

List of Books Published:

International Publications

1. A book on **HIV:AIDS : Basic Elements and Priorities** a global perspective published by Springer Verlag, 2007 pp 428 by S. Kartikeyan, R. N. Bharmal, R.P. Tiwari and **P.S. Bisen** www.springer.com/biomed/virology/book/978-1-4020-5788-5
Review: This book is recommended by the World Health Organization Eastern Mediterranean Region Office (WHO-EMRO) as a basic resource for medical faculty libraries. www.amazon.ca/HIV-AIDS-Basic-Elements-Priorities/dp/1402057881/ref=pd_sxp_f_pt/702-9218820-1295210
2. A book on **“Molecular Diagnostics”** a global perspective under publication by Springer Verlag, pp 520 by Mousumi Debnath, G.B.K.S. Prasad and **P.S. Bisen** ISBN 978-90-481-320-7 Released in March, 2010. www.springer.com/biomed/molecular?SCWID=0-130-0

Books In Press for Publication from Springer verlag:

Re-emerging, Newly Emerging Potential Epidemics by S. Kartikeyan, R.N. Bharmal, R.P. Tiwari and P.S. Bisen (2010)

Books In Press for Publication from Wiley-Blackwell, New York:

Mirobes: Biology and Applications by P.S. Bisen, Mousumi Debnath, and G.B.K.S. Prasad (2011)

Indian Publishers (National):

1. **A Handbook of Microbiology** by **P.S. Bisen** and Kavita Verma CBS Publishers, New Delhi, 1992 pp 199
2. **Tools and Techniques in Life Sciences** by **P.S. Bisen** and S. Mathur, CBS Publishers, New Delhi, 1994 pp 144
3. **Frontiers in Microbial Technology** Edited Volume by **P.S. Bisen** CBS Publishers, New Delhi, 1994. pp 318

List of Patents Granted:

1. The ‘TB Screen test’ was patented in India vide No. 226/DEL/2004/3631 Dated 01 August, 2004 received from **Govt. of India**, Patent Office Branch, Plot No. 32, Sector-14, Dwarka, New Delhi-110078 Europe & USA. “A Diagnostic Kit for pulmonary & Extrapulmonary tuberculosis”
2. **US Patent** was published vide Publication No. US-2007-0287165-A1 Bisen et al. (2007) December 13, 2007 entitled Diagnostic Kit for detecting Pulmonary and Extrapulmonary Tuberculosis.
3. **World Patent** was published on 1st September, 2005 vide publication No. WO 2005/080987 A1 entitled “A Diagnostic Kit For detecting pulmonary and Extrapulmonary tuberculosis”

4. **European Patent** was published on 23 April 2008 vide patent No. 1716417 application No. 05718967.2 entitled “A Diagnostic Kit For detecting pulmonary and Extra-pulmonary tuberculosis” and also can be viewed esp@cenet database – worldwide.
5. **Japanese Patent** Japanese Pat. Appln. No. 2006-553765 (PCT/IN05/000063) “A Diagnostic Kit for detecting pulmonary and Extra-pulmonary tuberculosis” Filed and in final stage for publication correspondence received 11 May, 2010.

List of Patents Applied:

1. **US Patent** for Further Improvement in “**Diagnostic kit for detecting pulmonary and extra-pulmonary tuberculosis**” vide Application No. 10/590,118, Filing Date: 06.11.2007 Confirmation No. 2820, Mail date 14.01.2008, Last Date 17.04.2008.
2. **Japanese Patent** “**Diagnostic kit for detecting pulmonary and extra-pulmonary tuberculosis**” vide Application No. Japanese Pat.Appln.No.2006-553765 - PCT/IN05/000063 Filing Date : 05.03.2010
3. **Indian Patent** through Department of Biotechnology, Ministry of Science and Technology, Govt. of India “**Rapid liposomal agglutination (TB/M Card) test for detection of glycolipid antigens in patients with meningial, pulmonary and other extra-pulmonary tuberculosis**” 9 January, 2009.

List of commercialization of Technologies Developed:

The Technology has already been recognized by Department of Biotechnology, Ministry of Science & Technology, New Delhi (through Biotech Consortium of India Ltd., New Delhi). Financial support under **SBIRI program of Biotech Consortium of India and Department of Biotechnology, Ministry of Science & Technology, New Delhi** has been granted vide sanction letter No. **BT/SBIRI/244/36-4/2007 Dated 26 March, 2009**

List of publications in indexed journals (Dr. P.S. Bisen)

1. **Bisen P. S.**, Bhagwan S. Sanodiya B.S., Gulab S. Thakur G.S., Rakesh K. Baghel R. K. and GBKS Prasad. Biodiesel Production with special emphasis on Lipase Esterification. **Biotechnology Letters** (Springer Verlag, Germany) DOI 10.1007/s10529-010-0275-z 32: 1019-1030 (2010)
2. **Bisen P. S.**, R. Dubey, A. Zacharia, R.P Tiwari and GBKS Prasad. Liposome in Development of Simple and Rapid Immunodiagnostics for tuberculosis. **Current Medicinal Chemistry** (Bentham Science Publication, USA) (2010) (In Press)
3. Khan Z., Noor Khan, A. K. Varma, R. P Tiwari, Shahul Mouhamad, GBKS Prasad, **P. S. Bisen**. Oxaliplatin-mediated inhibition of survivin increase sensitivity of head and neck squamous cell carcinoma cell lines to paclitaxel.

- Current Cancer Drug Target** (Bentham Science Publication, USA) 10: (2010)
PMID: 20578991 BSP/CCDT/E-Pub/00034 (In Press)
4. **Bisen P. S.**, Rakesh K. Baghel, Bhagwan S. Sanodiya, Gulab S. Thakur, and GBKS Prasad. *Lentinus edodes*: A Macrofungus with Pharmacological Activities. **Current Medicinal Chemistry** (Bentham Science Publication, USA) 17: 2419-2430 (2010)
 5. Khan Zakir, Noor Khan, Ram P. Tiwari, Ishan K. Patro, G.B.K.S. Prasad, **P. S. Bisen** Down-regulation of survivin by oxaliplatin diminishes radioresistance of head and neck squamous carcinoma cells. **Radiotherapy and Oncology** (Elsevier) <http://dx.doi.org/10.1016/j.radonc.2010.06.005> 96: 267–273 (2010)
 6. Khan, Zakir, N. Khan, A. K. Varma, R. P. Tiwari and **P. S. Bisen** Biology of Cox-2: An application in cancer therapeutics. **Current Drug Targets** (Bentham Science Publication, USA) (2010) (In Press)
 7. **Bisen P. S.**, G. S. Thakur, B. S. Sanodiya, R. K. Baghel and GBKS Prasad. Therapeutic Potential of *Calatropis procera* : A Giant Milkweed eCAM (Hindawi Publishing Corp., England) (2010) (In Press)
 8. **Bisen P.S.**, G. S. Thakur, B. S. Sanodiya, R. K. Baghel and GBKS Prasad. *In vitro* induction of tuber formation with special reference to synthesis of secondary metabolites in *Chlorophytum borvilianum* Sant, et Fernand. **Plant Cell Tissue and Organ Culture** (Springer Verlag, Germany) (2010) (In Press)
 9. Sanodiya B. S., Thakur G.S., Baghel, R. K., Prasad G.B.K.S. and **Bisen P.S.** *Ganoderma lucidum*: A potent pharmacological macrofungus. **Current Pharmaceutical Biotechnology** (Bentham Science Publication, USA) 10: 717-742 (2009).
 10. Thakur G.S., Bag Manoranjan, Sanodiya B. S., Debnath Mousumi, Bhadouriya Pratiksha, Prasad G.B.K.S. and **Bisen P.S.** *Chlorophytum borivilianum*: A White Gold for Biopharmaceuticals and Nutraceuticals. **Current Pharmaceutical Biotechnology** (Bentham Science Publication, USA) 10: 650-666 (2009)
 11. Pachauri Akash, Yadav Hariom, Jain Shalini, **Bisen Prakash Singh**, Chapperwal Anand, Marotta, Francesco, Minelli, E., Prasad G.B.K.S. Hypoglycemic effect of diabegon : A polyherbal preparation in normal and type 2 diabetic rats and human subjects. **International Medical Journal** (Japan International Cultural Exchange Foundation) 16: 117-124 (2009)
 12. Bhadauriya P., Gupta R., Singh S. and **Bisen P.S.** NaCl induced metabolic changes in the diazotrophic cyanobacterium *Anabaena cylindrical*. **World Journal of Microbiology and Biotechnology** (Springer Verlag, Germany) DOI: 10.1007/s11274-008-9879-z 25: 341-345 (2009).
 13. Thakur G.S., Bag Manoranjan, Sanodiya B. S., Bhadouriya Pratiksha, Debnath Mousumi, Prasad G.B.K.S. and **Bisen P.S.** *Momordica balsamina*: A Medicinal and Nutraceutical Plant for Health Care Management **Current Pharmaceutical Biotechnology** (Bentham Science Publication, USA) 10: 667-682 (2009).

