mycorrhizae, January 29-31, 1988, **Madras, India.**
28. **Singh VP** (1989) Effect of Ca²⁺ on extracellular amylase and cellulase production in thermophilic actinomycete isolates. National Seminar on Cell Biology, January 16-18, 1989, **Mysore, India.**
29. **Singh VP** and Gupta N (1988) Screening of thermophilic actinomycete strains for synthesis of extracellular amylase and cellulase enzymes. P. 4 (21) VII International Symposium on the Biology of Actinomycetes, May 22-26, 1988, **Tokyo, Japan.**
30. **Singh VP** (1987) **Keynote Address:** Biology of Thermophilic Actinomycetes. DAE Symposium on Biology and Molecular Biology of Streptomycetes. February 11-13, **Pune, India.**
31. **Singh VP** (1986) **Keynote Address:** Genetic Engineering and Industry. National Seminar on Interaction between Research in Universities and Industries, July 9-11, 1986, **New Delhi, India.**
32. **Singh VP** (1985) *In vivo* effects of Ca²⁺ on ATPase of an obligate thermophile - *Thermoactinomyces vulgaris* Under shake culture conditions. VI International Symposium on the Biology of Actinomycetes, August 26-30, **Debrecen, Hungary.**
33. **Singh VP** (1985) Partial purification and characterization of phosphatase II from a thermophilic actinomycete - *Thermoactinomyces vulgaris*. VI International Symposium on the Biology of Actinomycetes, August 26-30, **Debrecen, Hungary.**
34. Agarwal S, Sinha U and **Singh VP** (1983) ATPase activities in different mutants of *Aspergillus nidulans*. XV International Congress of Genetics, December 12-21, 1983, **New Delhi, India.**
35. **Singh VP** (1983) Can Recombinant-DNA technology provide any solution for oncogene regulation? International Symposium on Gene cloning and Recombinant-DNA technology, December 7-9, 1983, **Patna, India.**
36. **Singh VP** and Sinha U (1982) Thermostability and turnover of membrane-ATPase in *Thermoactino-mycetes vulgaris*. VI All India Cell Biology Conference, December 25-27, 1982, **Delhi, India.**

37. Sinha U and **Singh VP** (1982) Cation-dependent activity and stability of ATPase in *Thermoactinomyces vulgaris*. V International Symposium on Actinomycetes Biology, August 16-19, **Oaxtepec, Mexico**.
38. **Singh VP** and Sinha U (1982) Calcium-dependent growth and metabolism of *Thermoactinomyces vulgaris*. National Symposium on Recent Trends in Botanical Researches, March 14-16, 1982, **Patna, India**.
39. Sinha U and **Singh VP** (1978) Regulation of phosphatases in *Thermoactinomyces vulgaris*. Third All India Congress of Cytology and Genetics, October 24, 1978, **Hisar, India**.
40. Sinha U and **Singh VP** (1978) Thermostable phosphatases of *Thermoactinomyces vulgaris*. National Symposium on Advancing Frontiers of Plant Biology, December 21-23, 1978, **Varanasi, India**.

Invited Lectures (titled below) Delivered in India and Abroad:

1. Living under Changing Global Environment, **Invited Lecture** in the National Conference on Biodiversity and Climate Change, Maharaja Agrasen College, **Delhi, India**, April 3-4, 2013.
2. Understanding life at high temperature. **Lead Lecture** in Plant Science Section, 98th Indian Science Congress, **Chennai, India**, January 3-7, 2011.
3. High-temperature enzyme catalysis and thermoadaptation of microorganisms. Platinum Jubilee Guest Lecture, National Conference on New Horizons in Plant Sciences, Meerut College, **Meerut, India**. October 23-24, 2010.
4. Molecular Dynamics and Microbial Life at High Temperature, Under the Auspices of Biochemical Society, Deen Dayal Upadhyay College, University of Delhi, **Delhi**, February 24, 2009.
5. Life-forms at High Temperature, Under the Auspices of Botanical Society, Hindu College, University of Delhi, **Delhi**, February 11, 2009.
6. Calcium Signaling Pathways Regulate Calmodulin-mediated Genetics Transformation in Thermophilic Prokaryotes at School of Biosciences, University of Birmingham, **Birmingham, U.K.**, July 15, 2008.
7. Macromolecular Dynamics and Metallomics in Understanding Microbial Life at High Temperature at John Innes Centre, **Norwich, U.K.**, July 14, 2008.
8. Microbes vs Man in the Valedictory Function of Botanical Society, Daulat Ram College, University of Delhi, **Delhi**, March 20, 2008.
9. Print Media and Science Journalism in the Refresher Course for Media Persons at the Department of Adult, Continuing Education and Extension, University of Delhi, **Delhi**, February 25, 2008.

