

**RECIRCULATION SYSTEMS AND THEIR APPLICATION IN AQUACULTURE**  
**October 24 – 28 IFREMER Sète (France)**

	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
<b>8:30-9:30</b>	<b>Introduction</b> JP. Blancheton Ifremer	<b>Soluble and particulate matter quantifications</b> E. Eding WU	<b>Basics of gas transfer oxygenation/degassing</b> R. Piedrahita	<b>Low energy RAS</b> PB. Pedersen DTU	<b>Mini seminar with industry partners:</b>  JM Moulin LPDS (hatchery and pregrowing Aqualand group production)  P. Cacot LPDS (new species and systems Aqualand group R&D)
<b>9:30 – 10:30</b>	<b>Water quality and fish requirements, accumulating substances</b> V. Mota (Nofima)	<b>Suspended solids characterization and control / removal</b> R. Piedrahita	<b>Biofiltration and bacterial environment</b> O. Vadstein NTNU	<b>Energy control in RAS design</b> PB. Pedersen DTU	
<b>Coffee break</b>					
<b>10:45 – 11:45</b>	<b>Water quality optimisation using ORP</b> J. Bosmans IDEE	<b>Small solid removal processes</b> B. Barrut Coldep	<b>Bacterial control and bio-security</b> K. Attramadal NTNU	<b>Waste treatment and valorization</b> V. Dumas INRA	<b>Mini seminar continued</b>  J Bosmans IDEE (Engineering company)  B. Barrut, COLDEP (Engineering company)  A. Lebreton VETAEU (veterinary company)
<b>11:45 – 12:45</b>	<b>Fish, consumptions and productions: nutrient balance and model</b> E. Eding WU	<b>Mass balance basics nitrification kinetics Biofilter sizing</b> JP. Blancheton Ifremer	<b>Low energy RAS Seaweeds in integrated aquaculture</b> P. Cacot LPDS	<b>Environmental impact, IMTA and risk assessment</b> M. Callier Ifremer	
<b>Lunch break</b>					
<b>14:15 – 17:45</b>	<b>Visit: Palavas Ifremer research station</b>	<i>Design exercises</i>	<i>Design exercises</i>	<b>Visit: RAS seabass, seabream and meager pregrowing farm</b>	<b>FREE</b>

