

ENIGMA Meeting n°3

10/02/2018, Lausanne

Reporting aspects



ITN Enigma





I. General Information

Already reached milestones

N°	Title	Lead Beneficiary	Date
1	Website completion	CNRS	01 Feb 2017
2	Recruitment completion	CNRS	01 Jan 2018
3	Development Plans	ULG	01 Jan 2018



Next milestones

N°	Title	Lead Beneficiary	Date
4	State of the art review	CNRS	01 Apr 2018
5	Workshops 1,2,3 held	ULG	01 Apr 2018
6	Experimental plans	CNRS	01 Jul 2018
7	Summer school held	CNRS	01 Jul 2018
8	Year 1 report	ULG	01 Sep 2018
9	1st round of experimental campaigns completed	CNRS	01 Sep 2018

Already registered deliverables

WP No	Title	Lead Beneficiary	Est. Del. Date (annex I)	Status
WP7	Supervisory Board of the network	CNRS	28 Feb 2017	Approved
WP7	Consortium Agreement	CNRS	28 Feb 2017	Approved
WP7	Setup of the ENIGMA website	CNRS	31 Mar 2017	Approved
WP1	NEC - Requirement No. 1 (Ethics)	CNRS	30 Jun 2017	Approved
WP1	EPQ - Requirement No. 2 (Ethics)	CNRS	30 Jun 2017	Approved
WP6	1st workshop	ULG	31 Jul 2017	Approved
WP6	2nd Workshop	CNRS	30 Sep 2017	Approved
WP7	Completion of the recruitment process	CNRS	30 Sep 2017	Submitted

Next deliverables

Del Rel N°	Del N°	Title	Lead Beneficiary	Est.Del.Date
D6.5	D18	3rd Workshop	ULG	28 Feb 2018
D6.6	D19	ENIGMA summer school	CNRS	30 Jun 2018
D6.7	D20	4th Workshop	UNIL	31 Oct 2018
D7.8	D32	Mid-term report	CNRS	31 Oct 2018
D3.2	D7	Field test of novel techniques for quantifying water content spatial distributions and temporal fluctuations	UNINE	31 Dec 2018
D3.3	D8	Report: Critical assessment of emerging techniques for in situ monitoring of water content and fluxes	UCPH	31 Dec 2018
D5.1	D12	Validated algorithms for fully coupled 3-D inversion for tomographic datasets	EKUT	31 Dec 2018
D5.2	D13	Report on joint inversion procedures for multiple and disparate datasets (soft and hard data) with realistic subsurface structure reconstruction methods	ULG	31 Dec 2018
D6.2	D15	Training Needs Assessment Plan	UCPH	31 Dec 2018
D6.8	D21	Mid-term training progress reports by supervision committee	ULG	31 Dec 2018



II. Details of the deliverables within the Workpackages

WP2

Explore coupled dynamic processes in highly instrumented sites

- Lead Beneficiary of the WP: Juelich

Del n°	Due Date	Lead Beneficiary	ESRs
D2.1	Month 48: December 2020		
In situ datasets on space and time patterns of fluxes and reactivity in mixing interfaces		Juelich	Kevin ¹ , Guilherme ² , Alvaro ³
D2.2	Month 48: December 2020		
In situ datasets on flow distributions and transport patterns in fractured media		Itasca	Justine ⁴
D2.3	Month 48: December 2020		
Report on the added value of in situ experimentation for understanding and quantifying coupled flow, transport and reaction processes in critical areas of the subsurface		CSIC	Kevin ¹ , Guilherme ² , Alvaro ³ , Justine ⁴

Del n°	Due Date
D2.1 : In situ datasets on space and time patterns of fluxes and reactivity in mixing interfaces	Month 48: December 2020
D2.2 : In situ datasets on flow distributions and transport patterns in fractured media	Month 48: December 2020
D2.3 : Report on the added value of in situ experimentation for understanding and quantifying coupled flow, transport and reaction processes in critical areas of the subsurface	Month 48: December 2020

Lead-Contribution for this Workpackage:		Senior manager
D2.1	Main person in charge: KEVIN DE VRIENDT¹ Other contributors: Guilherme Nogueira ² , Alvaro Pardo Alvarez ³	Sander Huisman
D2.2	Main person in charge: JUSTINE MOLRON⁴ Other contributors: Lara Blazevic ⁵	Caroline Darcel
D2.3	Main person in charge: GUILHERME NOGUEIRA² Other contributors: all WP2 ESRs Kevin ¹ , Guilherme ² , Alvaro ³ , Justine ⁴	Jesus Carrera/Marco Dentz

WP3

Quantify temporal changes in subsurface water content and fluxes distributions

- Lead Beneficiary of the WP: UCPH

Del n°	Due Date	Lead Beneficiary	ESRs
D3.1	Month 36 : December 2019		
Validated prototype of portable absolute gravimeter for large scale water content distribution		MUQUANS	Anne-Karin ⁸
D3.2	Month 24: December 2018		
Field test of novel techniques for quantifying water content spatial distributions and temporal fluctuations		UNINE	Lara ⁵ , Behzad ⁶ , Joel ⁷
D3.3	Month 24: December 2018		
Report: Critical assessment of emerging techniques for in situ monitoring of water content and fluxes		UCPH	Lara ⁵ , Behzad ⁶ , Joel ⁷ , Anne-Karin ⁸