10. Man and the Microbes in the Refresher Course for Botany Teachers at the Department of Botany, University of **Jammu**, December 22, 2006.
11. Man vs Microbes and Media in the Refresher Course in Life Sciences with Special Reference to Anthropology at the Centre for Professional development in Higher Education, University of Delhi, **Delhi**, December 7, 2006.
12. Global Warming and Sustainability of Life at High Temperature in the Refresher Course in Biotechnology at the Department of Botany, University of Rajasthan, **Jaipur**, December 29, 2005.
13. Genetic Engineering: Technique and Applications at the Academic Staff College, Himachal Pradesh University, **Shimla**, December 25, 2001.
14. Genetic Recombination in Bacteria through Transformation at the Academic Staff College, Himachal Pradesh University, **Shimla**, December 24, 2001.
15. Genetic Engineering and Biotechnology at Academic Staff College, Himachal Pradesh University, **Shimla**, December 14, 1999.
16. Gave an **Invited Radio Talk at Delhi B under Vigyan Patrika Programme** on National Science Day, February 26, 1994.
17. Biomolecular Stabilizers and Microbial Life at High Temperatures at the Institut fur Mikrobiologie und Landeskultur, Justus-Liebig Universitat, **Giessen, Germany**, May 27, 1987.
18. Adaptation of Microorganisms to High Temperature at the Institut fur Mikrobiologie und Landeskultur, Justus-Liebig Universitat, **Giessen, Germany**, May 26, 1987.
19. Genetic Transformation: Competence of Bacteria and their Kinetic Properties at the Department of Microbiology, University of Poona, **Pune**, December 20, 1985.
20. Genetic Transformation in Prokaryotic Microorganisms at the Department of Microbiology, University of Poona, **Pune**, December 19, 1985.
21. Life: Its Definition at Modern School, Barakhamba Road, **New Delhi** on October 6, 1985.

Delivered a series of lectures in the National Workshop on Microbial and Molecular Genetics organized at the UGC Centre of Special Assistance, Department of Botany, Patna University, **Patna** during February 6-26, 1983 on the following topics:
 22. Transformation I: General Aspects
 23. Transformation II: Competence and Kinetics
 24. Transduction
 25. Conjugation
 26. Thermophilic Microorganisms and their Macromolecules at the Department of Botany, Patna University, **Patna**, February 6, 1982.

Participation in Workshops:

1. **Expert Member** in NCERT Workshops for reviewing the syllabi of new biology courses for Class XI and Class XII at the Department of Education in Science and Mathematics, National Council of Educational Research and Training, New Delhi during June 27-29 & July 21-22, 2005.
2. Participated in NBAIM-CAB International, UK Joint Workshop on Isolation, Preservation and Conservation of Agriculturally Important Microorganisms and Use of Potential Molecular Tools for their Identification, National Bureau of Agriculturally Important Microorganisms (NBAIM), Indian Agricultural Research Institute, New Delhi, March 16-17, 2004.
3. **Expert Member** in NCERT Workshop entitled “A Quick Review of NCERT Textbooks for Higher Secondary Stage (Biology)” at the Department of Education in Science and Mathematics, National Council of Educational Research and Training, New Delhi during October 11-15, 2004.
4. **Expert Member** in NCERT Workshop on “Evaluation of NCERT Textbooks for Secondary Stage” at the Department of Education in Science and Mathematics, National Council of Educational Research and Training, New Delhi during June 23-25, 2003.
5. **Expert Member** in NCERT Workshop for reviewing the manuscript of Laboratory Manual in Science & Technology for Secondary Stage at the Department of Education in Science and Mathematics, National Council of Educational Research and Training, New Delhi during February 17-21, 2003.
6. **Expert Member** in NCERT Workshop for reviewing the manuscript of the Biology Text Book for Class XII at the Department of Education in Science and Mathematics, National Council of Educational Research and Training, New Delhi during September 2002.
7. Participated in the Quality Improvement Programme (QIP) Course on Progress in Microbial Engineering and Technology held at Biochemical Engineering Research Centre, Indian Institute of Technology, New Delhi during June 10-24, 1986.
8. Participated in the DST Sponsored “Group Monitoring Workshop on Promotion of Scientific Interest in Youth”, G.B. Pant University of Agriculture and Technology, Pantnagar, December 4-5, 1985.
9. Participated in the Workshop on “Separation Techniques in Biochemical Research” V.P. Chest Institute, University of Delhi, Delhi, October 30-31, 1980.

Contribution to Corporate Life:

(a) Curriculum Development:

- * Member, Sub-Committee of Academic Council for introduction of new courses in Delhi University and its colleges; also used to coordinate for developing /framing of syllabi for Under-graduate Courses in Botany (2000-2002)
- * Member, Departmental Research Council, Department of Botany (2008-2010)
- * Member, M. Phil. Committee, Department of Botany (2007 - continuing)
- * Member, Committee of Courses in Botany (1996-2004; 2012 - continuing)
- * Member, Board of Research Studies, Faculty of Science (1998-2000)
- * Member, Business Advisory Committee to the Academic Council, University of Delhi (1998-2000)
- * Member, Admission and Courses Committee of Ayurvedic & Unani Tibbia College, University of Delhi (1998-2000)
- * Member, Publication Advisory Committee of Delhi University for publication of books authored by D.U. faculty (1998-2000)
- * Member, Faculty of Science, Delhi University (2001- 2003 & 2009 - 2011)
- * Member, Departmental Research Committee (DRC), Department of Geology, University of Delhi (2012 – Continuing)

(b) Administrative Assignments in University/Department:

- * **Treasurer**, Society of Environmental Scientists (1989-1991)
- * **Coordinator**, Practical Examinations of Botany (1996-97 & 2002- 2003)
- * Member, Administrative Committee (Staff Allocation), Department of Botany, University of Delhi (1994-1999 & 2005 - 2011)
- * **Teacher-in-Charge**, Building Repair and Maintenance, Department of Botany (1981-1999, 2002-2003 & 2005-2008)
- * **Treasurer**, Delhi University Botanical Society (1994 - 2011)
- * **Member**, Finance and Purchase Committee of Botany Department (2005 - 2008)
- * **Member**, Purchase Committee of Botany Department (2002-2003; 2008 - 2011)

