

## REPORT

Report on participation of the DHR-ICMR International fellowship under Long Term Fellowship/Training in Foreign institute under the scheme of 'Human Resource Development for Health Research:

1.	Name and designation of DHR-ICMR-IF	<b>Dr. Manju Singh, Assistant Professor</b>
2.	Address	<b>University Institute of Pharmacy, Pt. Ravishankar Shukla University, Raipur (C.G.)-492010</b>
3.	Frontline area of research in which training/research was carried out	<b>Proteomics and Advanced dermatokinetics</b>
4.	Name & address of Professor and host institute	<b>Dr. S. Narasimha Murthy, Associate Professor-Pharmaceutics, 113 Faser Hill, The University of Mississippi University, MS 38677, USA</b>
5.	Duration of fellowship	<b>6 months</b>
6.	Highlights of work conducted i) Technique/expertise acquired  ii) Research results, including any papers prepared/submitted for publication	<p>Dermal Pharmacokinetics of drugs, Biophysical equipment- Iontophoresis, Microdialysis for sampling drugs from different tissues, Franz diffusion cells, Ultrasound bath, ELISA, Western blotting, cell culture, Plasma Pharmacokinetics of drugs. Skin microdialysis for evaluation of intradermal drug delivery.</p> <p>Project has been undertaken to formulate and optimize nanostructured lipid constructs of omega fatty acids loaded with fluocinolone acetonide for dual effect on autoimmune dermal disorders like psoriasis. Few studies are still underway and results awaited after which paper will be communicated in well refereed journal.</p> <p>One paper and one book chapter has been accepted and epublished in elsevier journals</p> <p>1. Design, characterization and skin permeating potential of Fluocinolone acetonide loaded nanostructured lipid carriers for topical treatment of psoriasis, Steroids. Volume 101, September 2015, Pages 56–63 <b>IF-2.8</b>.</p>

	<p>iii) Proposed utilization of the experience in India</p>	<p>2. Skin autoimmune disorders: Lipid biopolymers and colloidal delivery systems for topical delivery. Ed: Alex Alexandru Mihai Grumezescu. Volume X: NanoBioMaterials in Galenic Formulations and Cosmetics (Applications of NanoBioMaterials) (ELSEVIER) edited by Alexandru Mihai Grumezescu</p> <p>The experience gained at the lab of Dr. Murthy on dermatokinetics will aid in establishing the preliminary work on molecular aspects of dermal delivery systems and advanced dermatokinetics. The techniques and training acquired during fellowship will be utilized for the ongoing and future programmes of the parent institute. Further collaboration is underway with Dr. Murthy's lab and parent institute.</p>
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Sanction no.

**HRD Fellowship-I(2) 2014-15 Dated: 07th Oct.,2014**



**Signature of DHR-MHRD IF**