



9<sup>th</sup> March - 10.30h Auditorium 1

**Anuj Chauhan**

University of Florida (USA)



CENTRO  
DE INVESTIGAÇÃO  
INTERDISCIPLINAR  
EGAS MONIZ

## **Designing Nanomedicine for Drug Delivery and Drug Sequestration**

Nanomedicine is rapidly becoming a critical part of pharmaceutical industry due to the potential for developing novel, highly effective therapies that can overcome many of the deficiencies in conventional formulations. Dr. Chauhan's Lab is interested in combining fundamental and experimental research to design novel pharmaceutical formulations, for ophthalmic, intravenous and oral formulations.

In this talk, he will cover three short stories on the following topics,

1. Sequestration of drug by colloids by liposomes for designing therapies for drug overdose treatment.
2. Designing improved emulsion formulations for propofol to minimizing pain on injection.
3. Designing nanostructured contact lenses for delivering ophthalmic drugs.

In each story, he will discuss the *in vitro* as well as *in vivo* results, and also discuss the fundamentals including mathematical models, which are heavily rely on for designing the optimal systems.

*Doctor Anuj Chauhan is the Associate Chair and Professor of Chemical Engineering Department at University of Florida. During his tenure at University of Florida Doctor Chauhan has guided 19 Ph.D. students. He has authored more than 100 journal articles, 10 patents, and numerous conference presentations. His research spans a wide range and includes drug delivery by contact lenses, designing pharmaceutical formulations for intravenous, ocular and oral drug delivery, developing novel devices to improve drug delivery and designing formulations to reduce toxicity.*

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