

# CSIR

*our future through science*



## Application Manual

**2021 African Laser Centre Research Collaboration program (ALC)**

**August 2020**

**Supported by the**



**science  
& technology**

Department:  
Science and Technology  
**REPUBLIC OF SOUTH AFRICA**

## Table of Contents

PART 1:	Introduction .....	3
1.1	Purpose .....	3
1.2	Background .....	3
1.3	African Laser Centre program - Strategic intent .....	3
1.4.	The ALC Research Collaboration Program .....	4
PART 2:	Call, Eligibility, Funding and Time lines .....	4
2.1	Call for Applications.....	4
2.2	Funding .....	5
2.3	Time line.....	5
2.4	Eligibility criteria.....	6
2.5	Duration of the Grant.....	6
2.6	Assessment process .....	6
2.6.1	Management plan .....	7
2.6.2	Scientific Merit.....	7
2.6.3	Collaborations .....	7
2.6.4	HR Development.....	7
2.6.5	Relevance & Impact .....	8
2.7	Proposal assessment criteria.....	8
PART 3:	MANAGEMENT OF GRANT .....	9
3.1	Contracting .....	9
3.2	Reporting requirements .....	9
3.3	Payment of Grants.....	10
3.4	Assistance .....	10

## **PART 1: Introduction**

### **1.1 Purpose**

This manual provides information on opportunities for funding within the CSIR's African Laser Centre program for Research Collaboration support.

The manual is intended to be an easy reference guide to the CSIR NLC ALC Research Collaboration Grant Scheme and to assist potential participants in accessing the available funding. It does not, however, constitute a complete set of policy, procedure or systems supporting the programme.

### **1.2 Background**

The African Laser Centre is recognized as an AU-NEPAD Flagship Program. The ALC is an open non-exclusive partnership to stimulate innovation, research and technology development in lasers and the application thereof, across the African continent. To enable this objective the ALC has an active research collaboration support program, a conference, workshops and topical schools program and a scholarship program for African students to enrol and do post graduate degrees at South African Tertiary Institutions in a laser-related research field.

The CSIR National Laser Centre is managing the funding allocation from the Department of Science and Innovation in support of the objectives of the Africa Laser Centre (ALC).

The Department of Science and Innovation has again made funding available which will be used to support collaborative research between South African and African researchers active in laser-related research in 2021.

### **1.3 African Laser Centre program - Strategic intent**

The purpose of the programme is to support laser-based research in Africa, especially between South African researchers and African researchers. The program is designed to develop, encourage and support a unique programme of building and growing a sustainable corps of expert laser researchers across Africa. The objectives of the program are:

- To promote research and training in lasers, optics and photonics.
- To promote and foster technological innovation in the use of lasers, optics and photonics.
- To promote collaboration among laser researchers:
  - Between African laser institutions and their international counterparts ;
  - To enhance the efforts of any other laser-driven initiatives in Africa.
- To reverse the brain drain of researchers from the African continent.
- To improve the quality of life of all African peoples.

## 1.4 The ALC Research Collaboration Program

The ALC Research Collaboration Program seeks to:

- Increase continental research collaborations;
- Increase the number of postgraduate research students (doctoral students are expressly targeted);
- Increase research fellowships and visitorships.

## PART 2: Call, Eligibility, Funding and Time lines

### 2.1 Call for Applications

The Call for the CSIR African Laser Centre Research Collaboration funding is facilitated through the ALC program office which is hosted by the National Programs group at the CSIR National Laser Centre. A template for new applications are distributed by this office to the ALC database of contacts, as well as to the research offices of all South African universities and university of technologies.

Proposals must be forwarded to the CSIR National Laser Centre's National Program's project office, at the e-mail address [nlcrentalpool@csir.co.za](mailto:nlcrentalpool@csir.co.za).

The scientific and technical contents of the project will be refereed through a peer review mechanism to assess quality of the research plan proposed, human capital development potential and impact of the proposed research. Applications must be substantial and comprehensive to allow proper assessment of the research proposed.

Applicants are encouraged to approach the CSIR NLC for assistance with completion of the application.

Projects can be funded for up to three calendar years. Contracting with successful applicants happens on a yearly basis, and continuation funding for a second or a third year of approved projects can only be considered based on the submission of a comprehensive progress report at the end of each year of the project. Continuation beyond the first three years can be considered if a new funding application is submitted to support a new research collaboration on existing programs.

Under the present COVID-19 pandemic situation which impacts and limits the ability to travel internationally applicants are encouraged to consider how research collaborations can continue using virtual collaboration platforms.