14. Dixit, Vandana, Baghel Paramanand, Gupta, A.K., **Bisen, P.S.** and Prasad, G.B.K.S., Impact of season on filarial vector density and infection in Raipur city of Chattisgarh, India. **Jour. Vector Borne Dis.** 46: 212–218 (2009)
15. Jain A., Gour D. S., **Bisen P.S.**, Prashant, Dubey P.P., Sharma D.K., Joshi B.K. and Kumar Dinesh. Single nucleotide polymorphism (SNP) in alpha-lactalbumin gene of Indian Jamunapari breed of *Capra hircus* **Small Ruminant Research** (Elsevier, The Netherland) doi:10.1016/j.smallrumres.2009.02.013 82: 156-160 (2009).
16. Khan Zakir, Tiwari R. P., Mulherkar Rita, Nand K. Sah N. K., Prasad G. B. K. S., Shrivastava B. R. and **Bisen P.S.** Detection of survivin and p53 in human oral cancer: correlation with clinicopathological findings **Head and Neck** Wiley InterScience (www.interscience.wiley.com) DOI:10.1002/hed.21071, 31: 1039-1048 (2009).
17. Dixit, Vandana, Pati, A.K., Gupta, A.K., **Bisen, P.S.** and Prasad, G.B.K.S. Filarial infection is resisted differentially by subjects having different blood group phenotypes. **Journal of Clinical Laboratory Analysis** (Inter Science Wiley Publishers, USA) 23(3):186-191 (2009).
18. Kulshreshtha Archana, Zacharia Anish J., Jarouliya Urmila, Pratiksha Bhadauriya, Prasad G. B. K. S and **Bisen P. S.** Spirulina in health Care management **Current Pharmaceutical Biotechnology** (Bentham Science Publication, USA) 9: 400-405 (2008)
19. Jain, A., Gour, D.S., **Bisen, P.S.**, Dubey, P.P., Prashant, Sharma, D.K., Bhargava, A., B. K. Joshi, B.K., Kumar, D, Single strand conformation polymorphism detection in alpha-lactalbumin gene of Indian Jakhrana milk goats. **Acta Agriculturae Scandinavica, Section A - Animal Science** (Taylor & Francis) DOI: 10.1080/09064700802609494 58: 205 — 208 (2008)
20. Debnath Mousumi¹ and **Bisen P. S.** **Jatropha curcas** L., A Multipurpose Stress Resistant Plant with a Potential for Ethnomedicine and Renewable Energy **Current Pharmaceutical Biotechnology** (Bentham Science Publication, USA) 9: 288-306 (2008)
21. Bhadauriya P, R. Gupta, S. Singh and **Bisen P.S.** n-Alkanes variability in the diazotrophic cyanobacterium *Anabaena cylindrica* in response to NaCl stress. **World J Microbiol Biotechnol** (Springer-Verlag, New York Inc.) 24:139-141 (2008).
22. Gupta, R, Bhadauriya, P, Chauhan V S and **Bisen P.S.** Impact of UV-B Radiation on thylakoid membrane and fatty acid profile of *Spirulina platensis* . **Current Microbiol.** (Springer-Verlag, New York Inc.) 56(2):156-161 (2008).
23. Singh S.K., N.K. Sah and **P.S. Bisen** A synthetic gag-p24 epitope chemically coupled to BSA through a deca alanine peptide enhances HIV-1 serodiagnostic ability by several fold. **AIDS Research and Human Retroviruses** (Marry Ann Liebert, Inc. Publishers USA) 23:153-160 (2007).

24. Dixit, Vandana, A.V. Subhadra, **P.S. Bisen**, B.C. Harinath and G.B.K. Prasad Antigen specific immune complexes in urine of patients with lymphatic filariasis. **Journal of Clinical Laboratory Analysis** (Inter Science Wiley Publishers, USA) 21: 46-48 (2007).
25. Dixit Vandana, Aswani Gupta, **P.S. Bisen**, G.B.K. Prasad and B.C. Harinath Serum immune complexes as diagnostic and therapeutic markers in lymphatic filariasis. **Journal of Clinical Laboratory Analysis** (Inter Science Wiley Publishers, USA) 21: 114-118 (2007).
26. Tiwari R.P., N.S. Hattikudur, R.N. Bharmal, S. Kartikeyan, N.N. Deshmukh and **P.S. Bisen** Modern approaches to a rapid diagnosis of tuberculosis: Promises and challenges. **Tuberculosis** (Elsevier The Netherland) 87: 193-201 (2007).
27. Khan, F, A.K. Pandey, Manorama Tripathi, Sudha Talwar, **P.S. Bisen**, Mino Borkar and Suraksha Agrawal. Genetic affinities between endogamous and inbreeding populations of Uttar Pradesh. **BMC Genetics** doi:10.1186/1471-2156-8-12 8:12, 1-11 (2007).
28. Tiwari R.P., R.N. Bharmal, S. Kartikeyan and **P. S. Bisen** Development of a rapid Liposomal agglutination card test for the detection of Glycolipid antigen in patients with Meningial, Pulmonary and other Extra-pulmonary tuberculosis **International Journal of Tuberculosis and Lung Disease** (International Union Against Tuberculosis and Lung Disease, Paris, France):11(10): 1143-1151 (2007).
29. Bhadauriya, P, Gupta, R, Singh, S and **P.S. Bisen** Physiological and biochemical alterations in a diazotrophic cyanobacterium *Anabaena cylindrica* under NaCl stress. **Current Microbiol.** (Springer-Verlag, New York Inc.) 55: 334-338 (2007)
30. Mousumi Debnath, A.K.Paul and **P.S. Bisen** Natural Bioactive Compounds And Biotechnological Applications Of Marine Bacteria. **Current Pharmaceutical Biotechnology** (Bentham Science Publication,USA)) 8: 253-260 (2007).
31. Mousumi Debnath, C.P. Malik and **P.S. Bisen** Clonal Propagation Of *Chlorophytum borivilianum*, An Endangered Medicinal Plant. **Phytomorphology** **57 :117-121(2007).**
32. Raghuvanshi, R., S. Singh, R. Saxena and **P.S. Bisen** Iron mediated metabolic regulations of growth in a diazotrophic cyanobacterium *Anabaena cylindrica*. **Physiology & Molecular Biology of Plants** 13: 123-134 (2007).
33. Raghuvanshi, R., S. Singh, **P.S. Bisen** Iron mediated regulation of growth and siderophore production in a diazotrophic cyanobacterium *Anabaena cylindrica*. **Indian Journal of Experimental Biology** (CSIR, New Delhi) 45: 563-567 (2007).
34. Sah NK, Z Khan, GJ Khan and **PS Bisen** Structural, Functional and therapeutic biology of survivin. **Cancer Letters** (Elsevier The Netherland) 244: 164-171 (2006).
35. Singh S.K. and **P.S. Bisen** Adjuvanticity of stealth liposomes on the immunogenicity of synthetic gp41 epitope of HIV-1. **Vaccine** (Elsevier The Netherland) 24(19): 4161-4166 (2006).

