

### **Research Papers Published:**

- Prabha P, Singh DP, **Gupta SK**, de Farias ST, Rai A. Comparative analysis to identify determinants of changing life style in *Thermosynechococcus elongatus* BP-1, a thermophilic cyanobacterium. Bioinformation 2013, 9(6): 299-308. **(IF: 1.15)**
- Mudiam MKR, Chauhan A, Singh KP, **Gupta SK**, Jain R, Ch R, Murthy R. Determination of *t,t*-muconic acid in urine samples using a molecular imprinted polymer combined with simultaneous ethyl chloroformate derivatization and pre-concentration by dispersive liquid–liquid microextraction. Analytical and Bioanalytical Chemistry 2013, 405(1): 341-349. doi: 10.1007/s00216-012-6474-9 **(IF: 3.778)**
- Lai X, Schmitz U, **Gupta SK**, Bhattacharya A, Kunz M, Wolkenhauer O, Vera J. Computational analysis of target hub gene repression regulated by multiple and cooperative miRNAs. Nucleic Acid Research 2012, 40(18): 8818-8834. doi: 10.1093/nar/gks657 **(IF: 8.026)**
- Prabha R, Singh DP, Gupta SK, Farooqi S, Rai A. Synonymous codon usage in *Thermosynechococcus elongatus* (cynobacteria) identifies the factors shaping codon usage variation. Bioinformation 2012, 8(13): 622-628. **(IF: 1.15)**
- Smita S, **Gupta SK**, Bartonova A, Dusinska M, Gutleb AC, Rahman Q. Nanoparticles in the environment: assessment using the causal diagram approach. Environmental Health 2012, 11(Suppl 1): S13. **(IF: 2.65)**
- Gupta SK, Srivastava M, Akhoon BA, **Gupta SK**, Grabe N. *In silico* accelerated identification of structurally conserved CD8+ and CD4+ T-cell epitopes in high-risk HPV types. Infection, Genetics and Evolution 2012, 12(7): 1513-1518. **(IF: 3.128)**
- **Gupta SK**, Gupta SK, Smita S, Srivastava M, Lai X, Schmitz U, Rahman Q, Wolkenhauer O, Vera J. Computational analysis and modeling the effectiveness of 'Zanamivir' targeting neuraminidase protein in pandemic H1N1 strains. Infection, Genetics and Evolution 2011, 11: 1072-1082. **(IF: 3.223)**
- **Gupta SK**, Dhawan A, Shanker R. *In silico* approaches: Prediction of biological targets for fullerene derivatives. Journal of Biomedical Nanotechnology 2011, 7: 91-92. **(IF: 4.216)**
- Akhoon BA, **Gupta SK**, Verma V. Comparative analysis of mesothelial invasion by single- and multi-wall carbon nanotubes using computational approach. Journal of Biomedical Nanotechnology 2011, 7: 181-182. **(IF: 4.216)**
- Patel A, Smita S, Rahman Q, **Gupta SK**, Verma MK. Single wall carbon nanotubes block ion passage in mechano-sensitive ion channels by interacting with extracellular domain. Journal of Biomedical Nanotechnology 2011, 7: 183-185. **(IF: 4.216)**
- Gupta SK, Srivastava M, Akhoon BA, Smita S, Schmitz U, Wolkenhauer O, Vera J, **Gupta SK**. Identification of immunogenic consensus T-cell epitopes in globally distributed influenza-A H1N1 neuraminidase. Infection, Genetics and Evolution 2011, 11(2):308-319. doi:10.1016/j.meegid.2010.10.013 **(IF: 3.223)**
- Gupta SK, Smita S, Sarangi AN, Srivastava S, Akhoon BA, Rahman Q, **Gupta SK**. *In silico* CD4+ epitope prediction and HLA distribution analysis for the potential proteins of *Neisseria*

*meningitidis* Serogroup B – a clue for vaccine development. Vaccine 2010, 28(43): 7092-7097. doi:10.1016/j.vaccine.2010.08.005 (**IF: 3.616**)

