



# Miranda House

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**Name: Sharda Mahilkar-Sonkar**

**Department: Chemistry**

**Current Designation: Associate Professor**

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**Academic Qualifications :**

2001-2003: M.Sc. (Organic Chemistry), Miranda House, University of Delhi

1998-2001: B.Sc. (Hons) Chemistry, Miranda House, University of Delhi

**Research Degree(s):**

2005-2009: Ph. D. Pt. R. S. S. Shukla University (Raipur), C. G.

**Field of Specialization under the Subject/Discipline: Organic Chemistry**

**Total Teaching Experience: 15 Years**

**Teaching at Miranda House since: June 2006**

**List of Publications in peer-reviewed journals:**

1. Variation on  $\lambda_{max}$  value of Lawsone (2-hydroxy-1,4-napthoquinone) in different solution in vitro: A preliminary study, Sharda Mahilkar Sonkar and Anshika Lumb, Zeichen journal, April 2022, 8(4) ,42-46.  
Link : <http://www.ezeichen.com/gallery/2508.pdf>
2. Drug Discovery and Development - with Special Focus on COVID-19, Sharda Mahilkar Sonkar , Sujata Sengupta , Shivani Singh , Anand Sonkar , Hana Fathima , Anjana R Chandran , Muskan Singh , Manisha, Raveena Kumari, Zeichen journal, March 2022, 8(3) ,436-457.  
Link : <http://www.ezeichen.com/gallery/2487.pdf>
3. Derivatization of Alcohols using (bmim) HSO<sub>4</sub> : A Green Approach for the undergraduate chemistry laboratory, **Sharda Mahilkar Sonkar**, Sujata Sengupta, Shivani Singh and Anshika Lumb, World journal of Chemical education, March 2022, 10(2), 62-64



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Link : <http://www.sciepub.com/WJCE/abstract/14240>

4. Spot Test to differentiate between D-Glucose and D-Fructose, **Sharda Mahilkar Sonkar** ,Sujata Sengupta and Shivani Singh, Journal of Laboratory Chemical Education, 2022, 10 (1), 1-3

Link : <http://article.sapub.org/10.5923.j.jlce.20221001.01.html>

5. Thermal Studies and Kinetic Parameters of Copper (II) Complexes of Some Novel N-Hydroxyamidines **Sharda Mahilkar Sonkar** and Hemlata Mohabey , International Journal of Innovative Research in Technology (IJIRT), 8(8),January 2022, 122-126

Link : [https://www.ijirt.org/master/publishedpaper/IJIRT153618\\_PAPER.pdf](https://www.ijirt.org/master/publishedpaper/IJIRT153618_PAPER.pdf)

6. The Chemistry of Essential Oil and its Role as Natural Fragrances In Perfumes, Sujata Sengupta, Shivani Singh, **Sharda Mahilkar Sonkar**, Anand Sonkar, Nandini Kapoor, Garima Tomar, Shweta Gaur, & Aditi Bajaj, International Education and Research Journal (IERJ), 2021, 7(11).

Link : <https://ierj.in/journal/index.php/ierj/article/view/2369>

7. Impact of Covid-19 Pandemic on The Environment: A General Review for the Lockdown Period In India From March 2020 To April 2020, Shivani Singh, Sujata Sengupta, **Sharda Mahilkar Sonkar** , Navpreet Kaur , Riya Kumari , Sanna, Sakshi , Shagun Paliwal , Anand Sonkar, International Educational Applied Scientific Research Journal, 2021, 6.

8. Detection of Heavy Metals (Cr,Co, NI, Cd) through atomic absorption spectroscopy from water samples of the river Yamuna at different locations in the NCT of Delhi, India, Kalawati Saini, **Sharda Mahilkar Sonkar**, Balendra, Garima Ghanjhas, Archa Gulati,International journal for scientific research and development (IJSRD), 2015, 120-123

Link : [https://ijsrd.com/C\\_Article.php?manuscript=NCILP030](https://ijsrd.com/C_Article.php?manuscript=NCILP030)

9. Determination of water quality parameters of the river Yamuna at different locations in Delhi using Vernier Sensors Kalawati Saini, **Sharda Mahilkar Sonkar**, International Journal of Engineering Science and Innovative Technology (IJESIT), March 2015, 4(2), 335-343

