

ENIGMA Meeting n°3

10/02/2018, Lausanne

Secondments terms and conditions



ITN Enigma





I. General Information



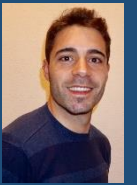


Maximum duration = 10months




- We are not supposed to deviate significantly from the secondments planned in the project. If there are some necessary changes, we should justify them scientifically previously with our Project Officer.
- In any case, keep the secondments of each ESR for an equivalent amount of time as originally foreseen, even in different hosting institutions (within the network).
- EC does not consider a real secondment less than 1 month (then it would be a study or work visit)

II. Details for the different ESRs

Updates about secondments (according to shared Table) – 1/5




ESR	Sites	Planned secondment (max duration = 10months)	Initial planned secondments		Initial work visits	
ESR11 - ULG Richard 	- Hermalle sous Argenteau (+Colonster), - Hyderabad [Test site at Mons?(tbd)]	Hyderabad, 6 months, field tracer tests FZJ, 3 months, training on GPR imaging	BRGM (6)	Field testing at H+ Hyderabad site	SILIXA	Fiber optic DTS
			FZJ (3)	Training on GPR imaging for solute and heat monitoring	SHS Uni Mons	Hydraulic tomo.
ESR3-UNINE Alvaro 	Emme site	UFZ Leipzig, 3-4 months, training on OpenFOAM	UFZ (4)	Training in simulating hyporheic exchange fluxes	FZJ	geophysical imaging
			GEOETH (1)	Training in direct push methods and soil characterization	SILIXA OSU	Fibre optic DTS
ESR7-UCPH Joel 	-HOBE sites (UCPH) -TERENO sites (UFZ)	-UFZ Leipzig, 2-3 months, test field techniques, modelling -Neuchatel, 2-3 months, 3D modelling (HGS)	UNINE (3)	Training on multiple-point statistics	μQuans	gravimeter
			UFZ (3)	Training on coupled modelling of overland/surface/subsurface flow	SILIXA	Fibre optic DTS

Updates about secondments (according to shared Table) – 2/5

ESR	Sites	Planned secondment (max duration = 10months)	Initial planned secondments	Initial work visits
ESR2-UFZ Guilherme 	-TERENO Selke (UFZ) -HOBE sites (UCPH)	- Neuchatel, 2-3 months, geostatistical modelling / HGS training - UCPH, 2-3 months, GW-SW exchange with focus on NO3?	UCPH (4) imaging GW-SW exchange at nested scales UNINE (2) Geostatistical modelling of heterogeneity	UT Smart tracers UNIL Inverse modelling GEOTH Direct push
ESR8-μQuans Anne-Karin 	Larzac (H+)	Université de Montpellier, UCPH HOBE site	UM (10) Test and validation of the instruments in the H+ Larzac site UCPH (2) Comparison with soil moisture network	CNRS LSBB Tests in LSBB
ESR5-CNRS Lara 	- Ploemeur - Orgeval - HRL SKB	- SKB Sweden (2-3 weeks) - UNIL Lausanne (up to 4 months)	UNIL (4) Inverse modelling, joint inversion SKB (2) Experiments at the Äspö site	FZJ comparison with GPR UM Field test H+ LSBB






Updates about secondments (according to shared Table) – 3/5



ESR	Sites	Planned secondment (max duration = 10months)	Initial planned secondments		Initial work visits	
ESR12-FZJ Satoshi 	-Ploemeur site -SIP measurement system -Imaging setup (camera etc.)	CNRS Rennes, 6 months, Micromodel design and laboratory experiment	CNRS (10)	Design, perform and interpret reactive tracer tests experiments with SIP monitoring	UNIL	Joint inversion
					AQUA	Technol. transfer
ESR15-ULG Jorge 	-Hermalle sous Argenteau -Llobregat-Argentona	CSIC Barcelona, apply method to saltwater intrusion	CSIC (6)	Collaboration on joint inversion	SHS Uni Mons	Hydraulic tomo.
			AQUA (2)	Transfer to applications	STAN	Multipoint geostatistics
ESR14-CSIC Andrea 	-Argentona site	University of Copenhagen (probably)	UCPH (9)	Training in hydrogeophysical methods and field experiment on the HOBE site	UNIL, STAN	Joint inversion
			ACA (2)	Transfer to saltwater intrusion management	SILIXA	Fibre optic DTS



