



International Workshop
Current advances in the application of (semi-)automated techniques
for studying phytoplankton dynamics in coastal and marine waters

**Joint European Research Infrastructure network for Coastal Observatories – Novel
European eXpertise for coastal observatories
JERICO-Next H2020 (2015-2019)**

<http://www.jerico-ri.eu/>

**Laboratory of Oceanology and Geosciences (CNRS UMR 8187 LOG)
MREN-ULCO and SMW-UL1, 32 & 28 av. Foch, Wimereux – France,**

May 31- - June 2, 2016

<http://log.cnrs.fr>

Contact: felipe.artigas@cnrs.fr

The **International Workshop on current advances in the application of (semi-)automated techniques for studying phytoplankton dynamics in coastal and marine waters**, organized by the Laboratory of Oceanology and Geosciences (UMR 8187 – CNRS-ULCO-UL1) will take place from May 31 to June 2, 2016, in Wimereux, as part of the **Joint European Research Infrastructure network for Coastal Observatories – Novel European eXpertise for coastal observatories (JERICO-Next H2020, 2015-2019)**.

It will gather together **scientists from 15 partners or contracted partners** and SMEs of the JERICO-Next consortium, as well as **some international external experts**, who will present their **recent past and current research**, helping preparing a **synthesis of existing approaches and methodologies related to biological optical sensors for studying phytoplankton**.

Moreover, participants will discuss about **recent past, current and possible future technical and analytical improvements** for building an **automated platform for the observation of phytoplankton diversity and related ecosystem services**, help preparing some Joint Research Actions on the **implementation of innovative automated techniques in pelagic biodiversity - plankton, Harmful Algal Blooms and eutrophication studies**, in connexion with actions on Coastal Carbon fluxes.

International Workshop on current advances in the application of (semi-)automated techniques for studying phytoplankton dynamics in coastal and marine waters – JERICO-Next

Agenda

May 31st - PLENARY SESSION (plenary session - open to all)

13:00

Arrival of participants – MREN Conference room (32, av. Foch – Wimereux)

13:30

Welcome by the LOG laboratory (F. Schmitt)

Presentation of the JERICO-Next network (H2020) project (Ingrid Puillat)

The JERICO-Next approach for phytoplankton coastal observation (WP2.4.2, WP3.1 and WP4.1 and connexions to other WPs and tasks) - (J. Seppälä, F. Artigas & B. Karlson)

14:00 – 16:00 - MREN Conference room

Semi-automated approaches and methods for the study of marine phytoplankton

Plenary/invited talks:

- **Image-in-flow acquisition and analysis** (Ph. Grosjean/ M. Brosnahan)
- **Automated Pulse-shape recording Flow Cytometry** (G. Grégori)
- **Multispectral Fluorometry/spectrophotometry** (J. Seppälä/J. Wolschläger)
- **Variable/Induced Fluorometry** (J. Kromkamp/E. Lawrenz)

16:00 – 16:30

Coffee break

16:30 – 19:00 - MREN Conference room

Short presentations of the approach and main results of recent and/or current projects dealing with (semi-)automated approaches for studying phytoplankton in coastal waters:

- JERICO (L. Delauney)
- Baltic projects (J. Seppälä)
- Scandinavian straits projects (B. Karlson)
- PROTOOL project (J. Kromkamp)
- DYMAPHY project (L.F. Artigas)
- North Sea UK projects (V. Créach)
- North Sea Dutch projects (M. Rijkeboer)
- North Sea Belgian projects (L. Tyberghein)
- Biological data integration and management (L. Tyberghein)
- Evaluation of the added value of novel monitoring strategies (A. Blauw)
- Integrative monitoring: REPHY/SRN - Channel Cruises - MARCO (A. Lefebvre)
- Western Mediterranean projects (M. Thyssen)
- Fast Cam project (L. Delauney)
- CytoBuoy in situ measurement (G. Dubelaar)

20:00 - *Dinner at Restaurant Le Spéranza (only on reservation) - 43 rue du Général de Gaulle*

June 1st – WORKING GROUPS (JERICO-Next partners and invited experts)

9:00 – 10:30 - MREN Conference room (32, av. Foch – Wimereux)

Presentation and open discussion on expected milestones and deliveries of the different sub-tasks and about the strategy to achieve them (WP2.4.2, WP3.1 and WP4.1 and connexions to other WPs and tasks) - (J. Seppälä, F. Artigas & B. Karlson)

Discussions on partners/laboratories' aims, scientific questions to solve and approaches to be shared during the project and discussed in separated sessions.

