



Dr. Nirmal Singh

Assistant Professor, Deptt. of Chemistry

M.Sc. UGC-NET, GATE, Ph.D. Organic Chemistry

Teaching Experience: 10 years

Area of Specialization: Organic Synthesis, Asymmetric Synthesis, Carbohydrate Derived Gemini Surfactants

6 Publications (2 international publications in SCI Thomson Reuters journals,
4 Publications in international /national Conference proceedings

10 conference attended (4 international & 6 national)

4 Short Term courses / faculty development program (3 one-week & 1 two-week)

2 Life memberships of reputed science societies

M.Sc. Computer Science

EDUCATION

Ph.D –[ORGANIC CHEMISTRY] Punjab Technical University, Jalandhar

(Registration no. 1012002, Punjab Technical University, Jalandhar (Punjab) – INDIA

Title Of Ph.D: *Synthesis, Characterization and Use of Carbohydrates derived Surfactants as Micellisation and reverse micellisation probes .*

CSIR UGC – NET Qualified in CHEMICAL SCIENCES in December 2010 **All India Rank: 0011**

GATE TEST Qualified in Chemistry in 2011 **Percentile: 93.37**

M.Sc. 1999 (APPLIED CHEMISTRY)

Deptt.Of Pharmaceutical Sciences. GURU NANAK DEV UNI. AMRITSAR (PUNJAB) INDIA 1997– 1999

B.Sc., 1997 (MEDICAL)

Govt. Brijindra College, Fairdktot , PUNJABI UNI. PATIALA (PUNJAB) - INDIA, 1994– 1997

Professional Qualification:

M.Sc., (Computer Science), 2003, Guru Jambheshwar University, Hisar

PUBLICATION LIST: 06

1. L. Sharma, Saroj, Nirmal Singh “*Micellar encapsulation of some polynuclear aromatic hydrocarbons by glucose derived non-ionic Gemini Surfactants in aqueous solution*”: **Tenside Surfactants Detergents**, , Vol. 51, No 5. Pages: 441–444
2. L. Sharma, Saroj, Nirmal Singh “*Reverse micellar encapsulation of D- and L- enantiomers of some aromatic α – amino acids and nucleobases by glucose derived non-ionic Gemini Surfactants in neat n-hexane*” : **Jol. Of Surfactants and Detergents**, Volume 18, Issue 1, pp 33-39
3. Lalit Sharma, Nirmal Singh and Saroj, “Gemini Surfactants : A distinct Class of Self-assembling Amphiphile Molecules” page 184, 2014,

4. Nirmal Singh, Lalit Sharma, “Enhancing Solubility of Poorly water soluble Drugs with Surfactants by Micellization”, *Frontiers in Materials Research & Applications FMRA -2015*, Vol. 2, Page 250 -253
5. Nirmal Singh, Lalit Sharma, “Use of non-ionic Gemini Surfactants for encapsulation of poorly water soluble drugs” *Frontiers in Materials Research & Applications FMRA -2016*

International conference outside India: 01

6. Nirmal Singh, Lalit Sharma , “Encapsulation of poorly water soluble drugs with novel Non-ionic Gemini surfactants by Micellization” International conference on Chemical Processes, Ecology & environmental Engineering , ICCPEE’16. At Pattaya, Thailand on 28-29 April 2016

CONFERENCE ATTENDED:10

International 04

National 06

1. International conference “*Multitrack conference on Sciences, Engineering and Technical Innovations*” At CT Institute of Engg. and Management & Tech. Jalandhar. On 23-23 May 2015
2. International conference “*Frontiers in Materials Reseach & Applications*” at Shaheed Bhagat Singh State Technical Campus, Ferozepur on Oct. 30-31, 2014
3. International conference “*Chemistry for Sustainable Development and Innovations*” at NIT Jalandhar (Punjab) – INDIA on 10 – 12 September 2012.
4. National conference “*Science and Technology for sustainable Growth* “organized by Punjab Science Congress on 14 – 16th Feb 2014 at Punjab Technical University, Jalandhar .
5. National Conference on “*Emerging Trends in Basic & Applied Sciences*” at DAV college Jalandhar on 6-7th March, 2014
6. National conference “*Science for Health*” at Baba Farid University of Health Sciences on 7-9th Feb. 2013 by Punjab Science Congress.
7. National Conference “*Frontiers in material research & applications*” at Shaheed Bhagat Singh State Technical Campus, Ferozepur on 24 December, 2015.
8. National Conference organized by *Punjab Science Congress*, on 07-09, Feb, 2016 at SUS group of institutions, Tangori.
9. National Seminar “*Scope of Pharmacy in Health Care System*” at Baba Farid University of Health Sciences, Faridkot on 27th April 2013.

International Conference outside INDIA:

10. International Conference on Chemical Process, Ecology & Environmental Engineering (ICCPEE’16) on **28-29 April, 2016, Oral presentation at Pattaya, Thailand.**

COURSE ATTENDED: 04

- Faculty Development Program on “*Material Technology and Characterization Techniques*” at Shaheed Bhagat Singh State Technical Campus, Ferozepur from 21-25th Dec. 2015.
- Faculty Development Program (1 week) on “*Recent Trends in polymers, composite and their Engineering Applications*” at Shaheed Bhagat Singh State Technical Campus, Ferozepur from 16-20th Sept. 2013.
- Faculty Development Program (2 weeks) on “*Analytical Techniques for Detection of Environmental*

Pollutants” from 16th – 27th Dec. 2013 at Shaheed Bhagat Singh State Technical Campus, Ferozepur

- Short term course (1 week) on “*Material Engineering*” at Shaheed Bhagat Singh State Technical Campus, Ferozepur from 17-21st Dec. 2012.

MEMBERSHIPS: 02

- Life member of **PUNJAB ACADEMY OF SCIENCES, PATIALA,**
Membership no. L-1401
- Life member of **INDIAN SCIENCE CONGRESS ASSOCIATION, KOLKATA**
Membership no. L-28918