- * **Officiating-in-Charge**, Department of Botany, University of Delhi during the summers vacations of 2008 and 2009 (for about two weeks each time)
- * **Vice-Chancellors's Nominee** to the Governing Body of Deshbandhu College, University of Delhi (2011-Continuing)
- * **Vice-Chancellors's Nominee** to the Governing Body of B.R. Ambedkar College, University of Delhi (2011- continuing)
- * **Vice-Chancellors's Nominee**, Delhi University Guest House, University of Delhi (2012 – continuing)
- * **Member, Managing Committee**, International Guest House, University of Delhi (2012- Continuing)
- * **Member, Managing Committee**, Gwyer Hall, University of Delhi (2012 - Continuing)
- * **Secretary, Garden Committee**, University of Delhi (2011- Continuing)

(c) Public Service / Cultural / Extracurricular Activities:

- * Recipient of Silver Medal in Junior Red Cross Competition at U.P. State Level (1965).
- * Secretary, University Cultural Society (Variety Entertainments), G.B.P.U.A.& T. Pantnagar (1974-1975)
- * Acted as a Judge for IX, X and XIII Inter College Genetic Model Competitions on February 2, 1990, February 5, 1992 and February 3, 1995, respectively under the auspices of Botanical Society of Zakir Husain College, University of Delhi.
- * **President, SSS Club, Delhi** for two terms (1991-1992 & 2000-2001). The objective of the Club are to organize various cultural and community activities for bringing people together and work under area development programmes.

(d) Academic Community and Extension Services:

- * Member, Liaison Committee for the University Magazine – “DELHI UNIVERSITY NEWS” (1985-1990)
- * Resource Person in Eco-Development Camp organized by Eco-Transformation: Centre for Environment and Rural Upliftment, Delhi (November 11, 1988)
- * Member, Counseling Committee for SC/ST Admissions in Delhi University Colleges (1994-1995 & 1995-1996)
- * Member, Examination Disciplinary Committee, University of Delhi (1996-1999)

- * Member, Science Admission Committee, Faculty of Science, University of Delhi (2000 & 2002)
- * Member, Central Admission Grievance Committee for admission to various Under-Graduate courses in Delhi University 2002-2003).
- * Member, Visiting Team (Observer) for conduct of examinations in Delhi University and its colleges (1996-2002 & 2005)
- * **Additional Head Examiner**, All India Pre-Medical Test conducted by Central Board of Secondary Education (2006 & 2007)

Membership of Scientific Societies:

- * Elected Member, Society for Applied Bacteriology, U.K. (1991-92).
- * Life Member, Association of Microbiologists of India.
- * Life Member (*Founder Member & Fellow*), International Society for Conservation of Natural Resources.
- * Life Member, International Society of Plant Morphologists.
- * Life Member, Eco-Transformation: Centre for Environment and Rural Upliftment.
- * Life Member, Indian Aerobiological Society.
- * Life Member (*Founder Member & Treasurer*), Society of Environmental Scientists.
- * Life Member & Treasurer, Delhi University Botanical Society.
- * Life Member, AASTHA – Foundation for Development and Welfare.
- * Life Member , Indian Botanical Society.
- * Life Member , The Orchid Society of India.
- * Life Member , Society for Plant Research..

UPDATED LIST OF PUBLICATIONS

(a) Research Papers Published in Full:

1. **Singh VP**, Kumar R, Singh I and Srivastava S (2013) Microsome Technology as a Potential Bioremediation Option for Health and Environmental Protection. *Journal of Environmental Research and Development* (**Impact Factor: 0.607**) (In Press)
2. Kedia VK and **Singh VP** (2013) Antimicrobial activity of *Thermoactinomyces vulgaris* against some selected bacteria and fungi. *Phytomorphology* 63(1&2) (In Press).
3. Mathur P, Sharma E, Singh SD, Bhatnagar AK, **Singh VP** and Kapoor R (2013) Effect of elevated CO₂ on infection of three foliar diseases in oilseed *Brassica juncea*. *Journal of Plant Pathology* (2013), **95(1)**, 135-144. (**Impact Factor: 0.91**)
4. Singh I and **Singh VP** (2012) Blastospore/Chlamyospore as a Potential Character in Identification of Aflatoxin Producing and Non Producing Isolates of *Aspergillus flavus* *Vegetos* **25(2)**: 361-366. (**Impact Factor: 0.04**)
5. Singh L and **Singh VP** (2012) Microbial decolourization of textile dyes by the fungus *Trichoderma harzianum*. *Journal of Pure and Applied Microbiology* **6(4)**: 1829-1833. (**Impact Factor: 0.06**)
6. Sharma R, Gaur SN, **Singh VP**, Lavasa S and Singh AB (2012) Association between indoor fungi in Delhi homes and sensitization in children of respiratory allergy. *Medical Mycology* **50**: 281–290. (**Impact Factor: 2.457**)
7. Singh A and **Singh VP** (2012) Production of extracellular hydrolytic enzymes by an obligate thermophile – *Thermoactinomyces vulgaris*. *Vegetos* **25 (1)**: 138-145. (**Impact Factor: 0.039**)
8. Verma M, Kumar A and **Singh VP** (2012) Chemical and biological control of pathogenic *Aspergillus* spp. *Journal of Plant Development Sciences* **4(3)**: 347-352.
9. Sharma R, Devala R, Priyadarshi V, Gaur SN, **Singh VP** and Singh AB (2011) Indoor fungal concentration in the homes of allergic/asthmatic children in Delhi, India. *Allergy Rhinology* **2**: 21-32. (*An Open Access Online International Journal*)
10. Kedia V, Laisram, N and **Singh VP** (2011) Screening and Optimization of IAA Production in an Obligate Thermophile *Thermoactinomyces vulgaris*. *Phytomorphology* **61(1&2)**: 9-16.
11. Singh L, and **Singh VP** (2010) Biodegradation of textile dyes, Bromophenol blue and Congo red by the fungus *Aspergillus flavus*. *Environment & We: An International Journal of Science and Technology* **5**: 235-242.
12. Kulshreshtha NM, Kumar A, Dhall P, Gupta S, Bisht G, Pasha S, **Singh VP** and Kumar R (2010) Neutralization of alkaline industrial wastewaters using *Exiguobacterium* sp. *International Biodeterioration & Biodegradation* **64(3)**: 191-196. (**Impact Factor: 2.074**)

