



Société Française
de Physique

Information Letter n°3 FISP project
Commission "Physique / Optique sans Frontières"
commune à la SFP et à la SFO



FISP : International Formation in Solar Photovoltaïcs in the framework of IYBSSD.

Workshops trainers : **Arouna Darga, Raymond Campagnolo, Robert Baptist** (Association Puya Internationale), together with local trainers.

The Lightbox kits (**Christophe Daussey**) and the Diasporeines workshop (**Odette Fokapu**), are included in the FISP action. We also promote the use of the site www.Fizziq.com (**Christophe Chazot**) for Physics popularization, it shows how to use smartphones to perform physics experiments. The site could be used with English and Spanish.

We are asking African organisations interested in FISP to send us a letter of intent indicating the type of activity they would like to develop.

A) Current status of the organisation:

The various coups d'état that took place this summer largely disrupted our initial programme in Niger and Togo. While Togo program took place by mid September, we don't know when it will be possible to organize the workshop in Niger.

With presidential elections due to take place in Madagascar in November, our Madagascar partners have asked us to postpone the workshop, which was scheduled for December, because they fear riots.

Performed workshops :

Togo :

The workshops to train trainers in solar panel manufacturing at the University of Lomé (Kekele Sossoe) and the University of KARA (Dam be Douti), which were scheduled for August, were held in September (see photos). See attached poster at the end of this document.



Photos of the workshop held at the University of Kara (18 - 20 September) credit: Arouna Darga..

Kekeli Sossoe, a physicist at the University of Lomé, was introduced to us by an Italian researcher (Giglioli CNR) who also trains young African teachers in solar energy. We need to develop closer relations with him. The two physicists are also interested in remote practical physics workshops as well as the use of Light Box kits.

Scheduled workshops :

Madagascar :

Solar panel manufacturing training workshop: initially scheduled for December, this will be postponed until January. Preparatory webinars will be organised from November onwards. Practical physics distance learning (Association Puya Internationale) will be organised in October in four universities or research centres: Fianarantsoa, Toliara, Antananarivo and Antsiranana. In the case of the University of Fianarantsoa, this will take place in October, with the cooperation of the Fianaralab association. We have provided € 1,554 in funding for the equipment needed for these distance learning courses, which is already on site. The Fianaralab association is represented in France by **Herinirina Fanevamampindra**.

Thanks to Herinirina's contacts with the University of Sherbrooke in Canada, the project to install a drinking water supply at the University of Fianarantsoa was completed this summer, with eight Canadian students coming to install the pump and solar panels. The project was entirely funded by the University of Sherbrooke. The Sherbrooke university also provided the funds for the drilling, up to 36 meters! We'd like to see French universities (or Engineer schools) to follow this trend!

Niger :

Solar panel manufacturing training workshop: scheduled for December, but postponed for the time being. Professor Saidou Madougou's letter of intent was enclosed with Newsletter 1. We will have to wait until Arouna Darga's trip is authorized before we can buy the solar cells we need. However, we will be able to organize the physics practical work remotely without any problems.

Côte d'Ivoire: Christophe Daussy has delivered five Lightbox kits to Professor Jérémie Zoueu at Charles de Gaulle Airport. The organization of a solar panel manufacturing workshop is under negotiation.

Mauritius (with Rodrigue): There is genuine interest in our work, and we are waiting for a letter of intent. (Pierre Richard Dahoo). This is part of our plan to set up a regional "Indian Ocean" initiative for physics: Madagascar, Mauritius and Réunion. Pierre Richard Dahoo will be taking three Light Box kits with him to Mauritius and Rodrigue between late October and early November.

Guinea: A workshop should be organised at the University of Konackry, we are waiting for the letter of intent.

Cameroon: We are still waiting for a letter of intent from the Yaoundé University Institute of Technology.

B) LightBox kits:

Christophe Daussy has received funding (from the Labex "temps fréquence") of €12,000 to produce additional kits, and is taking advantage of this to move on to a second version (incorporating solar cells in particular). A user charter has been drawn up. The problem of delivery still needs to be resolved. Christophe Daussy has just donated five kits to Professor Jérémie Zoueu, two of which were given to Soba Nafissa for the University of Niamey, one for Burkina Faso and one to Physique/Optique sans Frontières, representing a total of €1,500. The shipping and delivery problem may sometime be solved when we find people travelling to the country, as it is the case for an IN2P3 researcher (David

Rousseau) who has offered to bring two kits to Benin (Alain Dossa). If we could do the same thing for many countries, it would be interesting.

Our organization has provided a student of Institut d'Optique (third year), Léa Faye, with a kit which is used in rural classes in Tanzania.

Summary :

Burkina Faso : one kit, **Côte d'ivoire** : five kits, **Niger** : two kits, **Ile Maurice et Rodrigue** : three kits
Madagascar : two kits are scheduled, **Togo** : two kits **and Bénin** : two kits.

Peru Light Box: our colleague from the University of St Quentin Versailles, Jorge Linares, will be taking two Light Box kits to Peru for the Universities of Cusco and Chiclayo.

The Fizziq.org website:

We think that this site, which teaches how to use smartphones to carry out physics experiments and in particular how to determine certain constants using smartphones, would be useful for many countries. The www.Fizziq.com website (also in English, Spanish and Portuguese) offers a wealth of information and experiments. We think it's important to inform our African colleagues about this, and Christophe Chazot is ready to answer any questions and provide support.

