Name	Dr.Chitra Gupta
Designation	Assistant Professor (Department of Dairy Chemistry)
Photo	
Area of Specialization	Microencapsulation, Nanotechnology, Micronutrient fortification
Email& Phone No.	chitragupta97@gmail.com& 9034400269
Award & Recognition	 Recipient of Gold Medal (2007-2011) as University topper in B.Tech. (Dairy Technology) from Hon'ble M.S. Swaminathan at NDRI, Karnal Recipient of Prof.M.R. Srinivasan Memorial award as university topper in B.Tech. (2011) Recipient of Best Poster Award in National Conference on "Food Processing and Technology: Current Status and Future Prospects (NCFPT-2016)" organized by Shoolini University, Solan (HP) 25-26thFebruary, 2016. Recipient of IIndBest Poster Award in 44th Dairy Industry Conference on "Make in India: Dairying 2030" organised by ICAR- National Dairy Research Institute, 18-20th February, 2016. Recipient of Appreciation certificate for outstanding M. Tech research work on "Development and evaluation of microencapsulated iron fortified yoghurt" in the field of Dairy Processing during 12th convocation of NDRI, 14th Feb 2014. Examination Qualified Qualified Senior Research Fellowship (PGs)-2014 with fellowship in Dairy Chemistry. Qualified ICAR-National Eligibility Test examination-2013 (NET- 2013) conducted by Agricultural Scientists Recruitment Board, New Delhi with 69% marks.
Educational Qualification	 Ph. D. (Dairy Chemistry) from NDRI, Karnal in the year 2017 with 8.6/10. M. Tech. (Dairy Chemistry) from NDRI, Karnal in the year 2013 with 8.1/10. B. Tech. (Dairy Technology) from NDRI, Karnal in the year 2011 with 8.0/10 (Gold medalist).
Current Responsibility	Associate Library services, Associate public relation and advertisement, Associate hostel warden (Mauli Girls Hostel),

	Research associate, Coordinator AIEEPG
Experience	• 0 years
Affiliation to societies	Indian Dairy Association
	All India Agricultural Student Association
Publications	
Research Paper (International)	1. Chitra Gupta, Sumit Arora, Syama M. A. and Apurva Sharma. (2017). Preparation of milk protein- Vitamin A complexes and their evaluation for vitamin A binding ability. <i>Food Chemistry</i> , 237, 141-149. (Impact factor 4.052, NAAS rating 10.05)
	2. Chitra Gupta, Prince Chawla, Sumit Arora, S. K. Tomar and A. K. Singh. (2015). Iron microencapsulation with blend of Gum arabic, Maltodextrin and Modified starch using modified solvent evaporation method – Milk Fortification. <i>Food Hydrocolloids</i> , 43, 622-628. (Impact factor 3.858, NAAS rating 9.86)
	3. Chitra Gupta, Prince Chawla and Sumit Arora. (2015). Development and evaluation of iron microencapsules for milk fortification. <i>CyTA- Journal of Food</i> , 13(1), 116-123. (Impact factor 0.769 , NAAS rating 6.77)
	4. RavinderKaushik, BhawanaSachdeva, Sumit Arora and Chitra Gupta. (2015). Effect of fat content on sensory and physicochemical properties of laboratory-pasteurised calcium and vitamin D fortified mixture of cow and buffalo milk. <i>International Journal of Dairy Technology</i> , 68(1), 135-243. (Impact factor 0.912, NAAS rating 6.91)
Technical Articles and Lecture Delivered	 Sumit Arora, Apurva Sharma, Chitra Gupta and Syama M. A. (2016). "Preparation of sample and general aspects of atomic absorption spectroscopy" in the compendium of Training on "Basic training on routine chemical analysis" organized by Dairy Chemistry Division, NDRI, Karnal, 18th – 25th July, 2016, 56-59. Sumit Arora, Chitra Gupta, Apurva Sharma and Syama M. A. (2016). "Chemical Quality analysis of milk" in the compendium of Training programmeon "Milk and Milk Products Processing" organized by BPD, NDRI, Karnal, 26th -31stMarch, 21st – 30th April & 11th – 20th July, 2016, 10-15 Sumit Arora, Chitra Gupta, Apurva Sharma (2015). "Technological challenges and Design aspects of vitamin and
	mineral fortified milk" in the compendium of National Training on "Designing of new age dairy foods" organized by Dairy