Updates about secondments (according to shared Table) – 4/5

ESR	Sites	Planned secondment (max duration = 10months)	Initial planned secondments		Initial work visits	
ESR 1- CSIC Kevin 	Argentona site	Not decided yet. potentially Lausanne or Rennes University	CNRS (5)	Reactive and conservative tracer experiments using micromodels	UFZ	Reactive transport
			UNIL (4)	Upscaling geophysical signatures of mixing	GEOTH	Direct push
			ACA (2)	Reactive and conservative tracer experiments using micromodels	UFZ	Reactive transport
ESR6- CNRS Behzad 	- Ploemeur - HRL SKB	Not decided yet. potentially Silixa & CSIC Barcelona	CSIC (6)	Field work and inverse modelling	CNRS LSBB	Test on LSBB site
			OSU (3)	Theoretical analysis of heat dissipation	AQUA	Technol. transfer
			SILIXA (2)	Field work and inverse modelling	CNRS LSBB	Test on LSBB site
ESR9- UNIL Alejandro 	Possibly, Argentona site	University of Rennes 2-3 months; CSIC Barcelona 1-2 months.	CNRS (8)	Develop millifluidic experiments and data processing	FZJ	Application to field data
			CSIC (2)	Develop upscaling framework	ITASCASKB	Technol. transfer

Updates about secondments (according to shared Table) – 5/5

ESR	Sites	Planned secondment (max duration = 10months)	Initial planned secondments		Initial work visits		
ESR10- FZJ Peleg 	Krauthausen	Not decided yet	CNRS (2) Field test on H+ Ploemeur fractured rock observatory	UCPH, UT	GPR FWI Test	UNIL (2) Interpretation of inversion results	ITASCA SKB Technol. transfer
ESR13-UT Veronika	Lauswiesen	?	ULG (3) Collaboration on joint inversion	FZJ	GPR inversion	SHS Uni Mons(2) Transfer to applications	CSIC Inversion framework
ESR 4 –Itasca Justine 	Äspö	ITASCA : 6 months already + 1 week per 2 months in the future Rennes : full time by now (common lab between ITASCA and Rennes) SKB : 1 week already + 1.5 week in the future	CNRS (5) DFN development, field experiments	UNIL (5) Geophysical methods, inverse problem	SILIXA OSU	Fibre optic DTS	SKB (2) Experiments, industrial applications



Thank you for your attention !

Academic

- CNRS H+: Rennes, Poitiers, Montpellier, LSBB
- Helmholtz TERENO: Julich, Leipzig
- CSIC Barcelone
- University of Liège, University of Mons
- University of Tübingen (EKUT-UT)
- University of Copenhagen
- University of Lausanne
- University of Neuchatel
- Stanford (STAN)
- Oregon State University (OSU)
- BRGM

Non-academic

- μQuans, ITASCA
- SILIXA, SKB
- Geotechnik Heiligenstadt
- Aquale
- Agencia Catalana del Aigua (ACA)



Field Infrastructures (& H+ Hyderabad)



Field infrastructures	Unique attributes
Krauthausen (FZJ), Hermalle (ULG), Lauswiesen (TU), H+ Poitiers (CNRS)	Hydrogeophysical test sites with high borehole density and large hydrogeophysical databases
H+ Ploemeur (CNRS) H+ Hyderabad (BRGM) Aspo Hard Rock Laboratory (SKB)	Fractured rock observatories for long term monitoring and in situ experiments
TERENO- Selke (UFZ) HOBE obs. (UCPH) Emme (UNINE)	Nested observatories in highly instrumented catchments
Llobregat-Argentona (CSIC) H+ Mallorca (CNRS)	Salt water intrusion monitoring and experimentation
H+ Larzac (UM) H+ Low Noise Lab. (CNRS)	Unsaturated zone observatories for long term monitoring and in situ experiments