

- ❖ **Name & Designation** : Ms. Archana Sharma, Ph.D Student
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Zuarinagar, Goa-703726
- ❖ **Name of the International Conference/
Seminar/Symposium/ Workshop** : TERMIS AM-2014.
- ❖ **Title of the abstract accepted** : PEG-Gelatin and carrageenan-Gelatin
Supermacroporouscyrogel matrices for soft tissue
Engineering applications
- ❖ **Venue & Date** : Washington D.C, USA, 13-16th December 2014.
- ❖ **Money sanctioned** : ₹ 1,00,000/-
- ❖ **Money reimbursed** : ₹ 31,054/-

Participation Report

(No. of participating countries, :
No. of sessions, No. of papers
present etc (Not more than 100)

There were Material and stem cells scientists from all over the world participated in the conference. The scientific program was composed of keynote presentations, 5 award presentations, 4 pre-conference Workshops, 600 abstracts and 40 concurrent sessions. In addition, the student and young Investigator section has organized a number of events, including a mentoring lunch, career panel and visit to the FDA's White Oak Campus. Many International companies displayed their new technologies and product ranges giving us enormous information regarding the latest facilities and cutting edge research tools in the world of Tissue Engineering and Regenerative Medicine.

0. Academic highlights of the conference, including major recommendations and the following.

: The following highlights were covered in academic sessions

- Workshop on “The alliance for regenerative medicine’s workshops on commercialization strategies for tissue engineered products”
- Workshop on “ Restoring lives and functions for the wounded warriors”
- Workshop on “ Government efforts on the path to patients for regenerative medicine therapies : A MATES Symposium”
- Workshop for women “AVIODING TRAPS”, Women in tissue engineering and regenerative medicine luncheon
- Keynote symposium on Biomaterials for tissue engineering, Oxygen supply and demand in regenerative medicine, Immunoengineering for biomedical applications.
- Career panel discussion
Student –Meet-Mentor Lunch
- Research Careers in Industry and the Private Sector
- Challenges in Tissue engineering and regenerative medicine training
- Concurrent sessions on different parts of tissue engineering and regenerative field
- A Guide to Journal Publishing
- Transitioning Beyond the Postdoc: Early-Career Investigators

- (i) New developments presented at : Workshop for women “ Avoiding Traps”- worn in tissue engineering and regenerative medicine luncheon. TERMIS AM 2014 organized women in TERMIS luncheon with the purpose of fostering support and professional development of young women in our field. Each speaker spent 5-10 min presenting what they perceive major issues/ solutions are to avoiding traps in female career development with the remaining time spent actively engaged in discussions/questions from the audience.
- TWIG was there between morning and afternoon concurrent session. It includes one to one interaction with the different speakers of different institutes and had discussion regarding different applications of tissue engineering and regenerative medicine.

- (ii) New development resulting from : Tissue engineering and regenerative medicine (TERM) concepts present an alternative and innovative treatment strategy for restoring the lives, functions and the quality of living for wounded warriors, veterans and individuals with polytrauma injuries. Those half day pre- conference workshops, TWIG, and sessions brought together clinicians, researchers and the leaders from federal, public and private sectors in an engaging format to discuss the clinical challenges and functional rehabilitation needs of the wounded warriors and to bring emerging research and capabilities forward.
- Mentorship for the academic careers and encourage women in the field of research .

the conference (200 words)

- (iii) Name of the publication in case your work is recommended for publications : None

- Participant's contribution to the conference (100 words) : I had a poster presentation scheduled in a poster session II- December 15th (Monday), 4:30 pm to 6:30 pm. The title of my presentation was "PEG-Gelatin and Carrageenan-Gelatin Supermacroporous cryogel matrices for soft tissue engineering applications" There were several strategies or methods of fabricating scaffolds and have been applied for various applications My work has shown a unique technique for the fabrication of scaffolds that is Cryogelation. In my work I have shown an invitro and in vivo biocompatibility of the scaffolds and cell matrix interactions where I have used different cell types. Hence the work which I have shown was different and showed the potentiality towards different soft tissue engineering applications.

1. Brief report of the visit :

The TERMIS AM 2014 was one of its kind in the field of Tissue Engineering. conference. The scientific program was composed of keynote presentations, 5 award presentations, 4 pre-conference, Workshops, 600 abstracts and 40 concurrent sessions. In addition, the student and young Investigator section has organized a number of events, including a mentoring lunch, career panel and visit to the FDA's White Oak Campus.

- (a) Scientific/Technical sessions : Scientific sessions involved several aspects of Tissue engineering applications including innovative treatment strategy for restoring the lives, functions and the quality of living for wounded warriors, veterans and individuals with polytrauma injuries. There were concurrent sessions and in between TWIG which was an one to one interaction with the scientists about particular field.
- (b) Poster sessions : There were more around 500 posters covering several aspects of tissue engineering and stem cells, mostly involving in the different ways of fabricating 3D scaffolds for different applications. 3D printing was a major part in the sessions. Stem cells used for the treatment of many diseases and its role in tissue engineering applications.
- (c) Concluding session : Tissue Engineering and Regenerative Medicine International Society (TERMIS) AM 2014 had an extensive insight into the breakthroughs in tissue engineering and regenerative research. This extensive meeting had the scope of tremendous interactions amongst research personnel at different levels from beginners to established scientists. The wide array of research fields covered in the field of tissue engineering and regenerative medicine was indeed an intellectual retreat. The advances in research and modern approaches helps us in promising ourselves for advancing in our own field of research.



Impact of acquired knowledge on your work:

I am fabricating 3-D polymeric cryogel matrices with controllable mechanical, physical and biochemical properties without compromising biocompatibility and biodegradability which indicates scaffolds potentiality towards different soft tissue engineering applications. The annual conference of Tissue Engineering and Regenerative Medicine International Society (TERMIS AM 2014) is one of the largest gatherings in the world of Tissue Engineering. This meeting was immensely helpful to me to to understand the latest outcomes in the field of tissue engineering. It was also a unique opportunity to interact with so many renowned scientists in the field throughout the world. Overall this trip provided me an appropriate platform to extend my learning experience towards biomaterials and intelligent scaffolds, fetal and adult stem cells, activation of developmental and regenerative pathways, cell and innovative therapies covering all tissues and organs, translation of research to the clinic and industry and even exploring possible post doctoral opportunities. Hence it was a wonderful place to display and share the research progress from our country in the field of Tissue Engineering and Regenerative Medicine.