

# Dispersion of Powders in Liquids and Stabilization of Suspensions

March 19-21, 2012 Radisson Blu Hotel - Malmö - Sweden

**Lecturer: Prof. Tharwat Tadros**

## Monday, March 19

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| 08:30 - 08:45 | Registration   |
| 08:45 - 09:45 | General introduction   |
| 09:45 - 10:00 | Short break  |
| 10:00 - 11:00 | Powder wetting   |
| 11:00 - 11:30 | Break with beverages and snacks  |
| 11:30 - 12:30 | Critical surface tension of wetting, role of surfactants and powder dispersion |
| 12:30 - 13:45 | Lunch  |
| 13:45 - 14:45 | Structure of the solid / liquid interface and electrostatic stabilization      |
| 14:45 - 15:00 | Break with beverages and snacks  |
| 15:00 - 16:00 | Electrokinetic phenomena and the zeta potential                                |
| 19:00 -       | Course Dinner. <i>Assembly in the hotel reception.</i>                         |

## Tuesday, March 20

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| 09:00 - 10:00 | General classification of dispersing agents and adsorption of surfactants at the solid / liquid interface |
| 10:00 - 10:15 | Short break   |
| 10:15 - 11:15 | Adsorption of polymers at the solid / liquid interface  |
| 11:15 - 11:30 | Break with beverages and snacks   |
| 11:30 - 12:30 | Stabilization of dispersions using polymeric surfactants and the theory of steric stabilization           |
| 12:30 - 13:45 | Lunch   |
| 13:45 - 14:45 | Properties of concentrated suspensions  |
| 14:45 - 15:00 | Break with beverages and snacks   |
| 15:00 - 16:00 | Characterisation of suspensions and assessment of their stability   |

## Wednesday, March 21

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| 08:45 - 09:45 | Methods of evaluation of suspensions without dilution - Rheological techniques |
| 09:45 - 10:00 | Short break  |
| 10:00 - 11:00 | Rheology of concentrated suspensions   |
| 11:00 - 11:15 | Break with beverages and snacks  |
| 11:15 - 12:15 | Sedimentation of suspensions and prevention of formation of dilatant sediments |
| 12:15 -       | Lunch  |

**There is a short break included in each lecture**