



**INSTITUTE OF HOME ECONOMICS**  
**UNIVERSITY OF DELHI**



Name	<b>Dr Sandeep Yadav</b>	Photograph
Designation	Assistant Professor	
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**Educational Qualifications:**

- MSc (**Biochemistry**) from Department of Biochemistry & Genetics, Maharshi Dayanand University, Rohtak, Haryana in 2008
- PhD (**Biochemistry**) from Department of Biochemistry, Maharshi Dayanand University, Rohtak (Haryana), India and Institute of Genomics and Integrative Biology (I.G.I.B.) New Delhi, India in 2012

**Teaching experience:**

- 10 Years

**Subjects/Papers Taught:**

- Nutritional Biochemistry; Proteins & Enzymes; Plant Biochemistry; Human Physiology; Hormones: Biochemistry & Function; Biomolecules; Metabolism of Carbohydrates and Lipids

**Awards received**

- Best oral presentation award in National Conferences: 02
- Research Associateship (RA) awarded by Indian Council of Medical Research (ICMR)

**Research Interest/Specialization**

- Electrochemical biosensor technology, Bio-nanotechnology, Enzyme technology, Clinical chemistry, Analytical biochemistry and Microfluidics

**ORCID No.**

- <https://orcid.org/0000-0001-8613-9692>

**Research Projects**

Title	Funding agency/organization	Duration of Project

## Research papers since 2010 (APA format)

- Vachher, M., Bansal, S., Kumar, B., **Yadav, S.**, Burman, A. (2022). Deciphering the role of aberrant DNA methylation in NAFLD and NASH. *Heliyon*. 8, e11119 [IF- 3.77]
- Vachher, M., **Yadav, S.**, Rastogi, A., Tihara, S., Kumar, B., Arora, T., Burman, A. (2022). Consumption of natural products and Ayurvedic decoctions “kadha” as immunity-boosting measures during the spread of COVID-19 in Delhi. *J. Drug Res. Ayur. Sci.* **Article in press.** (DOI)
- Vachher, M., Bansal, S., Kumar, B., **Yadav, S.**, Arora, T., Moza-Wali, N., Burman, A. (2022). Contribution of organokines in the development of NAFLD/NASH associated hepatocellular carcinoma. *J Cell. Biochem.* 1, 1-32 [IF- 4.48]
- Vachher, M.,\* **Yadav, S.**,\* Gopal, P., Chopra, S., Grover, N., Vanshika., Sharma, S., Burman, A., Trilok-Kumar, G. (2021). A Sustainable Option of Developing Kitchen Gardens Based on Air Pollution Tolerance Index (APTI) Method of Plants with Edible Leaves for Health and Well Being. *The Ind. J. Nutrit. Diet.*, 58, 54-67.
- Singh, M., **Yadav, S.** (2014). A label-free electrochemical protein sensor of perchloric acid doped polyaniline. *Int. J. Pharm. Anal. Res.* 3, 157-168. [IF = 3.056]
- Pundir, C.S., Yadav, S., Kumar, S. (2013). Creatinine sensors. *Trends in Anal. Chem.* 50, 42-52 [IF = 14.908]
- Devi, R., Batra, B., Lata, S., **Yadav, S.**, Pundir, C.S. (2013). A method for determination of xanthine in meat by amperometric biosensor based on silver nanoparticles/ cysteine modified Au electrode. *Process Biochem.* 48, 242–249 [IF = 4.885]
- Kundu, N., **Yadav, S.**, Pundir, C.S. (2013). Preparation and characterization of glucose oxidase nanoparticles and their application in dissolved oxygen metric determination of serum glucose. *J Nanosci. Nanotechnol.* 13, 1710-1716. [IF = 1.354]
- Devi, R., **Yadav, S.**, Nehra, R., Yadav, S., Pundir, C.S. (2013). Electrochemical biosensor based on gold coated iron nanoparticles/chitosan composite bound xanthine oxidase for detection of xanthine in meat samples. *J. Food Engg.* 115, 207-214. [IF = 6.203]
- Batra, B., Lata, S., Devi, R., **Yadav, S.**, Pundir, C.S. (2012) Fabrication of an amperometric tyramine biosensor based on immobilization of tyramine oxidase on AgNPs/L-Cys modified Au electrode. *J. Solid State Electrochem.* 16, 3869-3876. [IF = 2.747]
- **Yadav, S.**, Devi, R., Bhar, P., Singhla, S., Pundir, C.S. (2012). A creatinine biosensor based on iron oxide nanoparticles/chitosan-g-polyaniline composite film electrodeposited on Pt electrode. *Enz. Microb. Technol.* 50, 247-254. [IF = 3.705]
- Devi, R., Narang, J., **Yadav, S.**, Pundir, C.S. (2012). Amperometric determination of xanthine in tea, coffee and fish meat with graphite rod bound xanthine oxidase. *J. Anal. Chem.* 67, 273-277. [IF = 1.237]
- Devi, R., **Yadav, S.**, Pundir, C.S. (2012). Amperometric determination of xanthine in fish meat by zinc oxide nanoparticles/chitosan/multiwalled carbonnanotube/polyaniline composite film bound xanthine oxidase. *Analyst* 137, 754-759. [IF = 5.227]
- Devi, R., **Yadav, S.**, Pundir, C.S. (2012). Au-Colloids-polypyrrole nanocomposite film for xanthine biosensor. *Colloids and Surfaces A: Physicochem. Engg. Aspects* 394, 38-45. [IF = 4.539]
- Devi, R., **Yadav, S.**, Pundir, C.S. (2011). Electrochemical detection of xanthine by xanthine oxidase immobilized on carboxylated multiwalled carbon nanotubes/polyaniline composite film. *Biochem.*