10:30- 10:45 *Coffee break*

10:45 – 12:45 – MREN Conference and Library room (32, av. Foch – Wimereux) - SMW and TP2 rooms (28, av. Foch – Wimereux)

Parallel discussions and short presentations on common technical and analytical improvements which could be performed, by WP3.1 subtask (chairs):

- **Imaging-in-flow acquisition and analysis** (M. Brosnahan & G. Wacquet)
- **Single-cell optical analysis** (M. Thyssen & M. Rijkeboer)
- **Multi-spectral fluorometry/spectrophotometry** (J. Seppälä & J. Wollschläger)
- **Variable/induced fluorometry** (J. Kromkamp & F. Lizon)

13:00 – 14:00 *Lunch – Cafeteria MREN ULCO*

14:15 – 16:15 - MREN Conference room, Library & Cafeteria – SMW Bonnier and TP2 rooms

Parallel discussions and short presentations on common scientific and operational issues which could be discussed and solved together within WP3.1 and WP4.1 joint work (chairs):

- **Operational matters:** which techniques could be combined together on which site and on which type of platform? Share of tools, know-how, staff, students...
- **Analytical tools:** which tools already available, how to improve their discrimination of phytoplankton groups/genera/species and applicability? Inter operability of common approaches for different techniques?
- **Data bases:** which format of files to share? which data? common or different databases?
- **Phytoplankton dynamics:** combination of tools and models for assessing phytoplankton **growth rates and productivity**, including techniques dealing with C fluxes.

16:15 – 16:45 *Coffee break - MREN Conference room*

16:45 – 18.45 - MREN Conference room, Library & Cafeteria –SMW Bonnier and TP2 rooms
Discussions on common technical and analytical work – writing of summaries and action plans per subtask, approach, operational, analytical and biological issues.

Dinner (free)

June 2nd - SYNTHESIS OF THE WORKSHOP (plenary session)

8:30 – 10:00

Semi-automated approaches and methods for the study of marine phytoplankton:

Presentation of the summary of the discussions held in subgroups (per subtask, approach, operational, analytical and biological issue) and recommendations for technical and/or analytical improvements, and for common share of devices, analytical tools, staff, students...

10:00 – 10.30 Coffee break

10.30 – 12.00

Open discussion for precisising the general strategy for the implementation of these techniques into the different reference sites within WP4.1 and link with other WPs.

