



E. K. Lee, Professor-Emeritus
Dept. of Bionano Engineering
Hanyang University-ERICA, Ansan, Korea (South)

24 Jan 2024, 2 pm - 3 pm (Physical)

Centros Level 6 Boardroom

Host: Dr Zhang Wei

Seminar Abstract

For the past decades, biopharmaceutics industry has dramatically expanded thanks to the various technical and clinical advances of monoclonal antibody therapeutics. Now, several of the antibody-based therapeutics are listed on the top 10 selling drugs globally. Both innovator and biosimilar products have contributed to this growth, primarily because of the platform, or universal manufacturing processes and quality management systems. In this talk, we will discuss the platform technology in upstream and downstream process, focusing on how the processes are being intensified in the industry to meet the future challenges.

About the Speaker

Prof. E. K. Lee is a Professor Emeritus at the Department of Bionano Engineering of Hanyang University-ERICA, Korea, and a VP and CTO of ImmunoForge, Ltd., a bio startup for rare diseases therapeutics for muscle degeneration. He has 35+ years of both industrial and academic R&D experience in the field of recombinant proteins processing technology and protein structure-function analyses. He obtained his B.S. from Hanyang University, Korea in 1975 and a Ph.D. from Drexel University, Philadelphia, PA, USA in 1985, both in Chemical Engineering, and possesses 8+ years of hands-on industrial experience on early phase process development through commercial manufacturing in the US biotech companies. Since his return to Korea in 1992 as an Associate Professor of Chemical Engineering at Hanyang University-ERICA, he has been active in the R&D activities focusing on applying bioengineering principles to the development and manufacturing of various protein biopharmaceutics including fusion proteins, vaccines, antibodies, etc. Prof. Lee has published more than 60 SCI-grade original research articles as a corresponding author and has given numerous invited presentations at various international conferences. He is a Full Member of National Academy of Engineering in Korea and have served as a scientific and technical consultant to the Korean government associations as well as several biopharmaceutical industries globally. His current research interests are protein/antibody modifications for improved functionalities, e.g., long-acting stability, and biorecognition engineering in bionanotechnology.