## 2.2 Funding

The program supports research collaboration between South African and African researchers, with a special emphasis on researcher mobility. The ALC research collaboration program funding covers the following aspects of the research collaboration:

- Costs related to the exchange of personnel between collaborating institutes in South Africa and Africa, up to a maximum of 2 visits in total per year.
- A daily allowance of R300 per day per person is allowed for senior team members and R250 for junior team members. Senior team members are defined as full time employees of research institutes. At the current funding level, research visits are limited to 10 days and 60 days per project for senior staff and junior staff respectively.
- Accommodation allowed per person according the following guidelines:
  - R 850 per day for senior staff, stay duration of 10 days or less
  - R 6 000 maximum per month for junior staff on extended visits (maximum stay duration of 60 days)
- Flights – realistic costs to be included in the proposal. Applicants are encouraged to get quotations for flights during the preparation of the proposal budget.
- Consumables to be used in the project (lifetime < 1 year), up to a maximum of R50 000. For the proposal budget it is recommended that the Principal Investigator obtain quotes and provide a good estimate.
- Costs associated with setting up equipment to support a virtual collaboration platform to enable continued collaboration due to travel limitations imposed by COVID-19 will also be considered and supported in the 2021 funding cycle. An additional R 20 000 can be motivated under this condition.

## 2.3 Time line

The time lines for the CSIR's ALC Research collaboration program are shown in **Table 1**.

<u>Event</u>	<u>Date</u>
Call Open	17 August 2020
Call Close	30 October 2020
Expected announcement of results	28 February 2021

Table 1: Call & outcomes announcement

\*See call document for actual due date.

## 2.4 Eligibility criteria

- All researchers in Africa engaged in laser-based research, in any study field in the natural sciences, health sciences or engineering may apply.
- Full time employees of research institutes may apply for grant funding. It is preferred that the Principal Investigator (PI) or main applicant be based at a South African research institution.
- Funding presently available to support ALC projects dictates that research collaborations needs to involve at least one South African entity. Applications for research collaboration support between only South African entities will not be considered.
- The grant may not be used for training alone, but should be based on a project with a strong research component.
- Applicants should hold at least a Masters degree and have a reasonable research track record.
- Students may not apply directly for a grant, but student involvement in projects are strongly encouraged.

## 2.5 Duration of the Grant

- Projects will be funded for up to three calendar years. Support after the first year, and in the subsequent years is not automatic. A **comprehensive annual progress report** must be submitted in response to an official call for progress reports. Continuation will be dependent on the quality of the Annual progress report as well as satisfactory progress during the previous year of the project.
- A Call for Proposals will be sent out each year, with a submission deadline specified. Application forms will be available from the NLC Rental Pool office [nlcrentalpool@csir.co.za](mailto:nlcrentalpool@csir.co.za)

## 2.6 Assessment process

All applications and progress reports received by the CSIR National Laser Centre will be submitted to an independent review panel appointed by the CSIR National Laser Centre. The purpose of the review panel is to provide an assessment of the quality of the proposals and the progress reports received, and to make a recommendation to the CSIR National Laser Centre on whether the project should be funded. The panel will consist of experts from industry, universities and international members. The assessment will primarily focus on the research project plan, scientific merit, capacity building, output, and equity and redress. Continuation funding will also be assessed based on the progress report.

The following aspects are important to consider when submitting an ALC application.

### **2.6.1 Management plan**

The research project plan or management plan submitted as part of the application must be a clear executable plan for the project. The plan must include defined major project tasks, broken down to activities that will be executed as part of the project plan. For each activity, a start and end date must be provided, and resources (such as for instance students) needs to be assigned to each of the activities defined. Each of the activities should also **have a clearly defined deliverable**. The detailed management plan can be in the form of a Gantt chart and should be available with the project proposal.

### **2.6.2 Scientific Merit**

Preference will be given to proposals that have the potential for high quality scientific outputs.

This section should clearly articulate the scientific background, and demonstrate through the proposed research a high level of scientific and technical excellence. Scientific outputs and impact needs to be quantified.

### **2.6.3 Collaborations**

The proposal format request information on collaborations. A list of collaborators should be included, which clearly articulates the contribution of each of the collaborators to the program. The information provided must be presented in such a way that will allow reviewers to assess the expertise and experience of the listed collaborators.

It is important to also list all the members of the research team who constitute this collaboration. Be sure to highlight the PI track record, staff involvement, student involvement, post docs, technical support and external collaborations (institutional, regionally, nationally and internationally).

Continuation projects will specifically be evaluated based on evidence of a functioning collaboration. Applicants should demonstrate that there are joint work, as reflected in joint publications, joint supervision of students, or other events jointly arranged.