13. Singh L and **Singh VP** (2010) Microbial degradation and decolourization of dyes in semi-solid medium by the fungus – *Trichoderma harzianum*. *Environment & We: An International Journal of Science and Technology* **5(3)**: 147-153.
14. Sharma M, Laisram N and **Singh VP** (2010) Screening of a soil bacterium for biological control of pathogenic fungi. *Journal of Plant Development Sciences* **2(1&2)**: 1-4.
15. Suresh PS, Kumar A, Kumar R and **Singh VP** (2008) An Insilico approach to bioremediation: Laccase as a case study. *Journal of Molecular Graphics and Modelling* **26**: 845-849. (**Impact Factor: 2.184**)
16. Singh A, Devarumath RM, RamaRao S, **Singh VP** and Raina SN (2008) Assessment of genetic diversity, and phylogenetic relationships based on ribosomal DNA repeat unit length variation and Internal Transcribed Spacer (ITS) sequences in chickpea (*Cicer arietinum*) cultivars and its wild species. *Genetic Resources and Crop Evolution* **55**: 65-79. (**Impact Factor: 1.554**)
17. **Singh VP** (2007) Mg²⁺ decreases Arrhenius energies of activation for high temperature catalysis of phosphatases in *Thermoactinomyces vulgaris*. *Current Microbiology* **55**: 179-184. (**Impact Factor: 1.815**)
18. Tiku DK, Kumar A, Sawhney S, **Singh VP** and Kumar R (2007) Effectiveness of treatment technologies for wastewater pollution generated by Indian pulp mills. *Environmental Monitoring and Assessment* **132**: 453-466. (**Impact Factor: 1.4**)
19. Singh I and **Singh VP** (2007) Phosphatases in aflatoxin-producing and non-producing strains of *Aspergillus flavus* Link. *Current Science* **90(10)**: 1362-1363. (**Impact Factor: 0.897**)
20. **Singh VP**, Kedia VK and Mohanta HS (2007) Differential expression of thermophilic phosphatases in the wild type and auxotrophic mutant strains of *Thermoactinomyces vulgaris*. *Indian Journal of Microbiology* **47**: 81-85. (**Impact Factor: 0.551**)
21. Kumar R, Singh I and **Singh VP** (2005). Degradation of aflatoxins by peroxidase isoenzymes of toxigenic and non-toxigenic strains of *Aspergillus flavus* at different temperatures. *Phytomorphology* **55(3&4)**: 289-295.
22. Singh I and **Singh VP** (2005) Effect of plant extracts on mycelial growth and aflatoxin production by *Aspergillus flavus*. *Indian Journal of Microbiology* **45(2)**: 139-142. (**Impact Factor: 0.511**)
23. Bhatnagar K and **Singh VP** (2004) Ca²⁺ dependence and inhibitory effects of trifluoperazine on plasma membrane ATPase of *Thermoactinomyces vulgaris*. *Current Microbiology* **49**: 28-31. (**Impact Factor: 1.815**)
24. Singh I and **Singh VP** (2003) A report on strain-specific and toxigenicity-associated blastospore formation in *Aspergillus flavus*. *Phytomorphology* **53(3&4)**: 331-333.

