



An IUPAP-IUCr project within the 2016-2019 ICSU Grants Programme

LAAAMP

Lightsources for **A**frica, the **A**mericas, **A**sia and **M**iddle East **P**roject



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Lightsources for **A**frica, the **A**mericas, **A**sia and **M**iddle East **P**roject (LAAAMP)

Full project title:

Utilisation of Light Source and Crystallographic Sciences to Facilitate the Enhancement of Knowledge and Improve the Economic and Social Conditions in Targeted Regions of the World

Lead Applicants:

International Union of Pure and Applied Physics, IUPAP
International Union of Crystallography, IUCr

Grant awarded: € 300,000

Grant period: 3 years (2017-2019)



LAAAMP > Structure > Partnering Advanced Light Sources (AdLSs)

Advanced Light Source (USA)

Advanced Photon Source (USA)

ALBA Light Source (Spain)

Australian Synchrotron

Canadian Light Source

DELTA Light Source (Germany)

Elettra Light Source (Italy)

European Synchrotron Radiation Facility (France)

MAX IV (Sweden)

National Synchrotron Light Source-II (USA)

Pohang Accelerator Laboratory (Korea)

Photon Factory, (Japan)

SESAME Light Source (Jordan)

SLAC National Accelerator Laboratory (USA)

Siam Photon Source (Thailand)

Taiwan Photon Source

(More to come)

LAAAMP > Tasks

- TASK 1 Regional Committees take **AdLS and Crystallography Usage Surveys** and develop **Strategic Plans** for each Region.

- TASK 2 Establish an AdLS/Crystallography **Colloquium Programme** in each Region.

- TASK 3 Publish and Disseminate an AdLS/Crystallography **Information Brochure** for government officials and public.

- TASK 4 Promote and Facilitate Researcher and Student **Short- & Long-Term Visits/Study** at International AdLS and Crystallography Facilities and Schools (*including establishing new IUCr-UNESCO OpenLabs*).

- TASK 5 Convene a **Meeting at UNESCO** Headquarters in Paris in Dec 2019 to Present the *Strategic Plans* for the Regions and Launch the *Business Plans*.



LAAAMP > Tasks > 2. Colloquium Programme

This Programme will dispatch experienced advanced light source users and crystallographers to universities and other institutions and private enterprises in the targeted regions for 3-day visits to give presentations, to engage in discussions, and to visit government officials and schools.

Dr. Prosper Ngabonziza (Max-Planck-Institute for Solid State Research, Department of Solid State Quantum Electronics, Stuttgart, Germany) delivered a presentation entitled *Synchrotron Light Sources and Their Diverse Applications* at the following venues in Kigali, Rwanda:

Friday, 15th December: African Institute for Mathematical Sciences-AIMS

Wed, 20th December: **ICTP-Affiliated East African Institute for Fund. Research**,
University of Rwanda, Nyarugenge Campus

Met with four government officials

Dep. Vice-Chancellor for Academic Affairs & Research, UR

Principal of College of Science & Technology, UR

Dir-General for Science, Tech & Research in the Ministry of Education

Top Advisor to Minister of Education for Science, Tech & Innovation



LAAAMP > Tasks > 3. Information Brochure

LAAAMP has published a professional quality color brochure (hard copy and online) containing information on the various AdLS components, disciplines impacted by AdLSs and crystallography, and experimental beamline techniques .

Editor: **Ernie Malamud**

Fermilab and University of Nevada, Reno (Retired)

Design: Atelier Christian Millet

Cover: Flore Garcia & Atelier Christian Millet

Printer: Imprimerie Launay

First printing in December 2017

Second printing in English, French and Spanish in Summer 2018



LAAAMP > Tasks > 4. Faculty-STudent (FAST) Teams to AdLSs and Crystallography Facilities

Eligibility

Faculty members at universities in Africa, the Caribbean, Mexico, Southeast Asia or the Middle East. **Interested in using AdLSs to further their research and training endeavors.** Previous experience with using AdLSs is limited to a year or less. **Ability to spend 2 months as a full-time visitor in residence at an AdLS that is a LAAAMP collaborative partner.**

Student: Registered as full-time Ph.D. student and supervised by the Faculty member

Financial Support

LAAAMP provides 2,000 Euros per person to cover transportation and (partially) accommodation costs. The remainder of accommodation and subsistence should be negotiated with the host AdLS and other sources of support.

First call: Deadline 21 April 2017, Awards announced June 2017, 7 FAST Teams (14 individuals), Period of visits: June-December 2017

Second call: Deadline 15 November, period of visits: January-December 2018
16 FAST Teams (32 individuals), visits anytime in 2018.

New call for 3 FAST Teams from SE Asia with deadline June 1, 2018.



LAAAMP > Tasks > 4. Faculty/student visits at AdLSs and crystallography facilities/schools

Jan-Dec 2018 Awardees

(Expecting 19 FAST Teams, 38 Awardees)

Africa	3 New FAST Teams	2 Continuing Teams
Caribbean	1 New FAST Team	1 Continuing Team
Mexico	3 New FAST Teams	1 Continuing Team
Middle East	3 New FAST Teams	2 Continuing Teams
SE Asia	3 New FAST Teams (To be announced)	



2018 LAAAMP Continuing FAST Team Awardees

<u>FAST Team</u>	<u>Institution/Department</u>	<u>Requested AdLS</u>
Ibrahim Serroukh Marco Antonio Garduño Ramón	University Autonomous of Querétaro (Mexico) Faculty of Engineering	TBA TBA
Richard Taylor Reco Phillips	University of the West Indies (Trinidad and Tobago) Chemistry	NSLS-II USA
Shehab E. Ali Ahmed Hassan Ibrahim	Suez Canal University (Egypt) Physics	ELLETRA Italy
Kirsi Lorentz Grigoria Ioannou	The Cyprus Institute Science and Technology in Archaeology Research Ctr	ESRF France
Diouma Kobor Ndèye Coumba Yandé FALL	University Assane Seck of Ziguinchor (Senegal) Physics	TBA TBA
Oluseyi Philip Oladijo Keagisitswe Setswalo	Botswana Int'l Univ. of Science & Technology Chemical, Material and Metallurgical Engineering	CLS Canada



2018 LAAAMP New FAST Team Awardees

<u>FAST Team</u>	<u>Institution/Department</u>	<u>Light Source</u>
Gabriela Díaz Daniel G. Araiza	Universidad Nacional Autónoma de México Física Química	SSRL USA
María Josefina Robles-Águila Noemí Díaz-Corona	Benemérita Universidad Autónoma de Puebla (Mexico) Research Center for Semiconductor Devices	Elettra Italy
René Loredo-Portales Joel Martínez Estrada	Universidad Nacional Autónoma de México Instituto de Geología	Elettra Italy
Michael Forde Ashley St. Clair-Smith	University of the West Indies (Trinidad and Tobago) Chemistry	NSLS-II USA
EISayed Mohamed EISayed Shalaby Wafaa Ibrahim Emam	National Research Centre (Egypt) Solid State Physics, X-Ray Crystallography Lab	ESRF France
Abdallah A. M. Shaltout Safaa S. M. Ali	National Research Center (Egypt) Spectroscopy	CLS Canada
Ahmed El-Hussein Mostafa Zeidan	Cairo University National Institute of Laser Enhanced Sciences	ALBA Spain
Saphina Biira Bosco Oryema	Busitema University (Uganda) Physics	NSLS-II USA
Kalambuka Hudson Angeyo Justus Okonda	University of Nairobi Physics	TBA TBA
Thulani Hlatshwayo Thabsile Thabethe	University of Pretoria Physics	DELTA Germany