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(CDR) SEMINAR SERIES

**Guest speaker: Zsolt Szabados, MBA**

Rutgers, The State University of New Jersey  
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## *Sunscreen Formulations and its Challenges*

### **ABSTRACT:**

Since 2011, after the new FDA mandated labelling rule, formulators face challenges in creating broad spectrum esthetically pleasing formulations. The limitations in the number of UV filters in the US and the numerous stability and health related concerns, do not allow for a lot of creativity, high UV performance and global compliance in formulation design. Sunscreen formulation is extremely complex - besides the prohibition of various UV filter combinations, one faces compatibility issues with several cosmetically approved ingredients. For example, the choice of a solvent/emollient could positively or negatively impact the absorption of the filter system or cause instabilities, such as crystallization. Emulsifiers are another category of ingredients, that needs close attention, since they could impact the water resistance of the formulation; also bring in possible irritation in already UV sensitized skin. Polymers can influence the rheological profile of the product, impacting the uniformity and the thickness of the film delivered on the skin surface, and thus the UV performance.

Nevertheless, formulators are pushed to include UV filters in all type of preparations, as sunscreens are becoming part of our daily care routines.

### **BIOGRAPHY:**



Zsolt Szabados is the Director of R&D at Presperse Corporation, a Sumitomo Group Company. He has extensive experience in Product & Application Development and Technical Service with a strong focus on Personal Care and Cosmetic Science. Prior of his tenure with Presperse, he was the North American Technical Specialist for Sun Care in BASF Corp., taking part in the development and launch of several UV filters globally and formulation development for prestigious global brands.

Zsolt has received an MBA in Marketing and International Management from Northeastern University, an MS in Pharmaceutics, with a concentration in Topical Dermatological and Cosmetic Applications from Long Island University and a BS in Chemistry & Physics from Babes-Bolyai University, Romania.

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