

3rd Summer School
Biological Treatment of Solid Waste
Tentative Programme

Day 1- Monday 26 June		
9.00 - 13.00	Welcome and presentation/PhD meeting and PhD progress presentations	
13.00 - 14.00	Lunch break	
14.00 - 18.00	PhD meeting and PhD progress presentations	
Day 2- Tuesday 27 June		
9.00 - 13.00	PhD meeting and PhD progress presentations	
13.00 - 14.00	Lunch break	
14.00 - 18.00	PhD meeting and PhD progress presentations	
Day 3- Wednesday 28 June		
9.00 - 13.00	Technical Visit of a Solid Waste Treatment Plant	
13.00 - 14.00	Lunch Break	
14.00 - 16.00	PhD Defense of Ms. Feishu Cao	
16.00 - 18.00	PhD Defense of Ms. Chiara Cassarini	
Day 4- Thursday 29 June		
General Introduction		
8.30 - 9.00	Registration	
9.00 - 9.20	Opening session and welcome	
9.20 - 10.00	Legal aspects of solid waste management in EU	
10.00 - 10.40	Biogas and biomethane in Italy and Europe	Dr. Lorenzo Maggioni
10.40 - 11.00	Coffee Break	
Anaerobic Digestion		
11.00 - 11.40	Physiological and metabolic aspects of biofilms in engineered systems	Dr. Federica Villa
11.40 - 12.20	Mathematical modelling of anaerobic digestion	Dr. Luigi Frunzo
12.20 - 13.00	ADM1 as a tool to study system dynamics, parameter sensitivity and identification of anaerobic digestion processes	Dr. Artin Hatzikioseyan
13.00 - 14.00	Lunch Break	
Anaerobic Digestion		
14.00 - 14.40	Anaerobic digestion pre-treatments	Prof. Vincenzo Belgiorno/Dr. Alessandra Cesaro
14.40 - 15.20	High-solids anaerobic digestion	Dr. Renaud Escudie
15.20 - 16.00	Biogas production from chicken manure: lab and full-scale experiences	Prof. Erkan Sahinkaya
16.00 - 16.15	Coffee Break	
16.15 - 18.15	PhD Defense of Mr. Silvio Riggio	
19.00 - 23.00	Tour of Sperlonga and Social Dinner	
Day 5 -Friday 30 June		
Biohydrogen/Bioenergy/Biorefinery		
9.00 - 9.40	BioHydrogen production in anaerobic digestion processes : innovations and challenges	Dr. Eric Trably
9.40 - 10.20	Photobioreactor design and illumination systems for H ₂ production with anoxygenic photosynthetic bacteria	Prof. Roberto De Philippis
10.20 - 11.00	Hydrogen synthesis by Thermatoga Neapolitana: an unexpected deviation from the Dark Fermentation Model	Dr. Angelo Fontana/Dr. Giuliana D'Ippolito
11.00 - 11.40	Coffee Break	
11.40 - 12.20	Fuel cells in the waste-to-energy chain	Dr. Viviana Cigolotti
12.20 - 13.00	Metabolic aspects of microalgae in biorefinery applications: the case of Cyanodiophyceae, polyextremophilic red algae	Prof. Antonino Pollio
13.00 - 14.00	Lunch Break	
Digestate and Gas Treatment and Valorization		
14.00 - 14.40	Biogas desulfurization	Prof. Piet Lens
14.40 - 15.20	Novel bioreactor configurations for waste gas treatment and resource recovery	Dr. Eldon Ray
15.20 - 16.00	Coffee Break	
16.00 - 16.40	Fate of trace metals in digestate and environment	Prof. Eric van Hullebusch
16.40 - 17.20	Using microalgae to remove nutrients from digestates while producing valuable products	Prof. Elena Ficara
17.20 - 17.40	Closing Session	