Workshops and actions will be organized as and when the requested subsidies are received. Insofar as the financial resources available allow, we will contact other countries such as Senegal, Chad and Ghana.

Other news :

Benin:

Emmanuel Maisonhaute is due to visit Benin in July 2024 for a thematic school on electrochemistry as part of the ELABORE project (CNRS - IRD "Sciences Frugales").

Burkina Faso:

Arouna Darga has received funding from the Swiss International Cooperation Agency to train around 400 young students in Burkina Faso in the field of solar energy (with the support of Daniel LINCOT and "Physique / Optique sans Frontières"). This is a very welcome initiative given the security situation in the country. We warmly congratulate him. We will keep you informed of the results.

FUNDINGS :

Société Européenne de Physique : 3500 €

Société Française de Physique (SFP) 3500 €

Société Suisse de physique (SSP) : 2000 €,

Société Française de Chimie (SCF) : 1500 €,

Association pour la Promotion Scientifique de l'Afrique (APSA) : 3000 €,

Institut d'optique graduate School (IOGS) : training course for a student to develop a spectroscopy kit. (2000 €)

Comité d'entreprise de la Caisse des dépôts et Consignations : 1500 €

Association Puya Internationale : support for distance learning physics workshops.

Association Atout Sciences : donation of 10 kits Lightbox : 1500 €

IPI (Initiative Physique des Infinis - Sorbonne Université) : 5000 €

International Science program (Université Uppsala) (ISP) : contacts with english speaking african countries.

Association Diasporeines (présidente Odette Fokapu)

DARGATECH SARL (Burkina Faso) : workshop organization d'ateliers, actions follow up.

PARTENAIRES :

Société Ouest Africaine de Physique (SOAPHYS) : organisation of webinars to raise awareness of the FIPS project, networking.

OPTICA,

Association Fianaralab :

Logos of partners :



Formation Internationale en Solaire Photovoltaïque
Physique & Optique Sans Frontières



Société Française
de Physique

Commission
Physique et Optique
Sans Frontières



Société Française d'Optique

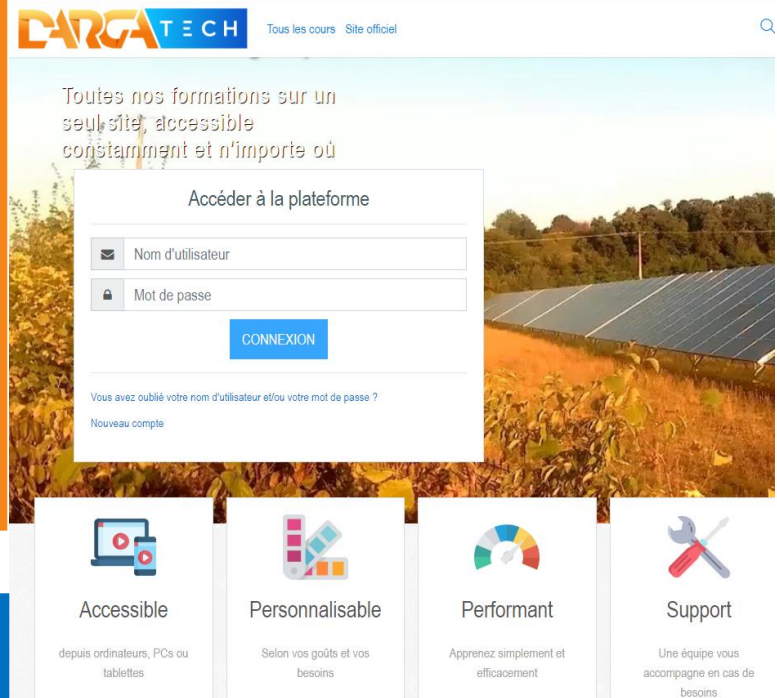


Contact : contact@dargatech.com

PROGRAMME

PHASE 1 FORMATION EN LIGNE TECHNOLOGIES PHOTOVOLTAÏQUES

Technologies de cellules
et modules solaire
Conception de modules solaires
photovoltaïques
techniques d'interconnexion
des cellules dans un module
Propriétés électriques des modules
Techniques de test de la qualité d'un
module solaire



CARGA TECH Tous les cours Site officiel

Toutes nos formations sur un
seul site, accessible
constamment et n'importe où

Accéder à la plateforme

Nom d'utilisateur

Mot de passe

CONNEXION

Vous avez oublié votre nom d'utilisateur et/ou votre mot de passe ?
Nouveau compte

- Accessible**
depuis ordinateurs, PCs ou
tablettes
- Personnalisable**
Selon vos goûts et vos
besoins
- Performant**
Apprenez simplement et
efficacement
- Support**
Une équipe vous
accompagne en cas de
besoins

FORMATION EN LIGNE
1x SEMAINE, VIDEOS & EVALUATIONS

PHASE 2 ATELIER DE FABRICATION

JOUR 1 – CONCEPTION DU MODULE

Spécification technique du module
réalisation du prototype

JOUR 2 – ESSAIS DU MODULE

Caractérisation optoélectronique
essais avec chargeurs de batteries



**CONTRIBUTION sur Inscription
et sur sélection**
NOMBRE DE PLACES : 90