

## NANO Coordination Meeting

Stellenbosch, South Africa

5-6 December 2015

### Participants:

#### NANO members:

Pavanee Annasawmy, Mauritius/S. Africa  
Abdelfattah Atoui, Tunisia  
Adriana Cervantes Gonzalez, Mexico  
Mohammed Kajee, South Africa  
Maziar Khosravi, Iran  
Sebastian Krieger, Brazil  
Nandini Menon, India  
Shaazia Mohammed, Trinidad & Tobago  
Oguguah Ngozi, Nigeria  
Arnaud Nicolas, Mauritius  
Jitraporn Phaksopa, Thailand  
Ngwako Rabodiba Adam Mohale, South Africa  
Suriyan Saramul, Thailand  
Olga Shatova, Ukraine/New Zealand  
Houssein Smeti, Tunisia  
Folly Serge Tomety, Togo  
Ted Wango, Ivory Coast  
Amy Wright, South Africa  
N'Guessan Eric Yao, Ivory Coast

#### POGO Secretariat:

Sophie Seeyave (Executive Director)  
Vikki Cheung (Scientific Coordinator)

### Saturday 5<sup>th</sup> December

#### Opening session

Sophie Seeyave welcomed the participants and introduced the scope and objectives of the meeting. The participants then introduced themselves.

#### Background information on NANO (Chair: Sophie)

The following presentations were given by way of background:

- *Introduction to POGO*: Sophie Seeyave
- *NANO overview and progress on Action Items from Meeting in May 2015*: Vikki Cheung
- *Update on NANO membership and communications*: Olga Shatova

#### Progress reports on Regional Projects (Chair: Sophie Seeyave)

- *North and West Africa*: Houssein Smeti
- *South East Asia*: Suriyan Saramul
- *Indian Sub-Continent*: Kanthi Yapa
- *Latin America*: Adriana Gonzalez

- *Caribbean:* Shaazia Mohammed

#### *General discussion of Regional Projects*

There was some discussion about the need to publish the results from the various regional projects, especially those which have been running for 3 or 4 years (e.g. Latin America, SE Asia). It was noted that the India/Sri Lanka project had included many outreach activities, and that the outcomes from these should also be used to provide some useful tools for the NANO community, such as common methodologies or handbooks.

#### **Break-out discussion session**

*The discussion groups were centred on research themes/methodologies rather than regions, to allow for cross-fertilisation between the different regional projects. There were only 2 discussion groups, since there were not enough participants interested in the topic on measuring phytoplankton pigments.*

#### **Discussion topics:**

- *Linking satellite remote sensing with in situ data*
- *Application of numerical modelling for water quality monitoring*

#### **Reports back from discussions and general discussion of commonalities between regional research projects**

##### *Linking satellite remote sensing with in situ data*

It was agreed that beginner-level users of remote sensing data often need help finding out:

- What data are the best to use and where to find them
- How to check reliability/validation of methods
- How they can get expert support.

To help with this problem, NANO members (experts and users of remote sensing data) will create a short, easy to use, comprehensive guide. This would consist of a set of drop-down lists of key words that a beginner user can use to find RELEVANT and RELIABLE resources for his/her problem and to contact the expert in the field for a advice (NANO friends). This would be hosted by the NANO website and open to NANO members first. The basic idea is that a combination of key words returns a result.

#### Categories of key words:

- Region (open ocean/coastal/river mouth etc Indian, Pacific etc)
- Problem: (cross validation/high cloud/coral bleaching etc)
- Type of measurement (SST, Chl a etc)
- Resolution (time and space).

A plan, timeline and people designated to produce this resource was drafted, as shown below.

# How?

| Action item                       | Who's in charge?      | Deadline   |
|-----------------------------------|-----------------------|------------|
| Design/<br>specific parameters    | Adriana (coordinator) | 31 Jan     |
| List of resources/<br>handbooks   | Kanthi                | 1st March  |
| refine search etc                 | Shubha and Trevor     |            |
|                                   | Shaaazia              |            |
| IT part of it/<br>Key word search | Vivian L              | 1 May 2016 |
|                                   | Lica                  |            |
|                                   | Sebastian             |            |
| NANO friends                      | Olga                  | 1 March    |
|                                   | Sophie+V              |            |
|                                   | Arnoud                |            |
| Testing                           | Angelee               | 31 August  |
|                                   | Ngozi                 |            |
|                                   | Mohammed              |            |
|                                   | Amy                   |            |

## *Application of Delft-3D for water quality and hydrodynamic modelling*

Discussion topics included:

- Modelling with Delft3D (Flow and Wave)
- Water Quality (Observation and Modelling)
- Collaboration between regions
- NANO news.

### *Modelling with Delft3D (Flow and Wave):*

- Setting up the numerical grids and flow model
- Sediment transport modelling
  - Satellite images for shoreline evolution (instead of beach profiling)
  - Possible use of UNIBEST (sediment budget).

There was some discussion of how NANO members could help each other in understanding and running the Delft3D model. It was suggested to have a discussion forum on the NANO website (or Google group).

### *Water Quality (Observation and Modelling):*

Most locations need in-situ measurements, which can be made using multi parameter sensors (Temp., Sal, DO, Chl-a and turbidity), which are relatively cheap and easy to be calibrated. Ideally nutrients should also be measured.