- Srivastava M, Akhoon BA, Gupta SK, **Gupta SK**. Development of resistance against Blackleg disease in *Brassica oleracea var. botrytis* through *in silico* methods. Fungal genetics and Biology 2010, 47(10): 800-808. doi:10.1016/j.fgb.2010.06.014 **Cover Page article (IF: 2.961)**
- Pandey R, Gupta S, Tandon S, Wolkenhauer O, Vera J, **Gupta SK**. Bacoside A suppresses epileptic like seizure / convulsion in *Caenorhabditis elegans*. Seizure 2010, 19: 439-442. doi:10.1016/j.seizure.2010.06.005 (**IF: 2.233**)
- Akhoon BA, Gupta SK, Gagan D, Srivastava M, **Gupta SK**. Virtual screening of specific chemical compounds by exploring *E. coli* NAD+-dependent DNA ligase as a target for antibacterial drug discovery. Journal of molecular Modeling 2010. doi:10.1007/s00894-010-0713-9. (**IF: 2.336**)
- Smita S, Sarangi AN, Patel A, Verma MK, Pandey R, Rahman Q, **Gupta SK**. Comparison of structural geometry of  $\alpha$ -helices from transmembrane and globular proteins. International Journal of Integrative Biology 2010, 9(2): 80-83. (**IC: 6.0**)
- Gupta SK, Akhoon BA, Srivastava M, **Gupta SK**. A novel algorithm to design an efficient siRNA by combining the pre proposed rules of siRNA designing. Journal of computer science & system biology 2010, 3(1): 005-009. doi:10.4172/jcsb.1000048 (**IC: 5.68**)
- Akhoon BA, Gupta SK, Verma V, Dhaliwal G, Srivastava M, **Gupta SK**, Ahmad RF. In-silico designing and optimization of anti-Breast cancer antibody mimetic oligopeptide targeting HER-2 in women. Journal of molecular graphics and modeling 2010, 28: 664-669. doi:10.1016/j.jmgm.2010.01.002 (**IF: 2.169**)
- Sarangi AN, Gupta S, Trivedi N, Rathi B, **Gupta SK**. Mining the proteome of *Haemophilus ducreyi* for identification of potential drug targets. The Open Bioinformatics Journal 2010, 4: 1-4. doi:10.2174/1875036201004010001 **Peer Reviewed**
- Dixit S, Purshottam SK, **Gupta SK**, Khanna SK, Das M. Usage pattern and exposure assessment of food colours in different age groups of consumers in the State of Uttar Pradesh, India. Food Additives & Contaminants: Part A Chemistry, Analysis, Control, Exposure & Risk Assessment. 2010, 27(2): 181-189. doi:10.1080/19440040903268062 (**IF: 2.131**)
- Pattanayak M, Seth PK, Smita S, **Gupta SK**. Geraniol and limonene interaction with *3-hydroxy-3-methylglutaryl-CoA (HMG-CoA) reductase* for their role as cancer chemo-preventive agents. Journal of Proteomics & Bioinformatics 2009, 2(11): 466-474. doi:10.4172/jpb.1000107 (**IC: 6.55**)
- Choubey J, Patel A, Khatri S, Dewangan R, **Gupta SK**, Verma MK. Homology modeling of hypoxanthine-guanine phosphoribosyltransferase, enzyme involved in salvage pathway of purine metabolism. Journal of computer science and system biology 2009, 2(5): 260-263. doi:10.4172/jcsb.1000039 (**IC: 5.68**)
- Gupta SK, Singh A, Srivastava M, **Gupta SK**, Akhoon BA. *In silico* DNA vaccine designing against human papillomavirus (HPV) causing cervical cancer. Vaccine 2009, 28(1): 120-131. doi:10.1016/j.vaccine.2009.09.095 (**IF: 3.616**)

- Biswas D, **Gupta SK**, Sindhwan G, Patras A. TLR2 polymorphism, Arg753Gln and Arg677Trp, are not associated with increased burden of Tuberculosis in Indian patients. BMC Research Notes 2009, 2: 162. doi:10.1186/1756-0500-2-162 (**IC: 6.16**)
- Pandey R, Singh T, Bhakuni RS, **Gupta SK**, Gupta RR, Kalra A. Nematicidal activities in artemisinin analogues. Nematologia Mediterranea 2004, 32(2): 213-216. **Peer Reviewed**

### **Book Chapter:**

- Marin-Sanguino A, **Gupta SK**, Voit EO, Vera J. Biochemical pathway modeling tools for drug target detection in Cancer and other complex diseases. In Michael Johnson editor: Methods in Enzymology, Vol. 487, Burlington: Academic Press, 2010, pp 319-370. (**IF: 1.904**)
- **Gupta SK**, Schmitz U. Bioinformatics approaches for analyzing high-throughput data. In: Recent trends in Biotechnology Vol-2, Nova Science Publishers Inc., USA, 2010, pp 129-156.
- **Gupta SK**, Smita S, Rahman Q. Enriching biotechnology with recent bioinformatics tools and protocols. In: Recent trends in Biotechnology, 2009, Vol-1, Nova Science Publishers Inc., USA.
- Smita S, Singh KP, Akhoon BA, Gupta S, **Gupta SK**. Bioinformatics tools for interpretation of data used in molecular identification. In "Analyzing Microbes", Manual of molecular Biology Techniques. Page 209 - 243. Published by Springer Protocols, Springer. ISBN: 978-3-642-34410-7.
- Smita S, Singh KP, Akhoon BA, **Gupta SK**. Biological sequence analysis: algorithms and statistical methods. In "Analyzing Microbes", Manual of molecular Biology Techniques. Page 303 - 333. Published by Springer Protocols, Springer. ISBN: 978-3-642-34410-7.
- Schmitz U, **Gupta SK**. Essay on "Target site". Encyclopedia of System Biology 2012.

### **Technical Report:**

- HENVINET – Evaluation questionnaire – causal chain for nanoparticles. Rahman Q, Smita S, **Gupta SK** Ed. by Yang A, Bartonova, A. [TR 13/2010].

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