36. Khan, Faisal, A. K. Pandey, **P.S. Bisen** and Suraksha Agrawal Allele frequency profile of three STR loci in nine north Indian populations. **Jour. Forensic Sciences** (Blackwell Publishing Inc.) 51(3): 706-707 (2006).
37. Garg S.K., Marilina B. Santucci, Miriam Panitti, Leo Pucillo, Marialuisa Bocchino, Fumikazu Okajima, **P S Bisen**, Cesare Saltini and M. Fraziano Does sphingosine 1-phosphate play a protective role in the course of pulmonary tuberculosis? **Clinical Immunology** (Elsevier The Netherland) 121: 260-264 (2006).
38. Gour, D.P.S., Geetu Malik, S.P.S. Ahlawat, A.K. Pandey, Rekha Sharma, Neelam Gupta, S.C. Gupta, **P.S. Bisen** and D. Kumar Analysis of genetic structure of Jamunapari goats by microsatellite markers. **Small Ruminant Research** (Elsevier, The Netherland) 66: 140-149 (2006).
39. Khan Zakir, Pratiksha Bhadouria, Radha Gupta and **P.S. Bisen** Tumor control by manipulation of the human anti-apoptotic Survivin gene. **Current Cancer Therapy Reviews** (Bentham Science Publishers Ltd.) 2: 73-79 (2006).
40. Debnath Mousumi, C.P. Malik and **P.S. Bisen** Micropropagation: A Tool for the production of high quality plant - based medicines. **Current Pharmaceutical Biotechnology** (Bentham Science Publishers Ltd.) 7: 33-49 (2006).
41. Tiwari, R.P., Dileep Tiwari, S.K. Garg, Ramesh Chandra and **P. S. Bisen** Glycolipids of *Mycobacterium tuberculosis* Strain H37Rv Are Potential Serological Markers For Diagnosis of Active Tuberculosis. **Clinical and Diagnostic Laboratory Immunology** (American Society for Microbiology, Washington) 12: 465-473 (2005).
42. Khan Zakir, Pratiksha Bhadoria and **P.S. Bisen** Nutritional and Therapeutic Potential of *Spirulina*. **Current Pharmaceutical Biotechnology** (Bentham Science Publishers Ltd..) 6: 373-379 (2005).
43. Gandhi Puneet, Zakir Khan, Prateeksha Bhadoria, Radha Gupta, N.K. Saha and **P.S. Bisen** Origin and Expansion of Trinucleotide Repeats and Neurological Disorders. **Current Genomics** (Bentham Science Publishers Ltd.) 6: 563-568 (2005).
44. Pavitran, S., S. Balasubramanian, Pradeep Kumar and **P.S. Bisen** Emulsification and utilization of high speed diesel by a Brevibacterium species isolated from hydraulic oil. **World Journal Microbiol.and Biotechnol.** (Springer- Verlag New York, Inc.) 20: 811-816 (2004).
45. Garg, K. Sanjay, Marilina B. Santucci, Seghrouchni Fouad, Cesare Saltini, **P.S. Bisen**, Vittorio Colizzi and Maurizio Fraziano (2004) Tuberculosis Therapeutics: Past Achievements, Present Road-Blocks and Future Perspectives. **Letters in Drug Design & Discovery.** (Bentham Science Publishers Ltd.) 1:35-449 (2004).
46. Chauhan, V. S., B. Singh, S. Singh and **P.S. Bisen** Regulation of Potassium Uptake in the Sodium-Resistant (NaCl^r) and Thallium-Resistant (TlCl^r) Mutant Strain of Diazotrophic Cyanobacterium *Anabaena variabilis*. **Current Microbiology.** (Springer-Verlag, New York Inc.) 46:59-64 (2003).

47. Bhargava, S., R. K. Saxena, P.K. Pandey and **P.S. Bisen** Mutational Engineering of the Cyanobacterium *Nostoc muscorum* for Resistance to Growth-inhibitory Action of LiCl and NaCl. **Current Microbiology** (Springer-Verlag, New York Inc.) 47:5-11 (2003).
48. Garg, S.K., R.P. Tiwari, D. Tiwari, R. Singh, D. Malhotra, V.K. Ramnani, GBKS Prasad, R. Chandra, M. Raziano, V. Colizzi and **P.S. Bisen** Diagnosis of tuberculosis: Available Technologies, Limitations and Possibilities. **Journal of Clinical Laboratory Analysis**. (Interscience Wiley Publishers, Europe) 17:155-163 (2003).
49. **Bisen, P.S.**, S.K. Garg, R.P. Tiwari, P. R.N. Tagore, R. Chandra, R. Karnik, N. Thaker, N. Desai, P.K. Ghosh, E. Volpe, M. Fraziano and V.Colizzi Analysis of shotgun expression library of *Mycobacterium tuberculosis* genome for immunodominant polypeptides: Potential use in serodiagnosis. **Clinical and Diagnostic Laboratory Immunology**. (American Society for Microbiology, Washington) 10 (6): 1051-1058 (2003).
50. Pandey, P.K., R.K. Saxena and **P.S. Bisen** Immobilisation results in sustained calcium transport in *Nostoc calcicola* Breb. **Current Microbiology** (Springer-Verlag, New York, Inc.) 44: 173-177 (2002).
51. Saxena, R.K., Pandey, P.K. and **P.S. Bisen** Physiological and biochemical alterations in *Anabaena* 7120 cells under iron stress. **Ind. J. Exp. Biol.** (CSIR, New Delhi) 40:594-599 (2002).
52. Singh, S., P.K. Pandey, V.S. Chauhan, B. Singh, R.K. Saxena and **P.S. Bisen** Nitrogen Metabolism in Cyanobacteria in **Phycology: Principles. Processes and Applications**. Prof. A.S. Ahluwalia ed. Volume Daya Publishing House, New Delhi. Chapter 5:65-88 (2002).
53. Singh, B., V.S. Chauhan, S. Singh and **P.S. Bisen** Physiological alterations and regulation of heterocyst and nitrogenase formation in Het⁻ Fix⁻ mutant strain of *Anabaena variabilis*. **Current Microbiology**. (Springer-Verlag, New York Inc.) 45:315-322 (2002).
54. Singh, B., V.S. Chauhan, S. Singh and **P.S. Bisen** Isolation and partial characterization of Het⁻ Fix⁻ mutant strain of the diazotrophic cyanobacterium *Anabaena variabilis* showing chromatic adaptation. **Current Microbiology**. (Springer-Verlag, New York Inc.) 43: 265-270 (2001).
55. Chauhan, V.S., B. Singh, S. Singh and **P.S. Bisen** Regulation of sodium influx in the NaCl- resistant (NaCl^r) mutant strain of the cyanobacterium *Anabaena variabilis*. **Current Microbiology**. (Springer-Verlag, New York Inc.) 42: 100-105 (2001).
56. Gothalwal, Ragini and **P.S. Bisen** Bioremediation in **Encyclopedia of Pest Management** (edited by David Pimentel) Marcel Dekker, Inc. pp.89-93 (2001).
57. Singh, B. B., I. Curdt, D. Shomburg, **P.S. Bisen** and H. Bohme Valine 77 of heterocystous ferredoxin *FdxH2* in *Anabaena variabilis* strain ATCC 29413 is

