AGENDA Meeting WG2 and WG3, COST 869, Jokioinen, Finland, 14-16 June 2010

Sunday, June 13

Arrival at Forssa (10 km from MTT Agrifood Research Finland), Hotel Pumpulienkeli Address of the hotel: Hämeentie 7, Torikeskus, 30100 Forssa 19 - 21 Welcome at the hotel bar

Monday, June 14

9.00 Departure by bus from the hotel to MTT, Jokioinen9.30 Registration at MTT. Address: Humppilantie 9, 31600 Jokioinen

10.15 Erkki Kemppainen, Finland: Opening of the workshop

10.30 Session 1: Novel methods - innovations, experiences, prospectsGeorge A. O'Connor, USA: Amendments to control P mobility [KEYNOTE]Deborah Ballantine, New Zealand: Methods for reducing agricultural nutrient loading and eutrophication: The New Zealand story [KEYNOTE]

13.00 Lunch

14.00 Session 2: Potential of phosphorus and nitrogen binding materials Wim Chardon, The Netherlands: Testing phosphorus sorbing materials - results and questions about criteria

Risto Uusitalo, Finland: Phosphate retention/solubilization characteristics of industrially produced Ca-Fe oxide granules

Olav Eklund, Finland: Nanostructured vermiculite - A new material for recycling ammonium from different types of polluted matters

15.15 Coffee + poster session

16.30 Excursion at MTT to sites with new measures

18.30 Evening and dinner at Elonkierto park with optional canoeing and sauna by the River Loimijoki

22 Arrival at the hotel

Tuesday, June 15

8.30 Departure by bus from the hotel to MTT

9.00 **Session 3**: *Practical results for runoff, buffer zones and wetlands with new measures*

Raymond Bernard Brennan, Rep. of Ireland: Evaluation of chemical amendments to control soluble phosphorus losses from dairy cattle slurry

Jaana Uusi-Kämppä, Finland: A rainfall simulation study on P removal in buffer zones amended with Fe and Ca compounds

Barbro Ulén, Sweden: Structure liming and omitting ploughing as measures to reduce agricultural nutrient loading to surface waters

Anne Falk Øgaard, Norway: Phosphate adsorption on different filter materials

10.30 Coffee

11.00 Session 3 continues

Pia Kynkäänniemi, Sweden: Constructed wetland to mitigate P losses from hotspots in agricultural areas

Anne-Mari Ventelä, Finland: Winter time nutrient load is challenging long-term water protection measures - urgent need for new tools

Clare Deasy, United Kingdom: Assessing the potential for using constructed wetlands as mitigation options for phosphorus and sediment within UK agriculture

Petri Ekholm, Finland: Does gypsum reduce phosphorus losses in an agricultural catchment?

12.30 Lunch + poster session

14.00 Excursion to a wetland site near Turku, and the Archipelago Sea

22 Arrival at the hotel

Wednesday, June 16

8.30 Departure by bus from the hotel to MTT

9.00 Session 4: *More about catchments: measures on critical source areas* Daniel Fiala, Czeck Republik: Shortfall of P budget in Orlik Reservoir - statistical tryout among culprints with sparse data

Micha Gebel, Germany: Evaluation of critical source areas to reduce nutrient loading from agriculture in river basins in Saxony/Germany

Jaroslav Antal, Slovakia: Reduction of groundwater pollution by nitrate-nitrogen with agrotechnical measures

Jeroen de Klein, The Netherlands: Balancing emission reduction measures and ecological water quality benefits; the river Dommel case

10.30 Coffee

11.00 Session 5: Remedies in water bodies

Jouni Lehtoranta, Finland: What to do with extra electrons - how combating eutrophication may affect mineralization pathways

Guido Waajen, The Netherlands: Application of lanthanum-modified bentonite and flocculent reduces eutrophication in a lake

Bryan Spears, United Kingdom: Using Phoslock®, to control cyanobacteria in a shallow eutrophic Scottish reservoir - ecological responses across multiple trophic levels **Sebastian Meis**, United Kingdom: Using Phoslock® to control cyanobacteria in a shallow eutrophic Scottish reservoir - assessing its impact on sediment phosphorus pools

12.30 Lunch

14.00 End of the workshop, departure to the hotel

Poster presentations:

- Borda, T., **Celi, L.**, Buenemann, E., Oberson, A., Frossard, E., Barberis, E.: Potential phosphorus and arsenic release in dispersed particulate form from Bangladesh rice fields
- **De Bolle, S.**, Gebremikael, M.T., De Neve, S.: Can phosphate solubilising bacteria be of use on phosphate saturated soils?
- Hämäläinen, J.-M., Kulokoski, U., Pietola, L.: Gypsum effects on soil characteristics and phosphorus sorption
- Johannesson, K.M., Tonderski, K., Wedding, B., Weisner, S.E.B.: Phosphorus dynamics and retention in non-point source wetlands in southern Sweden
- Kjaergaard, C.: Sustainable phosphorus remediation and recycling technologies in the landscape
- Koski-Vähälä, J., Saarijärvi, E., Heikkilä, J.: Modelling of the effects of phosphorus load in Iisalmi Route
- Lilja, H.: Erosion mapping with Light Detection and Ranging (LIDAR) and RUSLE method testing at experimental plots and farmers' fields
- Martin, M., Hossain, J., Simona, S., Celi, L., Borda, T., Barberis, E.: Potential phosphorus and arsenic release in dispersed particulate form from Bangladesh rice fields
- Närvänen, A., Uusitalo, R.: Reduction of phosphorus load from critical source areas using ferric sulphate
- Pietola, L., Kulokoski, U.: Gypsum effects on percolated water characteristics at various soil P status
- Purnavel, G., **Dana, D.**, Filiche, E., Petrovici, G., Dodocioiu, A.M., Mocanu, R., Cotet, V.: Protection of hill lakes through erosion control works
- **Saarijärvi, K.**, Virkajärvi, P.: Surface runoff simulator (SIMU) hastens the research on phosphorus losses from grasslands
- **Skowron, P.**: Acidification as a controlling factor for the content of an active form of nutrients in soil
- **Stoicheva, D.**, Kercheva, M., Koleva, V., Simeonova, T.: Agricultural practice and nitrogen leaching at the field experiment: Risk analyses using NLEAP model
- **Uusitalo, R.**, Ylivainio, K., Nylund, P., Pietola, L., Turtola, E.: Rainfall simulations of Jokioinen clay soils amended with gypsum to decrease soil losses and associated P transfer
- Vakkilainen, P., Alakukku, L., Myllys, M., Nurminen, J., Paasonen-Kivekäs, M., Puustinen, M., Peltomaa, R., Äijö, H.: Nutrient transport from different kind of subsurface drainage systems on clay soil
- **Tonderski, K.**, Pers, C., Arheimer, B.: Assessing the effect of constructed wetlands on non-point source nitrogen removal.
- Valkama, P., Lahti, K., Särkelä, A.: Applying on-line monitoring for quantification of diffuse load