### **2.6.4 HR Development**

Preference will be given to proposals that include a strong human capacity building program. In the section on HR development the applicant needs to list all students that will work on the project. It is important to identify the main supervisor and co-supervisor if applicable, as well as provide the thesis or research project title on which the student is working. Generic thesis titles or research project titles are not acceptable.

A clear indication should also be provided of present staff members who are busy with further studies.

The proposal must include information of how Knowledge Transfer will happen between research groups active in the collaboration. Evidence should be provided on activities planned or executed to support knowledge or skill transfer between the collaboration partners. This can be training schools, joint workshops, and supervision of students, reports or any other evidence of transfer.

## 2.6.5 Relevance & Impact

The proposal should clearly articulate the scientific, social, economic and environmental relevance and impact of the proposed work.

## 2.7 Proposal and report assessment criteria

Assessment criteria will be used to maintain consistency during assessment of research proposals and reports, each criterion is assigned a weight (see [Table 2](#) and [Table 3](#)).

For NEW applications

Criterion	Details	Weight
<b>Management Plan [10%]</b>	Feasibility & Efficiency of management Plan	10%
<b>Scientific Merit [30%]</b>	Scientific/technical excellence	15%
	Scientific impact/outputs	15%
<b>Collaboration [10%]</b>	The impact and evidence of collaboration needs to be provided. This includes joint publications, joint supervision, and contribution of ideas.	10%
<b>HR Development [30%]</b>	Knowledge transfer	5%
	Research students (Masters)	10%
	Research students (Doctorate)	10%
<b>Relevance &amp; Impact [10%]</b>	Social, Economic and Environmental	25%

**Table 2: Assessment criteria – New Projects**

For Continuation projects – Annual Progress Report evaluation criteria

Criterion	Details	Weight
<b>Project progress [10%]</b>	Progress on execution of the work as judged by progress against objectives, milestones and outputs	10%
<b>Scientific Merit [30%]</b>	Scientific/technical excellence	15%
	Scientific impact/outputs	15%



<b>Collaboration [10%]</b>	The impact and evidence of collaboration needs to be provided. This includes joint publications, joint supervision, and contribution of ideas.	10%
<b>HR Development [30%]</b>	Knowledge transfer	5%
	Research students (Masters)	10%
	Research students (Doctorate)	10%
<b>Relevance &amp; Impact [10%]</b>	Social, Economic and Environmental	25%

**Table 3: Assessment criteria - Continuation projects**

Based on the recommendations from the review panel, the CSIR NLC will do budget allocations, rank the proposals received and make a decision on the projects which will be funded in the next funding cycle.

## **PART 3: MANAGEMENT OF GRANT**

### **3.1 Contracting**

A CSIR ALC contract will be established that contains the clauses and requirements for the management of the grant. The contract addresses responsibilities, intellectual property issues, as well as the financial arrangements associated with the project. The contract is between the CSIR National Laser Centre and the host institution of the applicant.

At least one of the applicants on the proposal must be a South African citizen, and must be based in South Africa. From a contracting perspective the requirement is that the South African researcher submits the application as the principal investigator (PI) to ease the contracting process.

The contract will be an annual contract, and will be renewed on an annual basis **subject to the submission of an annual progress report, as well as a favorable review of the progress report.**

### **3.2 Reporting requirements**

On accepting the award (signing the contract), the grant-holder will be required to deliver on the annual research plan that formed part of the accepted application.

At the end of the calendar year the grant-holder will be required to prepare and submit an annual report to the CSIR NLC. The annual report must address project progress, delivery on milestones, project outputs and outcomes as presented in the research plan. In instances where the original project application was a multi-year proposal, the annual progress report will be used in an evaluation process to determine whether the project will continue in the next FY.

### **3.3 Payment of Grants**

Claims for payments of travel costs and consumables approved as part of the project should be submitted to the CSIR NLC for payment. Claims should be submitted for attention of Mr. Thomas du Plooy ([tiduplooy@csir.co.za](mailto:tiduplooy@csir.co.za)).

Invoices for payments should be addressed to:

The CSIR National Laser Centre  
PO Box 395  
Pretoria  
0001.

All invoices should reflect the CSIR's VAT no. 4470114283

All invoices should also reflect the unique reference number assigned to the project, and available on the ALC Grant contract, or from the CSIR NLC.

No payments will be processed unless proof of expenses accompanies the invoice submitted to the NLC.

### **3.4 Assistance**

Should you require clarification on any of the processes, criteria or plans presented in this manual please do not hesitate to contact Thomas du Plooy at 012 841 3511 or 082 443 1128, email [nlcrentalpool@csir.co.za](mailto:nlcrentalpool@csir.co.za)