# HANS RAJ COLLEGE UNIVERSITY OF DELHI FACULTY PROFILE

Title	Dr.	First Name	ANJALI	Last Name	SAXENA	Photograph	
Designation		Associate Professor					
Address		Department of Chemistry,					
		Hansraj College,					
		University of Delhi.					
		Delhi 110 007					
Phone No Office		011 – 2766 7548					
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Email		anjali19saxena@yahoo.co.in					
Educational		MSc (Chemistry), PhD					
Qualifications							
Degree		Institution				Year	
Ph.D.		Delhi University				2007	
PG		Delhi University				2000	
UG		Delhi University				1998	
Any other		NET				2000	
qualification		GATE				2001	
Award		Best poster: Project code HRC 303					
		Title: Extraction and utilization of Natural pigments in					
		Cosmetics					
Career F	Career Profile						

Started as Ad-Hoc Lecturer in Department of Chemistry, (1) Miranda House, (2) Ramjas College and (3) Hansraj College, University of Delhi. Currently working as Associate Professor in Hansraj College.

## Administrative Assignments

- 1. Member of screening committee for the recruitment of Assistant Professor in the Department of Chemistry, Hansraj College, University of Delhi, 2022.
- 2. Program Coordinator of National Conference on "New Frontiers in Biosensing" organized by Department of Chemistry, Hansraj College, University of Delhi on 3<sup>rd</sup> April 2021.
- 3. Program Coordinator at the National Seminar on "Environment and Sustainability in The Third World" organized by Department of Chemistry & IQAC, Hansraj College, University of Delhi on 28<sup>th</sup> February 2020.
- Organized two days FDP on Agriculture Health and Society (Interdisciplinary) on 15<sup>th</sup>
  -16<sup>th</sup> March 2019 organized by Mahatma Hansraj Faculty Development Centre,
  Hansraj College, University of Delhi.
- Organising committee member for 1<sup>st</sup> International Conference on Integrative Chemistry, Biology and Translational Medicine organized by the Centre for Global Health, Hansraj College, University of Delhi & Loyola University Chicago Stritch School of Medicine, USA on 25<sup>th</sup> – 26<sup>th</sup> February 2019.
- 6. Coordinator in the one-day skill enhancement workshop entitled "Celebrating Diwali with 3R's: An Ecofriendly Perspective" held on 29<sup>th</sup> Oct 2018 in Hansraj College, University of Delhi.
- 7. Actively participated in food committee in the INSPIRE programme (DSI) held at Hansraj College, University of Delhi from 12<sup>th</sup> to 16<sup>th</sup> Dec 2017.
- 8. Teacher in-Charge Chemistry Department, Hansraj College (2016-17).
- 9. Theory examination superintendent for afternoon session in Nov-Dec 2016.
- 10. Practical examination superintendent for Chemistry department in Apr-May 2016.
- 11. Member of interview board for selection of ad-hoc assistant professor in the Department of Chemistry in July 2016.
- 12. Admission in-charge for BSc (Hons) Chemistry and MSc Chemistry for the academic year 2016-17.
- 13. Served as the convenor in the one-day Skill Enhancement Workshop on "Chemistry, Environment & you" organised by the department of Chemistry in association with IQAC, Hansraj College, University of Delhi, 25<sup>th</sup> Feb 2017.
- 14. Organising committee member in the National Seminar on "Role of Analytical Sciences in Sustainable Development", held on March 4-5, 2016 at Hansraj college, University of Delhi, Delhi, India.
- 15. Organising committee member in Indo-Portuguese Workshop on emerging trends of Nanotechnology in Chemistry and Biology (INCB-2016) organized by Department of Chemistry, Hansraj college & Deshbandhu College, University of Delhi, India in association with CQM, University of Madeira, Portugal held on 12-13 February, 2016.
- 16. Member of committees 2016-17
  - Admission committee
  - > Hostel committee
  - Central purchase committee.
- 17. Have served as a member of garden committee (2014-16, 2019-20), environment awareness committee (2018-20), canteen committee (2018-19) of the college.
- 18. Departmental committees:
  - ➤ Convenor of chemical society 2022-23.
  - ➤ Member of departmental chemical store 2022-23.
  - ➤ Member of college garden committee 2022-23.
  - ➤ Member of college canteen committee 2022-23.
  - Member of departmental instrumentation committee 2021-22.
  - Member of departmental library committee 2021-22.

- Member chemical society 2020-21.
- ➤ Member chemical society 2019-20.
- ➤ Member chemical society 2018-19.
- Member departmental instrumentation committee 2015-16.
- Convener of departmental instrumentation committee in the year 2014-15.
- Member departmental library committee 2012-13.
- ➤ Member chemical society 2012-13.