25. Bhatnagar K and **Singh VP** (2003) Ca^{2+} -dependence and inhibition of transformation by trifluoperazine and chlorpromazine in *Thermoactinomyces vulgaris*. *Current Microbiology* **46**: 265-269. (**Impact Factor: 1.815**)
26. Singh I and **Singh VP** (2002) Comparative studies on growth patterns and metabolic status of aflatoxin-producing and non-producing strains of *Aspergillus flavus*. *Current Science* **82(12)**: 1425-1426. (**Impact Factor: 0.897**)
27. Singh I and **Singh VP** (2000) Antifungal properties of aqueous and organic solution extracts of seed plants against *Aspergillus flavus* and *A. niger*. *Phytomorphology* **50(2)**: 151-157.
28. **Singh VP** (1998) Enzymatic degradation of aflatoxins in shake cultures of *Aspergillus flavus* CMI 102566: A possible role of peroxidase in biological control mechanism. *Journal of Phytochemical Research* **11(1)**: 7-10.
29. **Singh VP** (1997) Interaction of temperature and microsomal peroxidase in aflatoxin degradation by *Aspergillus flavus* 102566. *Current Science* **73(6)**: 529-532. (**Impact Factor: 0.897**)
30. Gupta N, Saxena G, **Singh VP** and Mukerji KG (1988) Factors affecting distribution of nematophagous fungi in Delhi. *Acta Botanica Indica* **16**: 46-50.
31. **Singh VP** (1987) Effects of -SH blocking and -SH protecting agents on genetic transformation in *Thermoactinomyces vulgaris*. *Acta Botanica Indica* **15**: 62-64.
32. **Singh VP** (1984) Utilization of carbon sources by an obligate thermophile –*Thermoactinomyces vulgaris*. *Phytomorphology* **34(1-4)**: 200-203.
33. **Singh VP** and Sinha U (1984) Phosphatases of *Thermoactinomyces vulgaris*: Ca^{2+} - Mg^{2+} interaction as well as Mg^{2+} -dependent recovery of the dialysed and EDTA-inhibited enzymes. *Life Science Advances* **3(1)**: 1-7.
34. **Singh VP** and Sinha U (1982) Ca^{2+} -dependence and metabolic status of an obligate thermophile, *Thermoactinomyces vulgaris*, under shake culture conditions. *Cellular and Molecular Life Sciences/Experientia* **38(6)**: 670-671. (**Impact Factor: 6.57**)
35. **Singh VP** and Sinha U (1982) Thermostability & turnover of phosphatases in the obligate thermophile *Thermoactinomyces vulgaris*. *Indian Journal of Experimental Biology* **20**: 26-30. (**Impact Factor: 1.295**)
36. Sinha U, **Singh VP** and Srivastava S (1981) Cation-dependent activity & stability of phosphatases in *Thermoactinomyces vulgaris*. *Indian Journal of Experimental Biology* **19**: 453-457. (**Impact Factor: 1.295**)
37. Sinha U and **Singh VP** (1980) Phosphate utilization and constitutive synthesis of phosphatases in *Thermoactinomyces vulgaris* Tsilinsky. *Biochemical Journal* **190**: 457-460. (**Impact Factor: 4.897**)

38. **Singh VP** and Gupta VK (1978) Electrophoretic variations in *Brassica* with respect to esterase isoenzyme patterns. *Journal of Indian Botanical Society* **57**: 146-154.
39. **Singh VP**, Gupta VK and Chaubey CN (1977) Genome specificity in *Brassica*: Esterase isoenzymes as genetic markers. *Journal of Cytology and Genetics* **12**: 75-78.

(b) Short Research Papers:

40. **Singh VP** (1997) Ca²⁺-dependent morphological changes in *Thermoactinomyces vulgaris* colonies under shake culture conditions. *Phytomorphology* **47(3)**: 339-342.
41. Mukerji KG and **Singh VP** (1986) Unusual oospore in *Peronospora trifoliorum*. *Phytomorphology* **36(3,4)**: 383.

(c) Scientific Reviews:

42. Thomas L, Ram H, Kumar A and **Singh VP** (2013) Industrial and biotechnological potential of microbial cellulases. *Journal of Plant Development Sciences* (Accepted).
43. Hari Ram and **Singh VP** (2012) Plant growth-promoting rhizobacteria (PGPR) in plant productivity and protection. *INROADS – An International Journal of Jaipur National University* **Vol. 1, No. 2**, December 2012 (In Press).
44. Kumar A and **Singh VP**. (2011). Thermophilic bacteria and their potential for industrial applications. *Journal of Plant Development Sciences* **3(1&2)**: 19-30.
45. **Singh VP**, Singh A, Kedia VK and Laisram N (2006) *Thermoactinomyces vulgaris* as a causal agent of Farmer's Lung disease. *Indian Journal of Aerobiology* **19(1)**: 1-11.
46. **Singh VP** (2002) Enzymatic transformations of xenobiotics of health and environmental concern. In: VP Singh and RD Stapleton Jr (eds). "Biotransformations: Bioremediation Technology for Health and Environmental Protection", *Progress in Industrial Microbiology* **36**: 129-148, Elsevier Science B.V., Amsterdam, London, New York, Oxford, Paris, Shannon, Tokyo.
47. **Singh VP** (2002) Biotransformations of tannery wastes. In: VP Singh and RD Stapleton Jr (eds). "Biotransformations: Bioremediation Technology for Health and Environmental Protection", *Progress in Industrial Microbiology* **36**: 279-290, Elsevier Science B.V., Amsterdam, London, New York, Oxford, Paris, Shannon, Tokyo.
48. **Singh VP** and Bhatnagar K (2002) Sewage treatment systems: Microbiological aspects. In: VP Singh and RD Stapleton Jr (eds). "Biotransformations: Bioremediation Technology for Health and Environmental Protection", *Progress in Industrial Microbiology* **36**: 377-401, Elsevier Science B.V., Amsterdam, London, New York, Oxford, Paris, Shannon, Tokyo.