Planning for 2016-2017 work

12:00 - End of the Workshop

List of Participants

JERICO-Next partners (P), subcontractors (SC) and invited (I) participants

Name	Last name	E-mail	Institute/University	
Luis Felipe	Artigas	Felipe.Artigas@univ-littoral.fr Felipe.artigas@cnrs.fr	CNRS-LOG/Univ. Littoral	P
Anouk	Blauw	Anouk.Blauw@deltares.nl	Deltares	P
Michael	Brosnahan	mbrosnahan@whoi.edu	WHOI	I
Véronique	Créach	veronique.creach@cefas.co.uk	Cefas	P
Reinoud	de Blok	Reinoud.deBlok@UGent.be	U. Gent	SC
Laurent	Delauney	laurent.delauney@ifremer.fr	IFREMER	P
George	Dubelaar	dubelaar@cytobuoy.com	CytoBuoy (s.c. RWS)	SC
Mathilde	Dugenne	mathilde.dugenne@mio.osupytheas.fr	CNRS/ M.I.O.	P
Justine	Evrard	justine.evrard@ifremer.fr	IFREMER	P
Costas	Frangoulis	cfrangoulis@hcmr.gr	HCMR	P
Gérald	Grégori	gerald.gregori@univ-amu.fr	CNRS/ M.I.O.	P
Philippe	Grosjean	Philippe.GROSJEAN@umons.ac.be	U. Mons	I
Denis	Hamad	denis.hamad@lisic.univ-littoral.fr	LISIC	I
Pierre-Alexandre	Hébert	pierre-alexandre.hebert@lisic.univ-littoral.fr	LISIC	I
Bengt	Karlson	bengt.karlson@smhi.se	SMHI	P
Jacco	Kromkamp	Jacco.Kromkamp@nioz.nl	NIOZ (s.c. RWS)	SC
Soumaya	Lahbib	soumaya.lahbib@mio.osupytheas.fr	CNRS/ M.I.O.	P
Evelyn	Lawrenz	lawrenz@alga.cz	Algatech, Microb. Inst., CAS	I
Alain	Lefebvre	Alain.Lefebvre@ifremer.fr	IFREMER	P
Fabrice	Lizon	Fabrice.Lizon@univ-lille1.fr	CNRS-LOG/Univ.Lille 1	P
Tanya	Marshall	tmarshallsix@gmail.com	DAFFF	I
Emilie	Poisson-Caillault	emilie.caillault@lisic.univ-littoral.fr	IFREMER-LISIC	P
Ingrid	Puillat	jerico@ifremer.fr	IFREMER	P
Marta	Revilla	mrevilla@azti.es	AZTI	P
Machteld	Rijkeboer	machteld.rijkeboer@rws.nl	RWS	P
Thomas	Rutten	thomasruttenprojects@gmail.com	TRP (s.c. RWS)	SC
Jukka	Seppälä	jukka.seppala@ymparisto.fi	SYKE	P
Melilotus	Thyssen	melilotus.thyssen@univ-amu.fr	CNRS/ M.I.O.	P
Lennert	Tyberghein	Lennert.tyberghein@vliz.be	VLIZ	P
Lucyna	Wlodarczyk			I
Guillaume	Wacquet	guillaume.wacquet@univ-littoral.fr	CNRS-LOG	P
Jochem	Wollschläger	Jochen.Wollschlaeger@hzg.de	HZG	P
Arnold	Veen	arnold.veen@rws.nl	RWS	P
Wim	Vyverman	Wim.Vyverman@UGent.be	U. Gent (s.c. VLIZ)	SC

Local organising committee

Name	Last name	E-mail	Institute/University	
Luis Felipe	Artigas	Felipe.Artigas@univ-littoral.fr	CNRS-LOG/Univ. Littoral	P
Marie	Bruaut		CNRS-LOG/Univ. Angers	P
Claire	Dédéker		CNRS-LOG/Univ. Littoral	P
Morgane	Didry	morgane.didry@univ-littoral.fr	CNRS-LOG	P
Fabrice	Lizon	fabrice.lizon@univ-lille1.fr	CNRS-LOG/Univ. Lille 1	P
Arnaud	Louchart		CNRS-LOG/Univ. Lille 1	P
Valérie	Plouvin	Valerie.Plouvin@univ-lille1.fr	CNRS-LOG	P
Guillaume	Wacquet	guillaume.wacquet@univ-littoral.fr	CNRS-LOG/Univ. Littoral	P

Practical Information

How to get to LOG UMR 8187 in Wimereux?

- **By car** : if you come from North or South, by the highway A16, take the “Wimereux Sud” exit & follow signs to Wimereux. LOG is on the left at the roundabout at the southern entrance of Wimereux (two buildings : Maison de la Recherche en Environnement Naturel (MREN-ULCO) & Station Marine de Wimereux (UL1).