## Areas of Interest / Specialization

**Organic Chemistry** 

## Subjects Taught

- 1. B. Sc. (Hons.) Chemistry
- 2. B. Sc. Prog. (Chemistry papers)
- 3. B. Sc. (Hons.) (Subsi. Chemistry)

### **Projects**

- Project Investigator for the following innovation project (2015-16)
- Project code HRC-303
- Title: Extraction and Utilization of Natural Pigments in Cosmetics

#### Refreshers and Orientation Courses

- Four faculty development programs (FDPs) from Hansraj College, DU during 2020-21.
- Two refresher courses in Chemistry (2012-13, 2015) from CPDHE, DU
- One refresher course in Life Sciences (2019) from CPDHE, DU
- One orientation course (2012) from CPDHE, DU

#### **Publications Profile**

Research papers published in Refereed/ Peer Reviewed Journals

1. Synthesis of novel symmetrical and unsymmetrical bis-spiro[indole- indazolyl-thiazolidine]-2,4'-diones

Khanna, P., **Saxena, A.**, Khanna, L., Bhagat, S., Jain, S.C.

(2009) Arkivoc, 2009 (vii), pp. 119-125.

ISSN No.: 1551-7012

 Synthesis of some novel bis-spiro[indole-pyrazolinyl-thiazolidine]-2, 4'-diones Jain, M., Khanna, P., Saxena, A., Bhagat, S., Olsen, C.E., Jain, S.C. (2006) Synthetic Communications, 36, pp. 1863-1872.

ISSN No.: 1532-2432

3. Synthesis of new bridgehead heterocycles: Pyrimido[3',2':3,4]- 1,2,4-triazino[5,6-b]-indoles

Bhagat, S., Jain, M., Pandey, M.K., Pragati, **Saxena, A.**, Jain, S.C. (2006) Heteroatom Chemistry, 17(4), pp. 272-276.

- One pot facile synthesis of 5-alkyl-1,2-dihydro-spiro[4H-3,1-benzoxazine-2, 3'[3H]indol]-4,2'-diones under microwave irradiation
   Saxena, A., Khanna, P., Bhagat, S., Gupta, A., Jain, S.C. (2006) Indian Journal of Chemistry, 45B, pp. 1504-1510.
- 5. One pot synthesis of novel 1,2-dihydro-5-methyl-spiro[4*H*-3,1-benzoxazine-2,3'[3*H*]indol]-4,2'-diones (Rapid Communication) **Saxena, A.**, Goswami, R., Khanna, P., Bhagat, S., Jain, S.C. (2004) Indian Journal of Chemistry, 43B, pp. 2381-2385.
- 6. Effect of La Doping on Dielectric Properties of BiFe<sub>0.95</sub>Mn<sub>0.05</sub>O<sub>3</sub> Multiferroics Saxena, A., Sharma P., **Saxena A.**, Verma, V., Saxena, R. S. Ceramics International, 40(2014), 15065-15072. DOI: 10.1016/j.ceramint.2014.06.114
- 7. Dielectric dispersion near the morphotropic phase boundary of 0.64PMN-0.36PT ceramics

Saxena, A., Hussain A., **Saxena A.**, Joseph A. J., Saxena, R. S. Ceramics International, 48(2022), 26258-26263.

DOI: 10.1016/j.ceramint.2022.05.307

- Quantum Dots in Energy and Biosensing Applications: A Brief Review Gulia S., Jindal R., Kumar P., Saxena A., Dwivedi N., Pipil P., Payal R. J. Env. Bio-Sci., 36(2022), 77-84 DocID: https://connectjournals.com/03843.2022.36.77
- 9. Arduino based Portable System for Real-time Sensing of Visible Wavelengths Saxena, A., Ashok, Aswin A. J., Shaji D., **Saxena A.**, Saxena, R. S. International Journal of New Innovations in Engg. and Tech., 20(2022), 1-10
- 10. Fourier analysis of periodic signals using an Arduino-based low-cost portable setup Saxena A., **Saxena A.**, Bharti R., Nayak H., Kapoor A., Amayur S., Saxena R. S. Phys. Educ. 58(2023), 015020, 1-10
- 11. Analyzing Dielectric Dispersion of 0.64PMN-0.36PT Ceramics using Electrical Conductivity

Saxena A., Saxena R. S.

Accepted in Bulletin of Material Science, 2023

## Participation in Conferences/Seminars/Workshops

- Resource Person in the one-day skill enhancement workshop entitled "Celebrating Diwali with 3R's: An Eco-friendly Perspective" held on 29<sup>th</sup> Oct 2018 in Hansraj College, University of Delhi.
- Participated in National Science Day 2018 organized by Indian Academy of Sciences, Bangalore and Indian National Science Academy, Delhi on 28<sup>th</sup> February, 2018 at INSA Delhi, India.
- 3. "Herbal Cosmetics" with anticancer and antimicrobial properties, (Poster), J. Mat. NanoSci., 2016, Indo-Portuguese Workshop on Emerging Trends of Nanotechnology in Chemistry and Biology, Feb 12-13, 2016, Department of Chemistry, Hansraj College & Deshbandhu College, DU, India in association with CQM, University of Madeira, Portugal.