The baseline data would be used to implement the Delft3D-WAQ Model. There is a possibility that Lazare Akpetou (Ivory Coast) would join the project, bringing in his expertise in nutrient measurements.

*Extending the NHG group:*

- Togo or Mauritius will join in 2016
- Serge (Togo) & Arnaud (Mauritius) will submit a short proposal by February 2016 to show:
  - Their interest in hydrodynamic-related subjects;
  - Any existing project (institutional support);
  - How they are going to use the equipment (project proposal for the selected study site).

*NANO news 10:*

Chief Editor: Ted Wango. Contributions:

- NHG project
- Stellenbosch Workshop
- NF-POGO-NANO activities in Africa
- Polarstern Cruise
- Update from SEA Regional NANO Project
- Research communications by Housseem, Abdelfattah, Eric.

### **Sunday 6<sup>th</sup> December**

#### **Presentations on proposals for regional research projects in 2016**

*North and West Africa:* Housseem Smeti

*South East Asia:* Suriyan Saramul

*Indian Sub-Continent:* Nandini Menon

*Latin America:* Adriana Gonzalez

*Caribbean:* Shaazia Mohammed

*General discussion of Regional Project proposals*

#### **Break-out groups to finalise regional project proposals**

#### **NANO Outreach** (Chair: Vikki Cheung)

*Progress report on NANO outreach project:* Olga Shatova

Group discussion on NANO outreach: It was agreed that the group should try to produce some best practice guidelines as a product of the outreach activities that have taken place.

#### **NANO Communications**

**Group discussion of NANO communications and ways to enhance alumni engagement in the Network** (Chair: Sophie Seeyave)

NANO website: the new website design was shown and there was agreement that it looked much better than the previous site. The possibility of using Slideshare to embed presentations was discussed, and would be looked into.

NANO leaflet: Kanthi agreed to ask someone at her institute to work on a 1-page leaflet on NANO. There was some discussion about what was the best format to send her the material. It was agreed that some text (in Word) and images (jpeg) would be the easiest.

The CofE video was shown, and the group agreed that it was very good. The only issue was the volume of some of the interviews (Mr Ogiue's in particular), which needed to be rectified.

A list of meetings/conferences in each of the participants' countries was drawn up and it was agreed to try to have a NANO presence at these (e.g. poster, leaflets, presentation).

#### *Regional Meetings:*

- Benin: colloquium in Oct every year on coastal oceanography.
- WIOMSA Symposium on marine science every 2 years in a different country in W. Indian Ocean
- IOC WESTPAC Meeting 2016 Qingdao (every 2 years)
- Phytoplankton conference in Thailand every 2 years
- Marine Science Conference in Thailand every 2 years
- International Fisheries Symposium every 2 years in SE Asia, 2016 in Malaysia, 2017 Vietnam
- Fisheries Symposium in Sri Lanka May-June every year
- Mexico: National Symposium in Oceanography in Oct every 2 years; 2016
- Mexican Geophysical Union Meeting every year in Nov
- Research Symposium at Univ Trinidad + biological science research Symposium
- IOC Africa Symposium every year in Nairobi?
- Latin American Congress on Marine Science
- Brazilian Congress on oceanography
- OMARSAT physical oceanography conference in Brazil + satellite remote sensing conference + similar for marine biology and chemistry
- Tunisia: Annual Symposium on protection of coastal zone.
- International Persian Gulf Conference
- IMO -Int Conference on Coasts, Ports and Marine Structures (include oceanography)
- New Zealand Marine Science Conf in June-July; every 4 years joint with Australia
- Aquaculture conference?

#### **Action Items**

Proposals for 2016 to be submitted to Secretariat by 11th Dec.

Send template and last year's proposal to Outreach team asking them to submit a proposal by 11th Dec.

Mauritius and Togo to submit proposals (using template provided) to join NANO-NHG by end Jan 2016.

All projects to focus on producing publications (peer-reviewed and/or recommendations/guidelines/protocols). Consider submitting manuscript for Oceanography Blue Planet special issue on ocean

observations for societal benefit. Sophie will circulate more details about peer review, if there are any costs involved, etc.

Resource to help alumni starting out in remote sensing to be produced. Adriana, Kanthi, Shaazia, Olga etc.

Continue to develop new NANO website. Olga, Mo + Secretariat.

Look into other options for on-screen reader for NANO News. Sebastian + Secretariat.

Open Slideshare account to be able to upload presentations on new website (outreach, lectures, NANO meeting presentations, etc). Adriana to share Google folder with Ensenada training lectures.

Prepare NN10 issue on Africa. Ted Wango to be Chief Editor (advice from Sebastian). Editorial Board: Housseem, Maziar, Arnaud, Serge.

NANO leaflet: send Kanthi text (Word) and jpeg files to create new A4 3-fold leaflet. Consider options for translating into other languages. Remove statistics/graphs and add map showing origin of alumni. Secretariat, Olga, Shaazia, to draft text and select/create graphs.

Complete list of regional/national conferences in NANO countries. Send reminder for participants to provide more info/complete the list.