- **By plane:**

♣ via airport Lille Lesquin, shuttle station for Lille Europe train station, then take the TER / TGV to Calais Fréthun, then switch to the TER to Wimille-Wimereux station (or continue to Boulogne sur Mer station and then take the “F” bus to Wimereux)

♣ via airports in London, Paris and Brussels, then take a shuttle or train to catch the Eurostar or the TGV train to Calais Fréthun (then change to Wimille-Wimereux or to Boulogne sur Mer station)

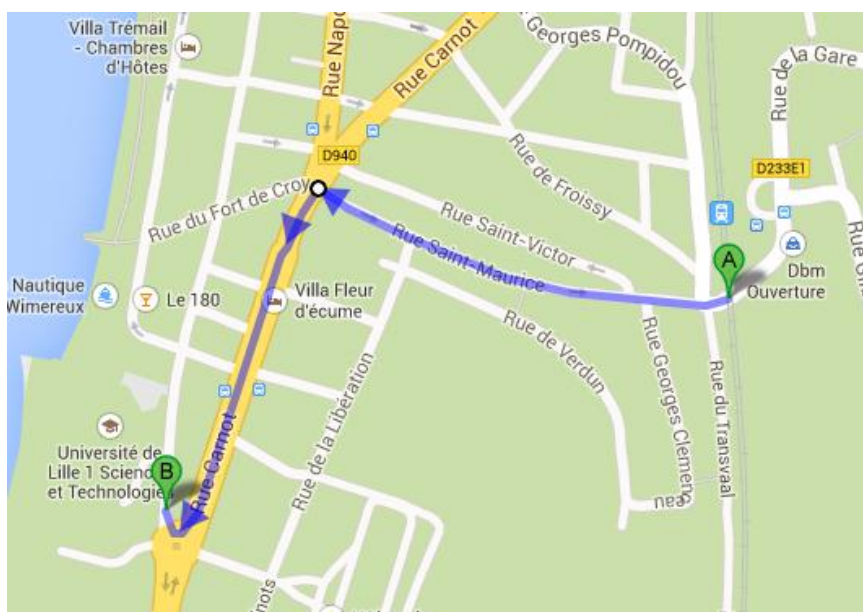
- **By train:** <http://www.voyages-sncf.com/>

- Take a train to Lille and/or directly to Calais-Fréthun station: Eurostar, TGV from Paris Nord, Lille Europe, elsewhere in France, London
- Then, take the TER to Wimille-Wimereux
- 5 minutes walk (500 m) from Wimille-Wimereux railway station
Take towards the sea, turn left when you arrive on the Rue Carnot. The LOG is at the southern entrance of the town)

- **By bus** : <http://log.univ-littoral.fr/>

From the Boulogne sur Mer railway station:

- line F, going to "Wimereux Baston" - "Saint Jean" stop (in front of LOG)



Where to stay in Wimereux?

[Hôtel Le Carnot](#) 12, rue Carnot, 62930 Wimereux from ≈ 65 €

[Saint Jean](#) 1 Rue Georges Romain, 62930 Wimereux from ≈ 75€

[Hotel Du Centre](#) 78 rue Carnot, 62930 Wimereux from ≈ 75€ (mention that you attend a LOG meeting to get discount if you call directly the hotel).

[Hotel des Arts](#) 143, rue Carnot, 62930 Wimereux from ≈ 45€

Where to stay in BOULOGNE-SUR-MER (4-5 km)?

[Auberge de jeunesse](#) : place Rouget de Lisle – 62200 Boulogne-sur-Mer
Tél : 03 21 99 15 30 / Fax : 03 21 99 15 39

[Les Gens De Mer - Boulogne](#) Quai Chanzy, 62200 Boulogne-sur-Mer from ≈ 55€

[Hôtel Metropole](#) 51 Rue Thiers, 62200 Boulogne-sur-Mer from ≈ 70€

[Opal'Inn](#) 168.170 Bd Ste Beuve, 62200 Boulogne-sur-Mer from ≈ 65€

[Hôtel De Londres](#) 22 Place De France, 62200 Boulogne-sur-Mer from ≈ 50€

[Hôtel Faidherbe](#) 12 Rue Faidherbe, 62200 Boulogne-sur-Mer from ≈ 50€

[Hôtel Alexandra](#) 93 Rue Adolphe Thiers, 62200 Boulogne-sur-Mer from ≈ 50€