Link : [http://www.ijesit.com/Volume%204/Issue%202/IJESIT201502\\_45.pdf](http://www.ijesit.com/Volume%204/Issue%202/IJESIT201502_45.pdf)

10. Kinetic Parameters of Copper (II) Complex of N-Hydroxy- N-(2-chloro-3-methyl)phenyl-N'-(2,6-dimethyl)- phenylbenzamidine Hydrochloride, **Sharda Mahilkar** and Hemlata Mohabey Asian journal of Chemistry (AJC), March 2008,20(2), 1636-1638

Link

<https://asianjournalofchemistry.co.in/User/SearchArticle.aspx?Volume=20&Issue=3&Article=&Criteria=>



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### **Book Published**

- Green Chemistry: An Introduction, Dr. Sujata Sengupta and Dr. Sharda M. Sonkar, April 2019, Prestige Publication, ISBN-10: 8194063817

### **Chapter in Books**

- Sonkar A and Sonkar S M. Chemotaxonomy in Gupta R. 2012. Plant Taxonomy: past, present and future. New Delhi: The Energy and Resource Institute (TERI)

### **Research Projects** (reverse chronological order):

- DU Innovation Project MH-308 : Synthesis of Henna (*Lawsonia inermis*) based Scaffolds and Comparison of their Color and Antimicrobial activity, 2015-2016
- DU Innovation Project MH-204 : More Miles on Yamuna, 2013-2015

### **Membership Of Professional Bodies** (reverse chronological order):

- Green Chemistry Network Centre(GCNC)- 2015
- Indian Science Congress Association -June 2016
- Association of Chemistry Teachers(ACT) – Life Member 2013
- Indian Society of Analytical Scientists (ISAS) – Life Member 2013
- Asia Pacific Chemical, Biological& Environmental Engineering Society(APCBEES)- Life Member 2013

### **Administrative Responsibilities** (reverse chronological order):

- Teacher-in-Charge, Department of Chemistry, Miranda House, University of Delhi, 4 Feb 2021- Till date
- Coordinator-Add-on Certificate Course “Green Chemistry and Environment” 2010-2012, 2015- 17

### **Invited talks/Session chair/Resource person** (reverse chronological order):

- Resource Person for the Bridge Course on Laboratory Safety and Handling of Equipment for B.Sc.(H) Chemistry I Year, conducted by Department of Chemistry, Miranda House on 23 November and 6 December, 2021.



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- Invited Speaker in an Online Workshop cum Guest Lecture series on Chemistry Education for Undergraduates: Opportunities and Career Prospects organized by Sibsagar College, Joysagar, Assam on 17 December, 2020. Title of the lecture: Green Chemistry: Introduction, Applications and Career Opportunities”
- Invited Speaker in short term course “Understanding our Environment “organized by Department of Botany, Miranda House, University of Delhi on 18 July 2020. Title of the delivered talk: Green Chemistry: Introduction, Applications and Career Opportunities”
- Resource Person for the Bridge Course on Laboratory Safety and Handling of Equipment for B.Sc. (H) Chemistry, conducted by Department of Chemistry, Miranda House on 1 and 9 August, 2019.
- Resource Person for the Bridge Course on Laboratory Safety and Handling of Equipment for B.Sc. Life Sciences, Miranda House on 7 Aug, 2019.
- Acted as a resource person on Bridge Course on Laboratory Safety and Handling of Equipment for B.Sc.(H) Chemistry I Year students on 2nd and 3rd August 2018.
- Resource person for the Bridge Course on Laboratory Safety and Handling of Equipment for B.Sc.(H) Chemistry I Year students on 1st and 3rd August 2017.
- Resource person for the Bridge Course on Laboratory Safety and Handling of Equipment for B.Sc.(H) Chemistry I Year students on 3rd and 4th August 2016.

### **Conferences Organized** (last five years):

1. Convener, International Conference on Chemistry-the Catalyst for Change (250 participants), organised by Department of Chemistry, Miranda House on 19 and 20 February 2021.
2. Convener, International Webinar on Empowering Diversity in Science (165 participants), organised by Department of Chemistry, Miranda House on 12 February 2021. 4. Convener, National Webinar: Learnings from the Corona Pandemic (296 participants), organised by Department of Chemistry, Miranda House on 24 and 25 September 2020.
3. Resource Person, Bridge Course on Laboratory Safety and Handling of Equipment, B.Sc. (P) Life Sciences (40 participants); organised by Department of Chemistry, Miranda House on 23 November and 7 December 2020.
4. Coordinator and Resource Person, Bridge Course on Laboratory Safety and Handling of Equipment, B.Sc.(H) Chemistry (88 participants); organised by Department of Chemistry, Miranda House on 19, 20, 26 and 27 November 2020.