- Technology Division, NDRI, Karnal, 28th November– 18th December, 2015, 86-89.
- 4. Sumit Arora, **Chitra Gupta**, Apurva Sharma and Prince Chawla. (2015). **"Estimation of Vitamin A in Fortified milk"** in the compendium of Winter School on "Advanced techniques and novel approaches for quality and safety evaluation of dairy foods" organized by Dairy Chemistry Division, NDRI, Karnal, 17th November– 7th December, 2015, 92-94.
- 5. Sumit Arora, Syama M. A., Chitra Gupta and Prince Chawla. (2015). "Application of rancimat in assessing the quality of milk fat" in the compendium of Winter School on "Advanced techniques and novel approaches for quality and safety evaluation of dairy foods" organized by Dairy Chemistry Division, NDRI, Karnal, 17th November– 7th December, 2015, 68-70.
- 6. Sumit Arora, **Chitra Gupta** and Prince Chawla. (2015). **"Estimation of Vitamin A in Fortified milk"** in the compendium of Training Programme on "Instrumentation involved in quality assurance of milk and milk products" organized by Centre of advanced Faculty Training in Dairy Processing, NDRI, Karnal, 3rd 23rd October, 2015, 156-160.
- 7. Sumit Arora, Apurva Sharma and Chitra Gupta. (2015). "Estimation of sodium, potassium, calcium and iron in milk by Atomic absorption spectroscopy" in the compendium of Training Programme on "Instrumentation involved in quality assurance of milk and milk products" organized by Centre of advanced Faculty Training in Dairy Processing, NDRI, Karnal, 3rd 23rd October, 2015, 137-140.
- 8. Shilpashree B. G., **Chitra Gupta**, Prince Chawla and Dr. Sumit Arora. (2014). "**Noval approaches for the preparation of iron fortificants- Designed for milk fortification**" in the compendium of Winter School on "Whole Genome Analysis and Functional "Omics" technologies for future designer milk food"organised by Animal Biochemistry Division, NDRI, Karnal, 28th October 17th November, 2014, 16-21.
- 9. Sumit Arora, Shilpa Shree and Chitra Gupta. (2013). "Fortification of milk with mineral and vitamins" in the compendium of 28th National Training on "Advances in Production, Functional, Rheological and Quality Aspects of Traditional Indian Dairy Products" organized by Dairy Technology Division, NDRI, Karnal, 8-28 October, 2013, 172-175.

Book Chapter/ Article Sumit Arora, Shilpa Shree B. G. and Chitra Gupta, (2014). "Fortification of Milk and Milk products for Value Addition" All India Dairy Business Directory (Dairy Year Book), A mini encyclopedia, Vol 1 (pp 105-109). Sadana, V. (Ed.), Sadana Publishers and Distributors, India. Shilpashree B. G., Chitra Gupta, Apurva Sharma, Prince Chawla and Sumit Arora. (2014). "Innovative techniques for iron fortification in milk" in the compendium of 7th National seminar on "Dairy Sector: The Key Player for Nutritional Security in India" organised by NDRI Graduates Association, NDRI, Karnal, 19-20 September, 2014, 45-49 **Oral presentation** Chitra Gupta, Prince Chawla, Sonika Chaudhary and Sumit Arora. (2013). "Sensory and physicochemical properties of yoghurt as affected by iron microencapsules fortification" in the 6th International conference on "Fermented foods health status and social well being" held at AAU, Anand, 6-7 December, 2013, organised by Swedish South Asian Network on Fermented Foods. **Abstracts and Posters** Chitra Gupta, Apurva Sharma and Sumit Arora. (2016). "Comparison of different method for iron microencapsulation" in the proceedings of National conference on Food Processing and Technology (NCFPT 2016)"Current Status and Future Prospects" held at Shoolini University, Solan, 25-26th February, 2016, organised by DST and NABARD. Chitra Gupta, KaushikMacwan, Prince Chawla and Sumit Arora. (2016). "Iron microencapsulation with blend of gum arabic, maltodextrin and modified starch (HiCap 100) using modified solvent evaporation method" in the proceedings of 44th Dairy Industry Conference "Make in India: Dairying 2030" held at ICAR- National Dairy Research Institute, Karnal, 18-20 February, 2016, organized by Indian Dairy Association. Chitra Gupta, Prince Chawla, Vivek Sharma and Sumit Arora (2015). "Preparation of Iron Microcapsules by modified Solvent Evaporation Method" in the proceedingsof "International Conference on Sustainable Innovation in Dairving" held at International convention center, Rajgir, Nalanda, Bihar, 2-5 April, 2015, organized by DTSI, Karnal and SGIDT, Patna. Chitra Gupta, Prince Chawla and Sumit Arora. (2015). "Microencapsulation of iron with blend of gum arabic,