Del n°	Due Date
D3.1 : Validated prototype of portable absolute gravimeter for large scale water content distribution	Month 36 : December 2019
D3.2 : Field test of novel techniques for quantifying water content spatial distributions and temporal fluctuations	Month 24: December 2018
D3.3 : Report: Critical assessment of emerging techniques for in situ monitoring of water content and fluxes	Month 24: December 2018
<p>Lead-Contribution for this Workpackage:</p> <p style="text-align: right;">Senior manager</p>	
D3.1	<p>Main person in charge: ANNE-KARIN COOKE⁸</p> <p>Bruno Desruelle</p>
D3.2	<p>Main person in charge: LARA BLAZEVIC⁵</p> <p>Other contributors: Behzad Pouladi⁶, Joel Tirado Conde⁷</p> <p>Philip Brunner</p>
D3.3	<p>Main person in charge: JOEL TIRADO CONDE⁷</p> <p>Other contributors: all WP3 ESRs Lara⁵, Behzad⁶, Joel⁷, AnneKarin⁸</p> <p>Majken Looms Zibar</p>

WP4

Create new methods for tracking the transport and reactivity of chemical species in subsurface

- Lead Beneficiary of the WP: UNIL

Del n°	Due Date	Lead Beneficiary	ESRs
D4.1	Month 36 : December 2019		
Laboratory facility: Geophysical millifluidic lab for testing geophysical monitoring of transport and reactions		CNRS	Alejandro ⁹ , Satoshi ¹²
D4.2	Month 48 : December 2020		
In situ datasets that couple tracer experiments and geophysical monitoring available		JUELICH	Peleg ¹⁰ , Richard ¹¹ , Veronika ¹³ , Andrea ¹⁴
D4.3	Month 36 : December 2019		
Report on process-based geophysical methodologies to monitor subsurface Processes		UNIL	Alejandro ⁹ , Peleg ¹⁰ , Richard ¹¹ Satoshi ¹²



Del n°	Due Date
D4.1 : Laboratory facility: Geophysical millifluidic lab for testing geophysical monitoring of transport and reactions	Month 36 : December 2019
D4.2: In situ datasets that couple tracer experiments and geophysical monitoring available	Month 48 : December 2020
D4.3 : Report on process-based geophysical methodologies to monitor subsurface Processes	Month 36 : December 2019
<div style="background-color: #e67e22; color: white; padding: 10px;"> Lead-Contribution for this Workpackage: Senior manager </div>	
D4.1	Main person in charge: ALEJANDRO FERNANDEZ VISENTINI⁹ Other contributors: Satoshi Izumoto ¹² Laurent Longuevergne
D4.2	Main person in charge: RICHARD HOFFMANN¹¹ Other contributors: Peleg Haruzi ¹⁰ , Veronika Rieckh ¹³ Andrea Palacios ¹⁴ and Justine Molron ⁴ Sander Huisman
D4.3	Main person in charge: PELEG HARUZI¹⁰ Other contributors: all WP4 ESRs Alejandro ⁹ , Peleg ¹⁰ , Richard ¹¹ , Satoshi ¹² , Niklas Linde

WP5

Design inverse modelling strategies for dynamic processes in complex subsurface structures

- Lead Beneficiary of the WP: **EKUT**

Del n°	Due Date	Lead Beneficiary	ESRs
D5.1	Month 24: December 2018		
Validated algorithms for fully coupled 3-D inversion		EKUT	Veronika ¹³ Jorge ¹⁵
D5.2	Month 24: December 2018		
Report on joint inversion procedures for multiple and disparate datasets (soft and hard data) with realistic subsurface structure reconstruction methods		ULG	Veronika ¹³ Andrea ¹⁴ Jorge ¹⁵



Del n°	Due Date
D5.1: Validated algorithms for fully coupled 3-D inversion	Month 24: December 2018
D5.2: Report on joint inversion procedures for multiple and disparate datasets (soft and hard data) with realistic subsurface structure reconstruction methods	Month 24: December 2018

Lead-Contribution for this Workpackage:		Senior manager
D5.1	Main person in charge: VERONIKA RIEKCH¹³ Other contributors: Jorge Lopez Alvis ¹⁵	Olaf A. Cirpka
D5.2	Main person in charge: ANDREA PALACIOS¹⁴ Other contributors: all WP5 ESRs Veronika Rieckh ¹³ , Jorge Lopez Alvis ¹⁵	Frederic Nguyen



III. Communication & Dissemination

What was proposed in the project :

- E-newsletter to present the ESRs progress and to highlight ENIGMA events and field campaigns
- Participate to public engagement activities to explain the scientific results (videos or simple schemes)
- Participate to relevant public events to expose scientific results and to understand public requirements such as 'The Researchers Night ' in Belgium, 'The Science Festival' in France, 'Fortbildungsverbund Boden und Altlasten' in Germany

Let me know ! Send me your posters/videos... !



Thank you for your attention !