- critical for its oxygen sensitivity. **Molecular and Cellular Biochemistry.** (Kluwer Academic Publisher) 217: 137-142 (2001).
58. Sengupta, S., L.K. Sengupta and **P.S. Bisen** Bioengineered Crops : The commercial and ethical considerations. **Current Genomics** (Bentham Science Publishers Ltd.) 2: 181-197 (2001).
 59. Sharma, S.K., Singh D.P., Shukla H.D., Ahmad Anwar and **P.S. Bisen.** Influence of sodium ion on heavy metal-induced inhibition of light-regulated proton efflux and active carbon uptake in the cyanobacterium *Anabaena flos-aquae*. **World Journal of Microbiology and Biotechnology** (Kluwer Academic Publishers) 17(7):707-711(2001).
 60. Datta, N., Saradhi, P., Sengupta, L.K. and **P.S. Bisen** Isolation and characterization of NaCl tolerant cell lines in *Origanum vulgare* L. **Physiology and Molecular Biology of Plants.** 6: 45-52 (2000).
 61. Chauhan V.S., B. Singh, S. Singh and **P.S. Bisen** Isolation and characterization of thylakoid membrane from the NaCl resistant mutant strain of the cyanobacterium *Anabaena variabilis*. **Current Microbiology** (Springer-Verlag, New York Inc.) 41: 321-327(2000).
 62. **Bisen, P.S.,** R.K. Gour, and S. Singh Combined effect of UV-B and heat shock on photosynthetic apparatus of wild type and UV-B-HS-tolerant (UV-HS^t) mutant strain of cyanobacterium *Anacystis nidulans*. **Indian Journal of Experimental Biology** (CSIR, New Delhi) 37: 572-578 (1999).
 63. Chauhan, V.S., S. Singh, and **P.S. Bisen** Development of NaCl resistant mutant strain of diazotrophic cyanobacterium *Anabaena variabilis* having derepressed nitrogenase and impaired glutamine synthetase activities. **Physiology and Molecular Biology of Plants** 5:33-36 (1999).
 64. Chauhan, V.S., S. Singh, P.K. Pandey, and **P.S. Bisen** Isolation and partial characterization of NaCl-tolerant mutant strain of the diazotrophic cyanobacteria *Anabaena variabilis* impaired in glutamine synthetase activity. **Journal of Basic Microbiology** (VEB Gustav Fischer Verlag, Jena, Germany). 39: 219-226 (1999).
 65. Gour, R.K., P.K. Pandey, S. Singh and **P.S. Bisen** UV-B and heat shock induced changes in selected photochemical processes and wild type and UV-B heat shock tolerant (UV-HS^t) mutant of the unicellular cyanobacterium *Anacystis nidulans*. **Physiology and Molecular Biology of Plants** 5:37-43 (1999).
 66. Chauhan, V.S., S. Singh, R.K. Gour and **P.S. Bisen** Immobilization caused physiological and biochemical changes in NaCl-resistant (NaCl^r) mutant strain of diazotrophic cyanobacterium *Anabaena variabilis*. **Indian Journal Experimental Biology** (CSIR, New Delhi) 37: 696-700 (1999).
 67. Singh, B.B., Ingo Curdt, C. Jakobs, D. Schomburg, **P. S. Bisen** and H. Böhme Identification of amino acids responsible for the oxygen sensitivity of ferredoxins from *Anabaena variabilis* using site directed mutagenesis. **Biochim. Biophys. Acta (Bioenergetics)** (Elsevier The Netherland)1412 (3): 288-294 (1999).

68. Pandey, P.K., R.K. Gour and **P.S. Bisen** Energy-Dependent Ca^{2+} efflux from the cells of *Nostoc calcicola* Breb: Role of modifying factors. **Current Microbiology** (Springer-Verlag, New York Inc.) 39:254-258 (1999).
69. Singh, B., V.S. Chauhan, R.K. Gour, S. Singh and **P.S. Bisen** Heterocysts: Current Status and Future Prospects. **Jour. Indian Bot. Soc.** (Indian Botanical Society) 78: 25-32 (1999).
70. Varma, Savita, Ajit Varma, Karl-Heinz Rexen, Annette Hassel, Gerhard Kost, Ashok Sarbhoy, **P.S. Bisen**, Britta Biitehorn and Philipp Franken *Piriformospora indica* gen. et sp. nov., a new root-colonizing fungus. **Mycologia** (American Mycological Society) 90: 896-903 (1998).
71. **Bisen, P.S.**, Singh, B.B., Sengupta, L.K., Mishra, R., Sengupta, S., Pandey, P.K. and Singh, S. Calcium - Calmodulin: An overview with reference to **Microbes in Health and Sustainable Environment**. (Ed. Ajit Verma), Malhotra Publishing House, New Delhi, pp 667-87(1998).
72. Gothwal, Ragini, and **P.S. Bisen** Degradation of Chlorinated Hydrocarbon Insecticides by *Pseudomonas* spp. **International J. Trop. Agric.** 16 (1-4) 189-193 (1998).
73. Sengupta, L. K., B.B. Singh, Rashmi Mishra, P.K. Pandey, S. Singh, Sushmita Sengupta and **P.S. Bisen** Calcium - dependent metabolic regulations in prokaryotes indicate conserved nature of calmodulin gene. **Indian Journal of Experimental Biology** (CSIR, New Delhi) 36: 136-147 (1998).
74. Pandey, P. K., S.P. Singh and **P.S. Bisen** Cu^{2+} efflux and its regulation in Cu-resistant (Cu^{r}) cyanobacterium *Nostoc calcicola* Breb.) **Journal of Basic Microbiology**. {VEB Gustav Fischer -Verlag Jena Germany) 371(5): 355-360(1997).
75. Gour, R.K., S. Singh, P.K. Pandey and **P.S. Bisen** UV-B and heat shock-induced changes in the wild type and UV-B heat shock tolerant (UV-HS^t) strain of the unicellular cyanobacterium *Anacystis nidulans*. **Journal of Basic Microbiology**. (VEB Gustav Fischer Verlag, Jena, Germany) 37 (4): 259-267(1997).
76. Singh, S., V.S. Chauhan and **P.S. Bisen** Nitrogen and carbon regulation of NO_2^- efflux in the Cyanobacterium *Nostoc* MAC. **Physiology and Molecular Biology of Plants**. 3: 171-172 (1997).
77. Sengupta, S., S. Singh, L.K. Sengupta and **P.S. Bisen** Phytolectins: the natural molecules with immense biotechnological potential. **Indian Journal of Experimental Biology** (C.S.I.R New Delhi) 35: 103-110 (1997).
78. Gour, R.K, P. K. Pandey and **P. S. Bisen**: Differential response in damage and repair of wild type *Anacystis nidulans* and its UV-B plus heat shock tolerant (UV - HS^t) Strain under UV-B and heat shock stress. **Journal of Photochemistry and Photobiology** {Pergmon Press} 40 (1): 61-67(1997).
79. Singh, B.B., P.K. Pandey, S. Singh and **P.S. Bisen** Calcium - induced physiological and biochemical changes in cyanobacterium *Nostoc* Mac. **Indian Journal Expt. Biology** (C.S.I.R New Delhi) 35: 881-885 (1997).