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5. Convener, DBT Star College Sponsored, Symposium on Bonding to Create Future Leaders in Sciences, Miranda House, University of Delhi, 12 February 2020.
6. Member of Organising Committee in National Workshop on Nano Road Show-2020 held on 1 January 2020 at Miranda House, University of Delhi.
7. Convener, DST and DRDO Sponsored- Symposium on Empowering Women in Chemistry: A Global Networking Event, Miranda House, University of Delhi, 12 February 2019.
8. Coordinator, Organizing Committee, INSPIRE INTERNSHIP PROGRAMME 2017, an initiative of Department of Science and Technology, Government of India held from 18 to 22 December 2017 held under the aegis of D S Kothari Centre for Research and Innovation in Science Education, Miranda House.
9. Member, Organising Committee, Indo-Hungarian Symposium on Recent Advances in Chemistry and Biology, organised by Department of Chemistry, Miranda House in association with Department of Pharmaceutical Chemistry, University of Debrecen, Hungary on 11 December 2017.
10. Guided summer projects under D S Kothari Centre for Research and Innovation in Science Education at Miranda House, June-July 2016.
11. Member, Organizing Committee, Indian Science & Engineering Fair, Regional Fair (Delhi) conducted by Miranda House in association with Science Society of India, 13 October 2017.
12. Coordinator, Workshop for Students on Using Gaussian software in Undergraduate Education (85 participants) organized by D S Kothari Centre for Research and Innovation in Science Education and Department of Chemistry, Miranda House, 3 August 2017
13. Coordinator, Workshop for School Teachers on Online Labs for school experiments (35 participants) organized by D S Kothari Centre for Research and Innovation in Science Education and Department of Chemistry, Miranda House in collaboration with Amrita University, Kerala, 11 April 2017.
24. Coordinator and Resource Person, Workshop on Green Chemistry and Environment (63 participants); organised by Department of Chemistry on 6-7 February, 2017.

### **Seminars/Workshops/Conferences attended** (reverse chronological order):

1. National Workshop on "ICT Tools for Online Learning" under PMMMNMTT-MHRD, Teaching Learning Centre, Department of Educational Technology, SNTD Women's University, 20-28 April 2020.
2. Two Weeks Faculty Development Programme on "Managing Online Classes and Co-Creating MOOCS", TLC Ramanujan College under PMMMNMTT-MHRD, 20 April – 06 May, 2020



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3. Two week National Workshop on Online and Blended Learning consisting of two sub-topics “ICT tools for Collaboration” and “Cooperative Learning” through online mode under PMMMNMTTMHRD, Teaching-Learning Centre, Department of Educational Technology, SNDT Women's University, 9-21 Mar 2020. Grade O+.

4. Online Refresher Course in Chemistry for Higher Education Faculty, SWAYAM Arpit Course for Career Advancement Scheme (CAS) promotion; with a “A” Grade in the proctored examination held on 30. 03. 2019, offered by Sri Guru Tegh Bahadur Khalsa College, Delhi.

5. One week Faculty Development Programme Advancements in Integrated Sciences: Learning and Adaptation for Effective Teaching and Research jointly organised by Shyam Lal College, University of Delhi, UGC-Human Resource Development Centre, Jamia Millia Islamia and CSIR-Institute of Genomics & Integrative Biology, 10-16 December 2018.

6. UGC-Sponsored Workshop on Innovative Teaching Methodologies and Use of ICT in Teaching organised by UGC-HRDC, Centre for Professional Development in Higher Education (CPDHE), University of Delhi, 20-26 October 2016.

### **Synergy (work with other organizations outside the college):**

- Volunteer, ISLF-Vigyanika 2020 conducted from 22-25 December 2020 as part of India International Science Festival 2020 (IISF 2020) organised by Ministry of Science and Technology; Ministry of Earth Sciences and Ministry of Health and Family Welfare, GoI in collaboration of Vijnana Bharati (Vibha) by Council of Scientific and Industrial Research (CSIR).