49. Singh BK, **Singh VP** and Singh MN (2002) Bioremediation of contaminated water bodies. In: VP Singh and RD Stapleton Jr (eds). "Biotransformations: Bioremediation Technology for Health and Environmental Protection", *Progress in Industrial Microbiology* **36**: 537-548, Elsevier Science B.V., Amsterdam, London, New York, Oxford, Paris, Shannon, Tokyo.
50. **Singh VP**, Gupta S, Singh I and Gupta R (1998) Prevention, elimination and detoxification of aflatoxins - An overview. *Indian Journal of Aerobiology* **11(1&2)**: 6-15.
51. **Singh VP** (1995). Aflatoxin biotransformations: biodetoxification aspects. In: VP Singh (ed), "Biotransformations: Microbial Degradation of Health Risk Compounds", *Progress in Industrial Microbiology* **32**: 51-63, Elsevier Science B.V., Amsterdam, Lausanne, New York, Oxford, Shannon, Tokyo.
52. Saxena RK, Sharmila P and **Singh VP** (1995) Microbial degradation of tannins. In: VP Singh (ed), "Biotransformations: Microbial Degradation of Health Risk Compounds", *Progress in Industrial Microbiology* **32**: 259-270, Elsevier Science B.V., Amsterdam, Lausanne, New York, Oxford, Shannon, Tokyo.
53. **Singh VP**, Smith JE, Harran G, Saxena RK and Mukerji KG (1992) Biological aspects of aflatoxin detoxification. *Indian Journal of Microbiology* **32(4)**: 357-369. (**Impact Factor: 0.551**)
54. Mukerji KG, **Singh VP** and Garg KL (1985) Biology of reproduction in Zygomycetes. *Journal of Plant Sciences* **1**: 31-47.
55. Sinha U and **Singh VP** (1983) High temperature adaptation of microorganisms. *Life Science Advances* **2(2&3)**: 218-227.

(d) Articles Published in Conference Proceedings:

56. **Singh VP** and Kumar A (2012) Global warming and dynamics of life at high temperature. In: D.G. Bhadange and D.K. Koche (eds), Innovative Research Trends in Biological Sciences, *Proceedings of Innovative Research Trends in Biological Sciences*, Akola, pp. 591-596.
57. **Singh VP** and Bhatnagar AK (1998) Microbes in waste utilization. In: B Rai, RS Upadhyay and NK Dubey (eds), Trends in Microbial Exploitation, *Proceedings of International Symposium on Trends in Microbial Exploitation*, Varanasi, pp. 219-223.
58. Kapoor A, **Singh VP** and Mukerji KG (1988) Studies on the phosphatases of mycorrhizal and non-mycorrhizal *Trigonella* roots. In: A Mahadevan, N Raman and K Natarajan (eds), Mycorrhizae for Green Asia: *Proceedings of the First Asian Conference on Mycorrhizae*, Madras, pp. 125-130.
59. **Singh VP** (1986). Ca²⁺-dependent extracellular amylase and cellulase enzymes in *Thermoactinomyces vulgaris* strains. In: GK Manna and U Sinha (eds), *Proceedings of Fifth All India Congress of Cytology and Genetics, Perspectives in Cytology and Genetics* **5**: 731-734.

60. **Singh VP** (1985) *In vivo* effects of Ca^{2+} on ATPase of an obligate thermophile - *Thermoactinomyces vulgaris* under shake culture conditions. In: G Szabo, S Biro and M Goodfellow (eds), *Proceedings of the Sixth International Symposium on Actinomycetes Biology, Hungary*, pp. 399-401.
61. **Singh VP** and Sinha U (1984) Calcium dependent growth and metabolism of *Thermoactinomyces vulgaris*. In: RP Sinha (ed), *Proceedings of National Symposium on Recent Trends in Botanical Researches*, Patna, pp. 229-233.
62. Sinha U and **Singh VP** (1981) Regulation of phosphatases in *Thermoactinomyces vulgaris*. In: GK Manna and U Sinha (eds), *Proceedings of the Third All India Congress of Cytology and Genetics, Perspectives in Cytology and Genetics 3*: 107-111.

(e) Invited Book Chapters:

63. Kumar A, Singh A and **Singh VP** (2011) Industrial enzymes of microbial origin. In: P.C. Trivedi (ed), *Biotechnology: A New Approach*, pp. 291-308, Agrobios (India).
64. **Singh VP** and Laisram N (2010) Use of *Gliocladium virens* as a potential tool for biological control of plant pathogenic fungi. In: T. Singh & K. Agrawal (eds) *Eco-Friendly and Non-Hazardous Management of Pests*, pp. 18-27, Aaviskar Publishers, Distributors, Jaipur.
65. **Singh VP** and Kumar R (2007) Microsome technology for biodegradation of xenobiotics of health and environmental concern. In: P.C. Trivedi (ed), *Microbiology: Applications and Current Trends*, pp. 216-228, Pointer Publishers, Jaipur.
66. **Singh VP** (2007) Microbial enzymes and detoxification strategies for environmental protection. In: JS Singh, AK Bhatnagar, VP Singh and BK Roy (eds), *Plant Diversity and Conservation*, pp. 301-308, Satish Serial Publishing House, Delhi.
67. Singh I and **Singh VP** (2006) An update on mycotoxins: Methods of detection and management. In: P.C. Trivedi (ed), *Biotechnology and Biology of Plants*, Festschrift in honour of Prof. C.P. Malik, pp. 280-304, Aavishkar Publishers, Distributors, Jaipur.
68. **Singh VP**, Singh L, Singh I and Kumar R (2006) Microbial degradation of hazardous dyes. In: K.G. Mukerji and C. Manoharachary (eds), *Current Concepts in Botany*, pp. 273-285, I.K. International Publishing House Pvt. Ltd., New Delhi, Mumbai, Bangalore.
69. Raman R, **Singh VP** and Singh M (1997) Cell and molecular biology of mycorrhiza – A review . In: JP Tewari, G Saxena, N Mittal, I Tewari and BP Chamola (eds), *New Approaches in Microbial Ecology*, pp. 297-320, Aditya Books Pvt. Ltd., New Delhi.
70. **Singh VP** and Mukerji KG (1996) Mycotoxin biotransformations : Biological aspects of detoxification. In: KG Mukerji, VP Singh and S Dwivedi (eds), *Concepts in Applied Microbiology & Biotechnology*, pp. 247-260, Aditya Books Pvt. Ltd., New Delhi.