- 4. Participated as judge in inter college Powerpoint Presentation competition in the Annual Fest on 9<sup>th</sup> March 2016 at Ramjas College, DU.
- 5. Presented a poster entitled "Herbal Cosmetics: an effective alternative" during the food festival on 7<sup>th</sup> October, 2016 at Hansraj College, DU.
- Participated in a Seminar/Workshop/Training programme on 23 24 July 2015 organized by Commission for Scientific and Technical Terminology at Hansraj College, DU.
- 7. Actively participated as resource person in the INSPIRE Internship program-2012 organized by Hansraj College, University of Delhi from 17<sup>th</sup> to 21<sup>st</sup> Dec 2012.
- 8. Ion transport studies through polystyrene based model membrane: Conductance data and Absolute Reaction Rate Theory, International Conference on Interface between Chemistry and Environment. O-22, Ramjas College, DU, India, Dec 13-14, 2012.
- Synthesis of new molecules for the discovery of drug candidates, pp-3, T3D-2010 International Symposium on trends in drug discovery and development, Jan 5-8, 2010 Department of Chemistry, DU, India.
- 10. A Journey from Synthetic to Natural Product Chemistry in search for new pharmacophores, pp-90, 9<sup>th</sup> CRSI National Symposium in Chemistry, Feb 1-4, 2007, Department of Chemistry, DU, India.
- 11. Variability in Antioxidants among different populations of Acacia catechu, Indo-Italian Workshop on Chemistry and Biology of Antioxidants 2006, p-14 Jan 8-9, Delhi, India.
- 12. A facile one pot synthesis of some novel 1,4-dihydrospiro[2H-4-oxo, 3-1-benzoxazine-2,3'[3H]indol]-2'(1'H)-ones, p-377, ICOB-4 & ISCNP-24 IUPAC International Conference on Bio-diversity and Natural products: Chemistry and Medical Applications, held in New Delhi, Jan 26-31, India 2004.
- 13. Phytochemical studies of piper genus, p-192, ICOB-4 & ISCNP-24 IUPAC International Conference on Bio-diversity and Natural products: Chemistry and Medical Applications, held in New Delhi, Jan 26-31, India 2004.
- 14. Design and synthesis of new amino acids as potential plant growth regulators, p-119, ICOB-4 & ISCNP-24 IUPAC International Conference on Bio-diversity and Natural products: Chemistry and Medical Applications, Delhi, Jan 26-31, India 2004.
- 15. Phytochemical investigation of Engelhardtia spicata, p-113, ICOB-4 & ISCNP-24 IUPAC International Conference on Bio-diversity and Natural products: Chemistry and Medical Applications, Delhi, Jan 26-31, India 2004.
- 16. Molecular structure and facile one pot synthesis of some novel benzpyrimidino heterocycles, p-40, IUPAC International Symposium on Green Chemistry, Jan 10-13, 2001, Department of Chemistry, DU, India.

#### List of conferences, seminars and workshops attended

 Attended Indo-US Colloquium on Recent Developments in Interdisciplinary Research organized by the IQAC, Department of Chemistry, Hansraj College, University of Delhi in Association with Loyola University Stritch School of Medicine, USA on 2<sup>nd</sup> July 2018.

- 2. National Seminar Chemistry in Interdisciplinary Applications, Organized by Department of Chemistry, Hans Raj College, 19<sup>th</sup> March 2013, DU, India.
- 3. International Conference on Interface between Chemistry and Environment, held at Ramjas College, DU, India, Dec 13-14, 2012.
- 4. National Seminar on "Role of Analytical Techniques in Biological and Environmental Sciences", Organized by Kirorimal College, DU, Delhi, Indian Society of Analytical Scientists (ISAS-DC), Petrotech Society of India, Jan 27-29, 2011, India.
- 5. Attended the session on Chemical Education in the National Conference on Chemistry: Education & Research Frontiers held on Oct 13-14, 2011, IGNOU, New Delhi
- 6. Seminar on Women Entrepreneurship development programme- Challenges & Opportunities organized by NRDC on 25<sup>th</sup> Feb, 2008, New Delhi.
- 7. Scientific Validation & Technical Evaluation of Ancient Medical Systems, Organized by IIT, Delhi, Feb 10-11, 2006.
- 8. National Symposium on new challenges in Chemistry, organized by Guru Nanak Dev University, Amritsar, March 20-21, 2006.
- 9. Indo-Italian Workshop on Chemistry and Biology of Antioxidants, held at Department of Chemistry, Jan 8-9, 2006, Delhi, DU, India.
- 10. 41<sup>st</sup> Annual convention of chemists, Indian Chemical Society, Dec 23-27, 2004, Department of Chemistry, DU.
- 11. ICOB-4 & ISCNP-24 IUPAC International Conference on Bio-diversity and Natural products: Chemistry and Medical Applications, New Delhi, Jan 26-31, India 2004.
- 12. IUPAC International Symposium on Green Chemistry, Jan 10-13, 2001, DU.
- 13. Workshop on high resolution NMR Spectroscopy of polymers, Dec 1-2, 2001, IIT Delhi.

#### **Association With Professional Bodies**

Life member of ISAS-DC