*Engineering J.* 58-59, 148-153. [IF = 4.446]

- **Yadav, S.,** Kumar, A., Pundir, C.S. (2011). Amperometric determination of creatinine with covalently co-immobilized enzymes onto carboxylated multiwalled carbon nanotubes/polyaniline composite film on Pt electrode. *Anal. Biochem.* 419, 277-283. [IF = 3.191]
- **Yadav, S.,** Devi, R., Kumar, A., Pundir, C.S. (2011). Tri-enzyme functionalized ZnO-NPs/ CHIT/c-MWCNT/PANI composite film for amperometric determination of creatinine. *Biosens. Bioelectrons.* 28, 64–70. [IF = 12.545]
- Lata, S., **Yadav, S.,** Bhardwaj, R., Pundir, C.S. (2011). Amperometric Determination of Tyramine in Sauce and Beer by Epoxy Resin Biocomposite Membrane bound Tyramine Oxidase. *Sens. Instrument. Food Quality Safety (Journal of Food Measurement and Characterization)* 5, 104-110. [IF = 3.006]
- **Yadav, S.,** Devi, R., Pundir, C.S. (2011). An amperometric oxalate biosensor based on polypropylene tip bound sorghum oxalate oxidase. *Sens. Letts.* 9, 1661-1665. [IF = 0.811]
- **Yadav, S.,** Devi, R., Kumari, S., Yadav, S., Pundir, C.S. (2011) An amperometric oxalate biosensor based on sorghum oxalate oxidase bound carboxylated multiwalled carbon nanotubes–polyaniline composite film. *J. Biotechnol.* 151, 212–217. [IF = 3.595]
- Dahiya, T., **Yadav, S.,** Chauhan, N., Handa, P., Pundir, C.S. (2010) Strawberry Fruit Oxalate Oxidase-Detection, Purification, Characterization and Physiological Role. *J. Plant Biochem. Biotechnol.* 19, 247-250 [IF = 0.773]

#### Books published/edited

#### Book chapters published/edited

- **Yadav, S.,** Saini, A., Vasdev, K. (2020). Nanobiosensors. In S. Yurish (Ed.). *Advances in Biosensors: Reviews Volume 3* (pp 273-333) International Frequency Sensor Association Publishing.
- Saini, A., **Yadav, S.,** Vasdev, K. (2020). Enzyme Biosensors. In S. Yurish (Ed.). *Advances in Biosensors: Reviews Volume 3* (pp 223-272) International Frequency Sensor Association Publishing.
- Saini, A., **Yadav, S.,** Mani I. (2022). Chapter 14-DNA/RNA-based self-assemblies for bio-sensing. In A. Pandya, R.S. Bhosale and V. Singh (Ed.). *Design, Principle and Application of Self-Assembled Nanobiomaterials in Biology and Medicine* (pp 227-249) Academic Press.

#### Association with Professional Societies

## **Any other**

### **Academic/Administrative Assignments**

- Convener; College Helpdesk for Reserve Category Candidates (SC/ST/OBC-NCL/EWS/PwBD/Minority) (2021-2023)
- Member; College Admission, Prospectus, Media Publicity & Student grievance committee (2016-2023)
- Member; College Student amenities committee (2021-2023)
- Member; College Purchase committee (2018-2021)
- Member; College Cultural committee (2013-2018)
- Member; College Sports committee (2013-2016)
- Member; College Automation committee (2014-2016)
- Member; College IQAC-NAAC committee (2021-2024)
- Member; CBCS-LOCF Course revision of Delhi University for BSc (Hons) Home Science, BSc (Pass) Home Science and PGDDPHN (2018-2019)
- Member; Annual Mode Course revision of Delhi University for PFDDPHN (2020-2021)
- Member; UGCF\_NEP Course revision of Delhi University for BSc (Hons) Biochemistry, BSc (Hons) Home Science, BSc (Pass) Home Science (2021-2022)