80. **Dev, A., R.K. Gour, R.K. Jain, P.S. Bisen and L.K. Sengupta** Effect of Vesicular Arbuscular Mycorrhiza-*Rhizobium* (VAM-*Rhizobium*) interaction on heavy metal (Cu, Zn, Fe) uptake in soyabean (*Glycine max*, var. JS-335) under variable P doses. **International J. of Tropical Agriculture**. **15: 75-79 (1997)**.
81. Mishra Rashmi and **P.S. Bisen** Photoactivation of NADP - Malate Dehydrogenase photochemical system in *Zea mays*. **Jour. Plant Biochemistry & Biotechnology** (C.S.I.R. New Delhi) **6: 125-127 (1997)**.
82. Pandey, P. K., B.B. Singh, R. Mishra and **P.S. Bisen** Ca²⁺ uptake and its regulation in the cyanobacterium *Nostoc* MAC. **Current Microbiology** {Springer Verlag New York U.S.A.} **32: 332 – 335 (1996)**.
83. **Bisen, P.S., R.K. Gour, R.K. Jain, A. Dev and L.K. Sengupta** VAM colonization in tree species planted in Cu, Al, and coal mines of Madhya Pradesh with special reference to *Glomus mosseae*. **Mycorrhiza News** {T E R I New Delhi} **8: 9-11 (1996)**.
84. Singh, B.B., P.K. Pandey, S. Singh and **P.S. Bisen** Calcium/Calmodulin antagonist changes in the cyanobacterium *Nostoc* MAC. **Physiology and Molecular Biology of Plants** **2: 75 – 78 (1996)**.
85. Singh, B.B., P.K. Pandey, S. Singh and **P.S. Bisen** Evidence for the nitrate assimilation - dependent nitrite excretion in cyanobacterium *Nostoc* MAC. **World Journal of Microbiology and Biotechnology** {Rapid Communication of Oxford} **12: 285 – 287 (1996)**.
86. Singh, B.B., P.K. Pandey, S. Singh and **P.S. Bisen** Regulation of nitrate and nitrite efflux in the cyanobacterium *Nostoc* MAC. **Journal of Basic Microbiology** {VEB Gustav Fischer Verlag Jena, Germany} **36: 433-438 (1996)**.
87. Pandey, P.K., B.B. Singh, S. Singh and **P.S. Bisen** NO₂⁻ efflux and its regulation in cyanobacterium *Nostoc* MAC. **Current Microbiology** {Springer Verlag New York U.S.A.} **31: 119-123 (1995)**.
88. Singh, S., B.B. Singh and **P.S. Bisen** Role of Ammonium assimilation in urea inhibition of nitrogenase activity in cultured cyanobiont *Nostoc* ANTH. **Indian Journal of Experimental Biology** (C.S.I.R., New Delhi). **33: 94 – 96 (1995)**.
89. Singh, S., B.B. Singh and **P.S. Bisen** Copper induced changes in the urea uptake and urease activity in the cyanobacteria *Anabaena doliolum* and *Anacystis nidulans*: Interaction with sulphur containing amino acids. **Biomedical and Environmental Sciences** (Chinese Academy Of Sciences, Beijing China) **8: 158 – 163 (1995)**.
90. **Bisen, P.S., Dev, Alok, Gour, R.K. Jain R.K and Sengupta, L.K.** Study of Vesicular-arbuscular mycorrhizal fungus *Glomus mosseae* in soil samples of Bhopal. In: *Mycorrhizal Biofertilizers For the Future* (Ed. Alok Adholeya and Sujana Singh), TERI, New Delhi pp 73-76 (1995).
91. Meeks, J.C., E. Campbell and **P.S. Bisen** Elements interrupting nitrogen fixation genes in cyanobacteria: Presence and absence of nif D element in clones of

- Nostoc* sp. strain Mac. **Microbiology** (Microbiological Society of England, Great Britain). 140: 3225-3232 (1994).
92. Singh, S. and **P.S. Bisen** Glutamine synthetase and arginine inhibition of nitrate reductase activity in *Anabaena cycadeae*. **World Journal of Microbiology and Biotechnology**. (Rapid Communication Of Oxford Ltd.) 10: 191-193 (1994).
 93. Singh, S. and **P.S. Bisen** Evidence for the role of intracellular glutamine level in the regulation of glutamine in cyanobacterium *Anabaena* 7120. **Current Microbiol.** (Springer Verlag New York U.S.A) 29: 319-322 (1994).
 94. Singh, S. and **P.S. Bisen** Role of glutamine synthetase activity in the urea regulation of heterocyst and nitrogenase formation in the cyanobacterium *Anabaena cycadeae*. **Jour. Basic Microbiology** (VEB Gustav Fischer Verlag, Jena, Germany) 34: 191-195 (1994).
 95. Singh, S. and **P.S. Bisen** Arginine metabolism in the cyanobacterium *Anabaena cycadeae*: Regulation of arginine uptake and arginase by ammonia. **Current Microbiol.** (Springer Verlag New York U.S.A) 29: 49-52 (1994).
 96. Singh, S. and **P.S. Bisen** Inhibition of nitrite reductase and urease by arginine and proline in the cyanobacterium *Anabaena cycadeae* **Jour. Basic Microbiol** (VEB Gustav Fischer Verlag, Jena, Germany) 34: 401-404 (1994).
 97. Singh, S., B.B. Singh and **P.S. Bisen** Short Notes: Role of membrane potential in ammonium inhibition of nitrogenase activity in the cultured cyanobiont *Nostoc* ANTH. **World Journal of Microbiology and Biotechnology** (Rapid Communication of Oxford Ltd.) 10: 600 (1994).
 98. Singh, S. and **P.S. Bisen** Assimilation of ethylenediamine as dinitrogen source by the cyanobiont *Nostoc* ANTH. **World. Journal of Microbiology and Biotechnology** (Rapid Communication of Oxford Ltd.) 10: 477- 478 (1994).
 99. Singh, S. and **P.S. Bisen** Proline metabolism and its regulation in the cyanobiont *Nostoc* ANTH. **Jour. Plant Science Research**. 9: 1 – 6 (1993).
 100. **Bisen, P.S.** and S. Shanthy Characterization of a DCMU resistant mutant of the filamentous, diazotrophic cyanobacterium *Anabaena doliolum*. **Jour. Pl. Physiol.** (Gustav Fischer Verlag, Stuttgart 70, Germany) 142: 557-563 (1993).
 101. Singh, D.P., S.K. Sharma and **P.S. Bisen** Differential action of Hg²⁺ and Cd²⁺ on the photosynthetic apparatus of *Anabaena flos-aquae*. **Biometals** (Rapid Communication Of Oxford Ltd.) 6: 125-132 (1993).
 102. **Bisen, P.S.**, H. D. Shukla and Amit Gupta Cyanobacterial Research at Barkatullah University, Bhopal 1986 onwards. *Cyanobacterial Research – Indian Scene* NFMC, BRRD, Tiruchipalli: 5-11(1993).
 103. **Bisen, P.S.** and S. Shanthy Regulation of Hill reaction coupled to photoreduction of nitrate and nitrite in *Anabaena doliolum*. **Current Science** (Current Science Association Bangalore, INDIA) 65 : 85-86 (1993).
 104. Gothwal, R. and **P.S. Bisen** Isolation and physiological characterization of *Synechococcus cedrorum* 1191 strain tolerant to heavy metals and pesticides.

