#### ISL ENGINEERING RESEARCH POLICY

#### 1.0 Introduction

ISL encourages its faculty to apply for sponsored projects to the governmental agencies such as DRDO, ISRO, DST etc and non government agencies. ISL has been interacting with industries, research organizations and governmental agencies and have several MoUs in place for mutual cooperation in research, development and innovation in the latest technological areas. Sponsored projects in such areas pose significant scientific, technological and academic challenge to the faculty and students. These aspects further strengthen the academic programmes of the institute and also give an opportunity for the institute faculty, staff research scholars and students to work on live problems which are immediate relevant to the society and country. These interactions, relevant information, evaluation and other technical aspects are coordinated by Research and Development Centre (R&D) of Research and Entrepreneurship Hub (R&E Hub) in consultations with the investigators, various departmental Heads and Principal. R&D oversees and coordinates to types of projects: One is Sponsored Research Projects and the other one is Consultancy projects. In the present document general guidelines for External Sponsored Research Projects

Sponsored Research projects are mostly sponsored by various governmental agencies such as industries or other institutions with in aim to generate new technologies, new conclusions from experimental data, and Simulations of emerging technologies for creating new products or new fields for research Normally these are relatively long term prefects with a duration of 1 year to 5 years. For this type of projects, the investigators spend considerable amount of time for both studies and doing carrying experimentation and documentation for publications etc. The procedures to be followed for undertaking Sponsored Research projects and responsibilities of the investigators are describe with document. The purpose of these guidelines is to simplify procedures without compromising quality of the research and interest of the institute—and make the investigators to feel doing a sponsored project as pleasant and exciting experience.

# 2.0 Initiation of Project Proposal

From time to time the governmental agencies advertise various sponsored research project schemes in their websites and or through newspapers. Sometimes, the sponsoring institute itself may contact a faculty whose expertise they need. Once the individual faculty (Principal Investigator (PI)) feels that he got the expertise in an identified research scheme he can prepare the proposal as per format given by the sponsoring agency. It is always preferable to have at least one Co-Principal Investigator (Co-PI) with identified work to be done by the Co-PI. If the PI who has less than proposed project period of service for superannuation at the time of submitting the project proposal should include another faculty member with a longer service by at least, project period as a Co-Principal Investigator

### 2.1 How to Apply

Project proposals mainly consists of an aim, objectives, significance of the proposal, current status of nationally and internationally, Methodology, Results (Experimental/ Simulation), Time schedule(Pert Chart), Budget, Summary and References. The proposal is to be prepared in the sponsoring agency's prescribed format. The following are only very brief general guidelines in filling up the prescribed format, not necessarily includes all aspects.

- i) Title: Should be precise and reflects the latest development in the chosen area.
- ii) Aim: Confine one sentence and give gist of the whole project
- iii) Objectives: To achieve the aim main steps / tasks can be considered as objects Generally, limited to 4 objectives
- iv) Significance: Spell out how the proposed work is useful in advancing the existing technology and its application to the society.
- v) Current Status of nationally and internationally: Mention which institution individuals have been doing this type of work by citing latest peer reviewed and internationally acclaimed journal papers
- vi) Results: Include a few experimental / simulation results in the proposed area so that the reviewer will get confidence in the investigators ability to execute the proposed work and complete the project successfully

vii) Time Schedule (Pert Chart): Prepare the pert chart that should truly reflect the activities mentioned in the objectives. Project staff recruitment (if applicable) and project completion documentation should be invariably mentioned in the pert chart.

viii) Budget: Propose the realistic amount for all anticipates expenses for project staff, equipment, travel, consumables, contingencies and institutional overhead. Make sure that maximum allowable institutional overhead is included in the proposal (normally it varies from 10 to 20% of the overall project cost).

ix) Summary: Overall aspects of the complete can be comprehensively described in this section.

X) References: Should contain peer reviewed standard papers, preferably latest ones.

#### 2.2 Submission Procedure:

The proposal together with the details of infrastructure required from the Department duly forwarded/approved by the Head of the Department(s) is to be submitted to the Dean, R&D. The Dean After the scrutiny of the project proposal and the Institute's commitments with respect to the infrastructure facilities invites the Pl to give a presentation before internal research committee.

After approval by the committee, it will be forwarded to Principal for signature after which it can be submitted by PI to the sponsoring agency. After successful submission of the project proposal to sponsoring agency the following documents are to be submitted to R&D Centre for future reference.

i.Brief Details of Submitted Project Proposals (Appendix A)

ii. Self-Declaration on Status of Projects and Training Programmes (Appendix B)

Those who are not able follow the above procedure due to unavoidable circumstances should send the dully filled Questionnaire on Submitted Proposals (Appendix C) to Dean R&D.