maltodextrin and modified starch" in the proceedings of XII

- Agricultural Science Congress on "Sustainable Livelihood Security for smallholder farmers" held at NDRI, Karnal, 3-6 February, 2015, organised by NDRI, Karnal.
- **5. Chitra Gupta**, Prince Chawlaand Sumit Arora. (2015). "Comparison of different hydrating media on encapsulation efficiency of iron microencapsules" in the **proceedings of** "National conference in food technology: Emerging trends (NCFT-2015)" held at Chaudhary Devi Lal University, Sirsa, 24-25 March, 2015, organised by Department of Food Science and Technology, CDLU, Sirsa.
- **6. Chitra Gupta,** Prince Chawla, Sonika Chaudhary and Sumit Arora. (2013). "Sensory and physicochemical properties of yoghurt as affected by iron microencapsules fortification" in the **proceedings of6**th International conference on "Fermented foods health status and social well being" held at AAU, Anand, 6-7 December, 2013, organised by Swedish South Asian Network on Fermented Foods. p. 70-71.
- 7. Chitra Gupta, Prince Chawla, RavinderKaushik, BhawanaSachdeva and Sumit Arora. (2013). "Polyglycerolmonostearate and lecithin as coating material for microencapsulation of iron" in the **proceedings of** 41st Dairy Industry Conference and IIDE 2013 on "Global Dairy Industry & Food Security" held at Mumbai, 14-16 March, 2013, organised by Indian Dairy Association (West Zone).
- **8.** Apurva Sharma, **Chitra Gupta** and Sumit Arora. (2016). "Evaluation and acceptability of lactose-iron complex fortified milk" in the proceedings of National conference on Food Processing and Technology (NCFPT 2016)"Current Status and Future Prospects" held at Shoolini University, Solan, 25-26th February, 2016, organised by DST and NABARD.
- 9. Prince Chawla, Latika Bhandari, Chitra Gupta, Nishant Kumar, Apurva Sharma, Syama M. A., KaushikMacwan, RavinderKaushikand Rahul Thory. (2016). "Functional property, antioxidant activity, mineral analysis and *in vitro* bioavailability of *Cucumismelo*and *Citrullus vulgaris* seed flour" in the proceedings of National conference on Food Processing and Technology (NCFPT 2016)"Current Status and Future Prospects" held at Shoolini University, Solan, 25-26th February, 2016, organised by DST and NABARD.
- **10.** Prince Chawla, **Chitra Gupta**, SanjuB.Dhull,SonikaChoudhary and RavinderKaushik. (2015). "Antioxidant activity and mineral content of Pistaciavera and Prunusdulcis" in the **proceedings of** "National conference in food technology: Emerging trends

- (NCFT-2015)" held at Chaudhary Devi Lal University, Sirsa, 24-25 March, 2015, organised by Department of Food Science and Technology, CDLU, Sirsa.
- 11. SonikaChoudhary, Chitra Gupta, Sumit Arora and Vikrant Narwal. (2015). "Effect of developed acidity and neutarlization on protein oxidation in milk and khoa prepared from cow and buffalo milk" in the proceedings of "National conference in food technology: Emerging trends (NCFT-2015)" held at Chaudhary Devi Lal University, Sirsa, 24-25 March, 2015, organised by Department of Food Science and Technology, CDLU, Sirsa.
- 12. Prince Chawla, Chitra Gupta, Sanju B. Dhull, SonikaChoudhary, Shilpa Shree B. G. and RavinderKaushik. (2015). "Antioxidant activity and mineral content of seed extracts of Cucumismelo and Citrullus vulgaris" in the proceedings of XII Agricultural Science Congress on "Sustainable Livelihood Security for smallholder farmers" held at NDRI, Karnal, 3-6 February, 2015, organised by NDRI, Karnal.
- 13. RavinderKaushik, BhawanaSachdeva, Chitra Gupta, Sumit Arora and SumanKapila. (2013). "Determination of vitamin D₂ and calcium bioavailability from fortified milk" in the **proceedings of** 41st Dairy Industry Conference and IIDE 2013 on "Global Dairy Industry & Food Security" held at Mumbai, 14-16 March, 2013, organised by Indian Dairy Association (West Zone).

Vision for thrust area

Milk protein complexes for stability of processed dairy products