- Biomedical and Environ. Sciences.** (Chinese Academy Of Sciences, Beijing China), 6: 187-194 (1993).
105. **Bisen, P.S.** and Shruti Mathur Adaptive response of wild and mutant type *Synechococcus cedrorum* to a polychlorinated pesticide Endosulfan. **Biomedical and Environmental Sciences** (Chinese Academy of Science, Beijing China) 6: 265-272 (1993).
 106. Sharma, S.K. and **P.S. Bisen** Hg²⁺ and Cd²⁺ induced inhibition of light induced proton efflux in the cyanobacterium *Anabaena flos-aquae*. **Biometals** (Rapid Communication of Oxford Ltd.) 5: 163-167 (1992) .
 107. **Bisen, P.S.** and S. Shanthy Biochemical characterization of glutamine synthetase from the cyanobacterium *Anabaena doliolum*. **Current Microbiology.** (Springer Verlag, New York USA) 25(2): 69-75 (1992).
 108. Singh, D.P., R. Gothwal and **P.S. Bisen** Action of sodium diethyldithiocarbamate (NaDDC) on the Hill activity and chlorophyll fluorescence in *Anacystis nidulans* IU 625. **Journal of Basic Microbiology.** (VEB Gustav Fischer Verlag Jena) 32:119-128 (1992).
 109. Mehta, R., H.D. Shukla and **P.S. Bisen** Physiological and genetical characterization of a novel *Synechococcus* sp. isolate showing resistance against cyanide, heavy metals and drugs. **Environ. Tech. Lett.** (Publication Division Selper Limited London) 13: 253-258 (1992).
 110. **Bisen, P.S.** and S. Shanthy Physiological and biochemical characterization of chlorate resistant mutants of *Anabaena doliolum*. **Current Microbiology.** (Springer Verlag, New York USA) 25: 353-357 (1992).
 111. **Bisen, P.S.** and Punam Khare Mitigating effect of physicochemical factors on Ni²⁺, Hg²⁺ and Cu²⁺ toxicity in *Cylindrospermum* IU 942. **Environ. Technol. Lett.** (Publication Division Selper Limited London) 12: 297-301 (1991).
 112. **Bisen, P.S.** and S. Shanthy Regulation of assimilatory nitrate reductase in the cyanobacterium *Anabaena doliolum*. **Current Microbiology.** (Springer Verlag New York USA) 23: 239-244 (1991).
 113. Singh, D.P., Ragini Gothwal and **P.S. Bisen** Toxicity of sodium diethyldithiocarbamate (NaDDC) on photoautotrophic growth of *Anacystis nidulans* IU 625. **Journal of Basic Microbiology.**(VEB Gustav Fischer Verlag Jena Germany) 29 (9): 685-694 (1989).
 114. Singh, D.P., Punam Khare and **P.S. Bisen** Effect of Ni²⁺, Hg²⁺ and Cu²⁺ on growth, oxygen evolution and photosynthetic electron transport in *Cylindrospermum* IU 942. **Journal of Plant Physiology.** (Gustav Fischer Verlag, Stuttgart 70, Germany) 134 (4): 406-412 (1989).
 115. **Bisen, P.S.,** Surabhi Audholia, Amit Gupta, H. D. Shukla and D.P. Singh Evidence for photosynthetic independence of viral multiplication in cyanophage LPP-1 infected cyanobacterium *Phormidium uncinatum*. **FEMS Microbiol. Lett.** (Elsevier Netherlands) 52: 255-228 (1988).

116. **Bisen, P.S.**, Surabhi Audholia, Amit Gupta and B.N. Tiwary Altered nuclease and protease activity in cyanophage LPP-1 infected cyanobacteria *Phormidium uncinatum* and *Plectonema boryanum*. **Current Science** (Current Science Association Bangalore) 57(10): 548-550 (1988).
117. Agrawal, G.P., Anjana Sharma and **P.S. Bisen** Physiological changes in *Pseudomonas syringae* sp. *phaseolicola* infected Bean leaves. **Biochem. Physiol. Pfl.** (VEB Gustav Fischer Verlag Germany) 183, 337-343 (1988).
118. Tiwary, B.N., P.S. Bisen and Umakant Sinha Genetic control of amino acid transport in *Aspergillus nidulans*: Evidence for polymeric amino acid permease. **Current Microbiol.** (Springer –Verlag Inc. New York) 15: 305-311(1987).
119. **Bisen, P.S.**, H.D. Shukla, Amit Gupta and S.N. Bagchi Preliminary characterization of a novel *Synechococcus* isolate showing mercury, cadmium and lead tolerance. **Environ. Technol. Lett.** (Publication Division Selper Ltd. London) 8: 427-432 (1987).
120. Tiwary, B.N., **P.S. Bisen** and Umakant Sinha Demonstration of an altered phenylalanyl-tRNA synthetase in the analogue resistant mutant of *Aspergillus nidulans*. **Mol. Gen. Genet.** (Springer- Verlag Inc. New York) 209: 164-169 (1987).
121. Bagchi, S.N., Paramjeet Kaloya and **P.S. Bisen** Effect of cyanophage N-1 infection on the synthesis and stability of *Nostoc muscorum* nitrate reductase. **Current Microbiology.** (Springer- Verlag Inc. New York) 15: 61-65 (1987).
122. Schlangstedt, M., **P.S. Bisen**, G. Dudel and J.G. Kohl Interaction of combined nitrogen availability and light in the regulation of growth, heterocyst differentiation and dinitrogen fixation of the planktonic blue green algae *Anabaena solitaria* KLEB. **Arch. Protistology.** (VEB Gustav Fischer Verlag Jena Germany) 134: 389-396 (1987).
123. Braune, W., B. Wiedemann and **P.S. Bisen** *In vivo* microspectrophotometry of *Anabaena* akinetes in different stages of their formation and during germination. **Cytobios.** (Faculty Press, 88 Regent Street, Cambridge, England) 47: 53-63 (1986).
124. **Bisen P.S.** and S. Shanthy Modifiers of ammonium transport in the nitrogen fixing cyanobacterium *Anabaena doliolum*. Proc. Natl. Symposium Cyanobacterial Nitrogen Fixation Edt. B.D. Kaushik, 41-47 (1986).
125. **Bisen P.S.** Cyanophages: History and Likelihood as a Control. Presidential Address Delivered at Bhopal Section Botany, M.P. Vigyan Academy, 1-10 (1986).
126. **Bisen, P.S.**, Surabhi Audholia and S.N. Bagchi Nitrate reductase activity of a cyanobacterium *Phormidium uncinatum* after cyanophage LPP-1 infection. **FEMS Microbiol. Lett.** (Elsevier Armsturdam Netherlands) 33: 69-72 (1986).
127. **Bisen, P.S.**, Surabhi Audholia, A.K. Bhatnagar and S.N. Bagchi Evidence for lysogen and viral resistance in cyanobacterium *Phormidium uncinatum*. **Current Microbiology.** (Springer- Verlag Inc., New York) 13: 1-5 (1986).