### 2.3 Procedures for Sanctioned Projects

# a) Project Identification Number:

As soon as the PI receives the project sanction letter, he should send the copy of the sanction letter to Dean and the HoD. After noting the information Dean R&D assigns a project number, which should be used in all correspondence within the institute. This helps to identify the project and to facilitate to monitor the progress and maintain the statistics of all projects within the .institute. This also helps in providing project related information to various accreditation and ranking systems.

#### b) Bank Account:

A joint SB/current account will be put into operation to maintain all the project funds as per sponsoring agency's guidelines. This account will be operated by the principal and Pl. This account number can be communicated to the funding agency so that the money can be deposited directly to this account.

Date of Commencement: The date of commencement of the project, is the date of receipt of the first instalment of the project fund from the funding agency or the date of approval of the date of joining of the staff, whichever is acceptable to the funding agency

### 2.4 Recruitment of Project Staff:

The PI should take the timely initiative to recruit the sanctioned staff by advertising the announcement in newspapers (if sufficient funds are available), institute website and circulating the announcement to various other institutions where prospective aspirants are expected to be available by giving at least 10 working days to respond. The notification should contain the details of post, pay, minimum qualifications and desired qualifications and experience if any (Appendix D). The following step by step procedure is followed for the recruitment of staff:

a) PI has to prepare the notification and the department issues the advertisement HoD. After scrutiny by the Departmental Research Committee (HoD, senior faculty and announcement as per the prescribed norms for which the expenditure if any will be debited to the project contingencies. The address for receiving the applications will be shortlist the candidates and the same will be informed to Dean R&D.

- b) Dean constitutes a Selection Committee, in consultation with the principal and intimates it to the Pl. The Pl, in consultation with the Chairman and members of the selection Committee has to fix a date and venue for the interview and also to take action for calling candidates for interview.
- c) Objective type tests if any and the Selection Interview are to be organised by the PI in consultation with the Chairman and Selection Committee Members. Bio-Data of the candidate in the prescribed form to be obtained and certificates verified before the commencement of interview
- d) The proceedings of the Selection Committee meeting prepared in the standard format provided by the R&D centre have to be sent to the Dean for getting approval of the Principal
- e) On approval by the principal. Administration issues an offer letter of appointment to the selected candidate(s). Appointments are initially made for six months which can be extended-for-the full duration of the project depending on the performance of the candidate.
- 1) Staff can be appointed on ad-hoc basis at any time of the project.
- g) Project staff designations and qualifications: The designation and qualification and pay should be compatible and standard norms as applicable in government agencies and government academic institutions have to be followed. More information on these aspects can be found in their websites. Whatever post is desired, its qualification, pay have to be approved by the Dean R&D,
- h) Facility to use services of graduate and post graduate students: On Part-time basis students can be employed to utilize their services for specific works in projects. Remuneration rate has to be fixed by the concerned coordinator at the rate between Rs.60/- and Rs.120/- per hour. During the Academic session, only part-time engagement is allowed. Such part-time engagement should not exceed a maximum period of 40 hrs per month. During vacation / ME project period this is 120 hrs per month. The payment shall be only for the duration for which the student has actually worked. The payment is made based on the certification given by the coordinator. All part-time payments will be only for the duration of the project. The part time payments have to be made from the contingency / staff head of the projects as per sponsoring agency's norms.

### 2.5 Project Staff Administration:

The following procedure will apply with regard to the administration of staff recruited on selection or ad-hoc basis.

- a) The Project staff will work directly under the supervision of the PL. Their attendance and punctuality in work, the allocation of duties is all made by the Pl
- b) The personal files of the project staff will be maintained by the Pl.
- c) The project staffs are eligible for Leave as mentioned in Annexure II
- d) Project Staff are eligible only for the consolidated salary as mentioned in Annexure II and not eligible for any other benefits..
- e) Leave can be approved by the Pl. But if the leavexceeds the permitted level, it will be treated as leave without pay. This is to be approved by the Dean, Research
- f) The female staffs appointed through selection process are eligible for Maternity Leave as per Institute's rules. The project staff must be advised to give sufficient notice well in advance before they leave the project
- h) Care must be taken by the Pl to see that the staff members are not engaged beyond the duration of appointment or the closing date of the project.

### 2.6 Administrative Support:

- I. All the expenditure for carrying out the project has to be approved by Dean R&D and sanctioned by the principal. For purchase of material and equipment the Institute rules shall apply and finally to be approved by the principal.
- II. On the recommendation of Dean R&D Temporary advance up to Rs. 10000/- will be sanctioned to the PI by the Principal for minor purchases and incidental expenses. The PIs must settle these accounts within one month from the drawl of advance.
- III. On the request of Pl, an imprest amount subject to a maximum of Rs. 5000/- per project will be sanctioned by the Principal on the recommendation of Dean R&D, This can be operated by the PI / Co-Pl. The imprest can be utilised for petty purchases, contingencies etc. and should be chargeable to sub heads like consumables or contingencies only and the specific sub head should be indicated in the accounts. The imprest can be periodically

recouped by giving the up-to-date statement of accounts along with all the bills and vouchers duly certified. The accounts can be directly settled with the Accounts Section with a copy to R&D.