71. Saxena RK, **Singh VP** and Mukerji KG (1996) Heavy metal immobilization by fungi: Implication for agriculture. In: KG Mukerji, VP Singh and S Dwivedi (eds), *Concepts in Applied Microbiology & Biotechnology*, pp.138-144, Aditya Books Pvt., Ltd., New Delhi.
72. Saxena RK, Sinha U, **Singh VP** and Mukerji KG (1993) Fungal biotechnology. In: KG Mukerji and VP Singh (eds), *Frontiers in Applied Microbiology* Vol. IV, pp. 91-100, Rastogi and Company, Meerut.
73. **Singh VP** and Mukerji KG (1989) Microbes in biotechnology. In: KG Mukerji, VP Singh and KL Garg (eds), *Frontiers in Applied Microbiology* Vol. III, pp. 61-84, Rastogi & Company, Meerut.
74. **Singh VP** and Garg KL (1985) Microbial life under hypersaline environments: Eco-physiological aspects. In: KG Mukerji, NC Pathak and VP Singh (eds), *Frontiers in Applied Microbiology* Vol. I, pp. 315-326, Print House (India), Lucknow.
75. **Singh VP** (1984) Oncogenes and cancer. In: U Sinha and W Klingmuller (eds), *Trends in Molecular Genetics*, pp. 153-158, Spectrum Publishing House, Patna, Delhi.
76. **Singh VP**, Saxena RK and Srivastava S (1984). Microbial life at low temperatures: Ecological aspects. In: KG Mukerji, VP Agnihotri and RP Singh (eds), *Progress in Microbial Ecology*, pp. 341-347, Print House (India), Lucknow.

(f) Books/Volumes - Authored/Edited:

(i) Volumes of Elsevier's International Periodical:

77. **Singh VP**, Stapleton RD Jr (eds) (2002) *Progress in Industrial Microbiology Vol. 36* "Biotransformations: Bioremediation Technology for Health and Environmental Protection", Elsevier, Amsterdam, London, New York, Oxford, Paris, Shannon, Tokyo.

(This Volume was Released by Dr. S. Nagarajan, Director, Indian Agricultural Research Institute, New Delhi on World Environment Day, 5th June 2002)

78. **Singh VP** (ed) (1995) *Progress in Industrial Microbiology, Vol. 32* "Biotransformations: Microbial Degradation of Health-Risk Compounds", Elsevier, Amsterdam, Lausanne, New York, Oxford, Shannon, Tokyo.

(Foreword of this Volume was written by Professor Dr. A.S. Paintal, FRS)

(ii) Books:

79. Singh JS, Bhatnagar AK, **Singh VP** and Roy BK. (eds) (2007) *Plant Diversity and Conservation*, Satish Serial Publishing House, Delhi.
80. Mukerji KG, **Singh VP** and Dwivedi S (eds) (1996) *Concepts in Applied Microbiology and Biotechnology*, Aditya Books Pvt. Ltd., New Delhi.

81. Mukerji KG and **Singh VP** (eds) (1993) *Frontiers in Applied Microbiology*, Vol. 4, Rastogi and Company, Meerut.
82. Mukerji KG, **Singh VP** and Garg KL (eds) (1989) *Frontiers in Applied Microbiology*, Vol. 3, Rastogi & Company, Meerut.
83. Mukerji KG, **Singh VP** and Garg KL (eds) (1986) *Frontiers in Applied Microbiology*, Vol. 2, Print House (India), Lucknow.
84. Mukerji KG, Pathak NC and **Singh VP** (eds) (1985) *Frontiers in Applied Microbiology*, Vol. 1, Print House (India), Lucknow.

(iii) Scientific Magazine:

85. Babu CR, Mathur AK, Sahai A, **Singh VP** and Bhattacharjee, M (eds) (1981) *The Botanica*, Vol. 31, Department of Botany, University of Delhi, Delhi.