128. Bagchi, S.N., Anita Karamchandani and **P.S. Bisen** Isolation and preliminary characterization of cadmium and lead tolerant strains of *Lyngbya* IU 487. **Microbios Lett.**(Faculty Press, 88 Regent Street, Cambridge, England) 29: 65-68 (1985).
129. **Bisen, P.S.**, Surabhi Audholia and A.K. Bhatanagar Mutation to resistance for virus AS-1 in the cyanobacterium *Anacystis nidulans*. **Microbios Lett.** (Faculty Press, 88 Regent Street, Cambridge, England) 29: 7-13 (1985).
130. Agarwal, G.P., Divya Mishra and **P.S. Bisen** *In vitro* production of phytotoxic metabolite by *Alternaria alternata* (Fr.) Keissler causing blight in garlic (*Allium sativum*). **Jour. Indian Bot. Soc.**(Indian Botanical Society) 64: 135-138 (1985).
131. **Bisen, P.S.**, Anjana Sharma and G.P. Agarwal *In vitro* production of halo blight inducing toxin by *Pseudomonas phaseolicola* (Burkh.) Dowson. **Phytopathol. Z.** (Verlag Paul Parey, Berlin and Hamburg) 114: 249-255 (1985).
132. **Bisen, P.S.** Effect of various substances on the oxygen uptake by *Curvularia lunata* (Wakker) Boedjn var. *aeria*. **Acta Bot. Indica** (Society for the Advancement of Botany Meerut) 12: 56-63 (1984).
133. **Bisen, P.S.** Glucose metabolism in cyanobacterium *Nostoc* sp. strain Mac grown under photoautotrophic, photoheterotrophic and chemoheterotrophic regimes. **Acta Bot. Indica** (Society for the Advancement of Botany, Meerut) 12: 107-113 (1984).
134. **Bisen, P.S.** Toxin production by *Curvularia lunata* (Wakker) Boedjn var. *aeria* causing leaf blight in french bean *Phaseolus vulgaris* L.. **Jour. Indian Bot. Soc.** (Indian Botanical Society) 63: 292-297 (1984).
135. **Bisen, P.S.** and G.P. Agarwal Respiratory and permeability changes in bean leaves (*Phaseolus vulgaris* L.) infected with *Curvularia lunata* var. *aeria* or with the isolated toxin. **Biochem. Physiol. Pfl.** (VEB Gustav Fischer Verlag, Jena, Germany) 179: 13-19 (1984).
136. **Bisen, P.S.** and G.P. Agarwal (1983) Effect of fungicides and antibiotics on the activity of wall degrading enzymes of *Curvularia lunata* var. *aeria* causing leaf blight in french bean (*Phaseolus vulgaris* L.). **Jour. Indian Bot. Soc.** (Indian Boanical Society) 62: 282-284.
137. **Bisen, P.S.** and Bala Channy Some observations on the surface of wheat leaves during the early stages of infection by *Helminthosporium sativum* (P.K. & B). **Jour. Indian Bot. Soc.** (Indian Botanical Society) 62: 285-287 (1983).
138. **Bisen, P.S.** Changes in the carbohydrate and nitrogen content of bean leaves infected with *Curvularia lunata* (Wakker) var. *aeria*. **Acta Bot. Indica** (Society for the Advancement of Botany, Meerut) 11: 146-149 (1983).
139. **Bisen, P.S.** Production of toxic metabolites by *Curvularia lunata* (Wakker) Boedijn var. *aeria* and its role in leaf spot disease of bean (*Phaseolus vulgaris* L.) **Acta Bot. Indica** (Society for the Advancement of Botany, Meerut) 11: 235-237 (1983).

140. **Bisen, P.S.**, Kanti Ghosh and G.P. Agarwal Induction and inhibition of cellulase complex in *Fusarium solani* **Biochem. Physiol. Pfl.** (VEB Gustav Fischer Verlag, Jena, Germany) 117: 593-599 (1982).
141. Shobun, Nisha and **P.S. Bisen** Phytotoxic metabolite from *Coniella granati*. **Acta Bot Indica** (Society for the Advancement of Botany, Meerut) 10: 107-109 (1982).
142. **Bisen, P.S.** and G.P. Agarwal *In vitro* production of pectolytic enzymes by *Aspergillus niger* Van Tiegh. causing soft rot in apples. **Phytopath. Z.** (Verlag Paul Parey, Berlin and Hamburg) 97: 317-326 (1980).
143. Agarwal, G.P., D. Kulhara and **P.S. Bisen** Factors affecting the *in vitro* production of pectolytic and cellulolytic enzymes by bean leaf pathogens *Curvularia lunata* and *Colletotrichum dematium*. **Biochem. Physiol. Pfl.** (VEB Gustav Fischer Verlag Jena, Germany) 172: 277-283 (1978).
144. **Bisen, P.S.** and G.P. Agarwal Accumulation of Phenols in tomato leaves by plant fungi interaction. **Natl. Acad. Sci. Lett.** (India) (National Academy of Sciences, Allahabad, India) 1: 285-286 (1978).
145. Agarwal, G.P, D. Kulhara and **P.S. Bisen** *In vitro* production of pectolytic enzymes by *Pleospora infectoria* (Group) and *Nigrospora sphaerica* (Sacc.) causing Pod spots of Pea (*Pisum sativum*) and Bean (*Dolichos lablab*). **Biochem. Physiol. Pfl.** (VEB Gustav Fischer Verlag Jena, Germany) 171: 7-16 (1977).
146. Agarwal, G.P. and **P.S. Bisen** Post infection changes in apple due to *Aspergillus niger* van Tiegh III Phenolics. **Phytopath. medt.**(Unione Fitopatologica Mediterranea – Italia) 16: 137-139 (1977).
147. Agarwal, G.P. and **P.S. Bisen** Changes in the ascorbic acid contents of some cultivars of stored apples infected by *Aspergillus niger* and *Alternaria tenuis*. **Phytopath. medt.**(Unione Fitopatologica Mediterranea – Italia) 15: 125-127 (1976).
148. Agarwal, G.P. and **P.S. Bisen** Post infection changes in apples due to *Aspergillus niger* van Tiegh II Organic acids **Phytopath. medt.**(Unione Fitopatologica Mediterranea -Italia) 14: 125-126 (1975).
149. **Bisen, P.S.** Changes in amino acid content of healthy and *Aspergillus niger* infected apple tissue. **Indian Phytopathology** (Indian Phytopathological Soc. New Delhi, India) 28: 131-133 (1975).
150. Agarwal, G.P., D. Kulhara and **P.S. Bisen** Production of cellulolytic enzymes by *Pleospora infectoria* (Group) and *Nigrospora sphaerica* (Sacc.) Mason. causing pod spots of Pea (*Pisum sativum*) and Bean (*Dolichos lablab*). **Biochem. Physiol. Pfl.** (VEB Gustav Fischer Verlag Jena, Germany) 165: 401-405 (1974).
151. **Bisen, P.S.** Effect of fungal infection in vitamin C content of apples. **Current Sci.** (Current Science Association Bangalore) 43: 625-626 (1974).