### 2.7 Relief in workload to PI and Co-PI(s)

Those who have got sponsored/consultancy projects may send a request letter for partial relief in departmental workload (teaching and administrative) to the Dean R&D through HoD. The Dean R&D will examine such request case by case and send his recommendations to the Principal for necessary approval.

#### 2.8 Project Accounts:

- a. The project account shall be maintained by the PI and accounts section. The expenditure can be incurred only as per the head of sanction. Any deviation or re-appropriation is possible only with the prior approval of sponsoring agency. Funds also cannot be diverted, for creating the infrastructural facilities without the approval of the funding agency.
- b. Whenever funds are to be claimed from the funding agency or bills to be sent against sanction, the same is sent to sponsoring agency by the Pl through the Accounts Section with intimation to R&D Office. For release of grants in subsequent years also, the Accounts Section may be approached for necessary statement of Accounts (Provisional or audited as the case may be) and for utilization certificates Release of grants at the right time is to be ensured by the Pl, as deficits in projects will affect the progress of the project.
- c. All bills and invoices for payment against purchase order are to be sent to the Accounts Section. All bills duly certified with all the particulars, towards hiring of taxis, purchase of books, travel expenditure of visitors etc, must be sent to the Accounts section
- d. The accounts of the project will be audited every year, Audited Statement of Account and Utilization Certificates will be sent to the sponsors by Pl under intimation to the R&D

# 2.9 Conferences /Seminars/Workshops:

The Project Investigators (PIs) can attend Conferences/Seminars workshops in related areas utilizing the project grants. There is no ceiling for registration fee for attending National or International Conference held in India or abroad. Specific approval of the funding agency to utilize the grants for travel abroad is to be obtained.

#### **2.10 Travel:**

The Pls/Consultants are permitted to be away on duty, as required for project work. Prior permission of the Principal / Dean R&D in prescribed form sent through the Head of the Department, must be obtained for all such travels. The staff member who will be undertaking the travel has to fill up the approval form. Pl and Head of Department/Centre have to countersign the form. This is forwarded to the Principal through Dean R&D for approval. Care must be taken by the PI that the total expenditure for travel does not exceed the amount allotted for the purpose. The final TA bill after performing the journey has to be forwarded to the Accounts Section directly. International travel in projects can be permitted only with the concurrence of the Sponsoring Agency. Project staff on tour for field trials etc., can be reimbursed boarding and lodging expenses, on production of certified bills as per Institute's norms.

Prior approval by Principal / Dean R&D is needed for the visits abroad by the Project Investigators. Also, they have to make made alternate arrangements for carrying out the projects during their absence and have to submit concurrence letter stating that they will do the project work during their absence.

### 3. Departmental Research Committee (DRC)

In order to streamline the research activities and increase the productivity in terms of projects. Publications and also improve quality of training programmes, dedicated Departmental Research Committee for each department are established. This facilitates to process solve day to day research related issues at the departmental level.

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The term of the membership of all the members of DRC shall be for a period of two years. Unless otherwise specified minimum three members of the DRC shall form the quorum. The meeting of the DRC shall be held at least once every six months. It may be held frequently depending upon the necessity.

### Composition of DRC Members

Chairman	Dept Bos will be chairman
Member	HoD of the concerned Department
	One Professor
	One expert from industry
	One expert from academics
Convenor	One Associate professor

### 3.1 Responsibility of DRC:

- 1. To issue appropriate guidelines to B.E./M.E students projects for maintaining quality research and for choosing application oriented projects.
- 2. Promote Research Culture in the Department
- 3. Develop and maintain Departmental research activities
- 4. Develop and maintain a Departmental research publication strategy (in line with the institutional strategy)
- 5. Encouraging faculty to apply for external /In-house funding
- 6. Preparation of Thesis Guidelines.
- 7. Inform the thrust Research areas
- 8. Promote the development of national and international links and collaborations with academic institutes and industries.
- 9. For every meeting, minutes are prepared and circulated to all the faculty members with a copy to Principal and Dean R&D
- 10. Facilitating lectures by renowned people on latest toples
- 11. Facilitating industrial collaboration and visits
- 12 to oversee the general functioning of Department Col Recognised Research Centre and MoUs

Periodically, Dean R&D will review the progress of various research activities of the institute with the Bos Chairpersons of various departments and or HoDs, For this, Dean R&D will be Chairman of the committee and one of the research coordinators will be the convener of the meeting