(g) Other Publications/Reports:

(i) Articles in Scientific Magazines:

86. Kumar A and **Singh VP** (2011) Lipase – An enzyme for mankind. *Everyman's Science XLVI(3)*: 162-164
87. Singh A and **Singh VP** (2006) Microbial enzymes of industrial interest : The current scenario. *The Botanica 56*: 19-30.
88. Gupta R and **Singh VP** (1995) Health hazards of mycotoxins. *The Botanica 45*: 32-34.
89. Singh M, **Singh VP**, Smith JE, Harran G and Lewis C (1991) Agrowaste utilization for biogas production. *The Botanica 41*: 30-35.
90. **Singh VP** (1988) Southern transfer and northern blotting techniques in nucleic acid research. *The Botanica 38*: 26-30.
91. Gupta N and **Singh VP** (1987) Some aspects of isolation and identification of thermophilic actinomycetes. *The Botanica 37*: 64-68.
92. Gupta N and **Singh VP** (1986) Genetics of antibiotic biosynthesis in actinomycetes. *The Botanica 36*: 65-69.
93. **Singh VP** (1986) Cancer Kyon Hota Hai? *Vigyan Pragati 390(5)*: 176-178.
94. **Singh VP**, Garg KL and Mukerji KG (1984). Architecture of ribosomes in prokaryotes and eukaryotes. *School Science 22*: 36-37.

95. **Singh VP** and Garg KL (1984) Microbes, molecules and man. *The Botanica* **34**: 35-38.
96. **Singh VP** (1981) Recent advances in immunology. *The Botanica* **31**: 63-66.
97. **Singh VP** and Sinha U (1978) Recombinant-DNA technology : The last look before the leap. *The Botanica* **28**: 1-9.

(ii) Reports:

98. **Singh VP** (1989) VII International Symposium on Biology of Actinomycetes (ISBA-88). INSA News, pp. 58-59. Indian National Science Academy, New Delhi.
99. **Singh VP** (1986) VI International Symposium on the Biology of Actinomycetes : A Report. International Science News and INSA Delegation Reports, 4: 13-17, Indian National Science Academy, New Delhi.

Subject Expert to Academic Bodies of Indian Universities & UGC:

- * Member, Board of Studies, Amity Institute of Microbial Technology, Amity University, **Noida** (U.P.) (2013- continuing).
- * Nominated as External Member, Board of Studies in Botany, C.C.S. University, **Meerut** (2011, 2012).
- * Nominated as External Member, M.Phil. Committee in Botany, C.C.S University, **Meerut** (2011).
- * Nominated as External Expert, Board of P.G. Studies in Botany, Kurukshetra University, **Kurukshetra** (2009-2010).
- * Subject Expert, Committees for Major and Minor Research Projects of UGC, **New Delhi** (2006-210).
- * Nominated as External Expert, Research Degree Committee (RDC), University of Kanpur, **Kanpur** (2009).
- * Nominated as External Expert, Research Degree Committee (RDC), Bundelkhand University, **Jhansi** (2009).
- * Nominated as External Expert, Faculty of Life Sciences, M.D. University, **Rohtak** (2009).
- * Nominated as External Expert, Research Degree Committee (RDC), C.C.S University, **Meerut** (2008).
- * Nominated as External Expert, Board of Studies in Biotechnology, C.C.S. University, **Meerut** (2005).
- * Member, Academic Council, University of Delhi, **Delhi** (1998-2002).

Overseas Visits / Assignments:

- * **1982 : MEXICO** – Represented India and presented a Research Paper in the Fifth International Symposium on Actinomycetes Biology at **Oaxtepec**, (Mexico), August 16-19, 1982.
- * **1985 : HUNGARY** – Represented India, Chaired a Biochemistry Session and presented two research papers in the Sixth International Symposium on Actinomycetes Biology at **Debrecen** (Hungary), Under INSA-COSTED Travel Fellowship with Indo-Hungarian Cultural Exchange Programme, August 26-30, 1985.
- * **1987 : GERMANY** – Delivered two Invited Lectures at Institut für Microbiologie und Landeskultur, Justus-Liebig Universität, **Giessen** (Germany), while proceeding for British Council Visitorship, May 26 – 27, 1987 (Host: Professor E. Kuster).
- * **1987 : UNITED KINGDOM** – As a British Council Visitor to Portsmouth Polytechnic, **Portsmouth**, Department of Biology, Birkbeck College, University of London, **London** and Commonwealth Mycological Institute, **Surrey** (England), June 1-30, 1987 (Host: Professor E.B. Gareth Jones).
- * **1988 : JAPAN** – Represented India and presented a Research Paper in Seventh International Symposium on Biology of Actinomycetes (ISBA) at **Tokyo**, (Japan), May 22-26, 1988. (This visit was sponsored under UNESCO Award Winner's Programme).
- * **1990-91 : UNITED KINGDOM** – As Commonwealth Academic Staff Fellow at Applied Microbiology Division, Department of Bioscience & Biotechnology, Royal College, University of Strathclyde, **Glasgow** (Scotland) from October 1, 1990 - July 31, 1991; and presented a Research Paper in the 60th Jubilee Conference of Society of Applied Bacteriology, **Bristol** (England), July 16-18, 1991.
- * **2008 : GERMANY** – Participated and presented a paper on July 13 in the XX International Congress of Genetics at **Berlin** (Germany), July 12-17, 2008.
- * **2008 : UNITED KINGDOM** – (i) Delivered an Invited Lecture at John Innes Centre, **Norwich** (England), July 14, 2008 (Host: Professor Sir David Hopwood, FRS).
(ii) Delivered an Invited Lecture at School of Biosciences, University of Birmingham, **Birmingham** (England), July 15, 2008 (Host: Professor Steve Busby, FRS).
- * **2012 : MALAYSIA** – Chaired a Session of Life Science Section, Coordinated another Session and presented a Research Paper in the 5th International Congress of Environmental Research at **Kuala Terengganu**, Malaysia, November 22-24, 2012.