152. **Bisen, P.S.** Amino acid composition of *Aspergillus niger*. **Indian Phytopathology**. (Indian Phytopathological Soc. New Delhi India) 27: 407-40 (1974).
153. **Bisen, P.S.** and G.P. Agarwal Studies on the qualitative and Scientific Reviews Published quantitative changes in the sugar contents of apple (*Pyrus malus*) during pathogenesis by *Aspergillus niger* Van Tiegh. **Proc. Natl. Acad. Sci.** (National Academy of Sciences, Allahabad India) 42:235-239 (1972).

List of chapters/Reviews written for Books:

1. “Liposomes in Diagnosis of Tuberculosis” **P.S. Bisen**, GBKS Prasad, Anish Zacharia, Nitesh Jadon, Richa Dubey and R P. Tiwari, In: Advances in Biomedical Research Photios Anninos, Marco Rossi, Tuan D. Pham, Carla Falugi, Arndt Bussing, Martha Koukkou Published by WSEAS Press www.wseas.org ISSN: 1790-5125 ISBN: 978-960-474-164-9 pp. 381-400 (February 2010)
2. “Immunoprophylactic Mechanisms of Glycolipid Antigens in Tuberculosis” G. B. K. S. Prasad, **P. S. Bisen**, Nitesh Jadaun, Anish Zacharia J., Richa Dubey and R. P. Tiwari In: Advances in Biomedical Research Photios Anninos, Marco Rossi, Tuan D. Pham, Carla Falugi, Arndt Bussing, Martha Koukkou Published by WSEAS Press www.wseas.org ISSN: 1790-5125 ISBN: 978-960-474-164-9 pp. 407-416 (February 2010)
3. “Culture Filtrate Antigens in Tuberculosis Diagnosis” Anish Zacharia, Nitesh Jadaun, Richa Dubey, G. B. K. S. Prasad and **P. S. Bisen** In: Advances in Biomedical Research Photios Anninos, Marco Rossi, Tuan D. Pham, Carla Falugi, Arndt Bussing, Martha Koukkou Published by WSEAS Press www.wseas.org ISSN: 1790-5125 ISBN: 978-960-474-164-9 pp. 417-425 (February 2010)
4. “Mycobacterium tuberculosis: Pathogenesis, Diagnosis, Chemotherapy and Strategy for Vaccination” **P.S. Bisen** and R. P. Tiwari, In Microbes for Human Life , Ashok K. Chauhan, Harsha Kharkwal and Ajit Varma ed., I.K. International Publishing House Pvt. Ltd., New Delhi, pp. 357-419 (2007).
5. “Nitrogen Metabolism in Cyanobacteria” S. Singh, P.K. Pandey, V.S. Chauhan, B. Singh, R.K. Saxena and **P.S. Bisen** in Phycology: Principles. Processes and Applications. Prof. A.S. Ahluwalia ed. Volume Daya Publishing House, New Delhi. Chapter 5:65-88 (2002).
6. “My journey with cyanobacteria” **P.S. Bisen** (Sectional Presidential Address of Plant Sciences) 90th Annual Session of Indian Science Congress Association, Bangalore p 1 – 40 (2003).
7. “Bioremediation” Ragini Gothalwal and **P.S. Bisen** in Encyclopedia of Pest Management David Pimentel ed., Marcel Dekker, Inc. pp.89-93 (2001).
8. Singh, B., Chauhan, V.S., Gour, R.K., Singh, S. and **Bisen P.S.** (1999) Heterocyst: Current status and future prospects. Journal of Indian Botanical Society 78:25–32.
9. “Calcium - Calmodulin: An overview” **P.S. Bisen**, B.B. Singh, L.K. Sengupta, R. Mishra, S. Sengupta, P.K. Pandey and S. Singh in Microbes in Health and

- Sustainable Environment, Ajit Verma ed., Malhotra Publishing House, New Delhi, pp 667-87(1998).
10. Singh, B.B, S. Singh and **P.S. Bisen** (1998) Why does diazotrophic cyanobacterium in its immobilized state liberate ammonium? (Ed.) V.K. Jain Wisdom Publishing House, New Delhi 352-358.
 11. Study of Vesicular-arbuscular mycorrhizal fungus *Glomus mosseae* in soil samples of Bhopal. **P.S. Bisen**, Alok Dev, R.K. Gour, R.K. Jain and L.K. Sengupta in: Mycorrhizal Biofertilizer For the Future, ed. Alok Adholeya and Sujana Singh, TERI, New Delhi pp 73-76 (1995).
 12. Cyanobacterial Research at Barkatullah University, Bhopal 1986 onwards **P.S. Bisen**, H. D. Shukla and Amit Gupta. Cyanobacterial Research – Indian Scene NFMC, BRRD, Tiruchipalli: 5-11(1993).
 13. “Organization of the gene for nitrogen fixation in some cyanobacteria”. **P.S. Bisen** and S. Shanthy in Frontiers in Microbial Technology ed. **P.S. Bisen**, CBS Publishers, New Delhi, pp. 237-246 (1994).
 14. “Heat shock proteins in prokaryotes” H.D. Shukla and **P.S. Bisen** in: Frontiers in Microbial Technology, ed. **P.S. Bisen** CBS Publishers, New Delhi, pp. 302-310 (1994).
 15. “Root nodulation during infection by Rhizobia” **P.S. Bisen** and Rajendra Mehta in Frontiers in Microbial Technology. ed. **P.S. Bisen**, CBS Publishers, New Delhi. pp 265-278 (1994).
 16. “Modifiers of ammonium transport in the nitrogen fixing cyanobacterium *Anabaena doliolum*” **P.S. Bisen** and S. Shanthy Prof. G.S.Venkataraman Felicitation Volume in ed. B.D. Kaushik Proc. Natl. Symp. Cyanobacterial Nitrogen Fixation 41-47 (1990).
 17. “Cyanophages: History and likelihood as a control” **P.S. Bisen** Presidential address in M.P. Vigyan academy held at Bhopal. Fifth Annual Session in 1986 (Section Botany) 1-6 (1986).
 18. “Aflatoxin producing potentials of *Aspergillus flavus* associated with stored wheat grains.” G.P. Agarwal, Shashi Awasthi and **P.S. Bisen** in Proc. Symposium Mycotoxin in Food and Feed, Bhagalpur University. ed. K.S.Bilgrami Allied Press, Bhagalpur 73-78 (1981).
 19. “Studies on the production of CM-cellulase by *Aspergillus niger*” G.P. Agarwal, and **P.S. Bisen** Current Trends in Life Sciences, Today & Tomorrow Press New Delhi 9, 1-9 (1981).
 20. “Production of toxic metabolite by *Curvularia lunata* (Wakker) Boed var. *aeria* causing leaf spot in french bean (*Phaseolus vulgaris* L.)” G.P. Agarwal, and **P.S. Bisen** in Proc. Physiology of Parasitism, ed. G.P. Agarwal and K.S. Bilgrami Today and Tomorrow Publishers and Printers New Delhi), 275-281 (1979).
 21. “Role of extra cellular enzymes in rot of apples caused by *Aspergillus niger*” **P.S. Bisen** Proc. Physiology of Parasitism ed. G.P. Agarwal and K.S. Bilgrami), Today and Tomorrow Printers and Publishers, New Delhi 247-258 (1979).