# Standard Operating Procedure for AcSIR Students

## An Outline of Steps to be followed in Ph.D. Programme

1) Student Joins Ph.D. Program as per Letter of Offer & pays Semester Fee to AcSIR.
2) A Supervisor is Assigned by Lab.
3) Student is assigned AcSIR Ph.D. Enrolment Number.

4) Student registers for and passes mandatory courses including Research Methodology with scores above threshold level.

5) Student submits research proposal to his/her supervisor and after evaluation supervisor sends note to Director, NEERI through AcSIR coordinator for Doctoral Advisory committee constitution.
   (For DAC, supervisor suggests two members from the same research field and Director, NEERI nominates the third member from different field of research. Format for DAC formation Note is given in **Annexure 1.**)

6) Student expresses preparedness for DAC1 & accordingly Supervisor facilitates DAC1 Meeting (**DAC 1 should be completed before 3rd semester**).

7) Supervisor sends note to Director Office through AcSIR coordinator for taking approval for conducting students Comprehensive Exam and request Director to chair the Exam board (In case Director is not available, Director suggests Director's nominee for the same. Format for Comprehensive Exam approval note is given in **Annexure 2.**)

8) Student clears Comprehensive Exam (**Comprehensive Exam can be conducted after DAC 1 from 2nd to 4th semester**)

9) The comprehensive Exam Report should be sent to Dean of respective faculty for approval. Only after approval from Dean, student's registration in Ph.D. gets confirmed.

10) After receiving Deans approval for comprehensive exam, student starts working for other requirements, such as writing review article, project proposal, work for societal programs etc. as per their procedures of conduct and/or evaluation (**Review Article, Project Proposal and CSIR-800 Societal Project should be completed before Open Colloquium**)

11) Student expresses preparedness for DAC2 and Supervisor accordingly facilitates DAC2 Meeting.

12) Student carries out research in the lab and regularly reports progress of work (preferably monthly or quarterly reports, though supervisor may have one's own way of getting update of progress).

13) Student expresses preparedness to make a presentation of progress of work and Supervisor accordingly facilitates DAC3 Meeting.

14) Students complete the doctoral thesis research work including implementation of suggestions made at DAC2 and DAC3 meetings, discusses with Supervisor and, if concurred by Supervisor, requests DAC4 (Thesis Seminar/Open Colloquium) and accordingly, Supervisor facilitates conduct of DAC4.

15) If DAC4 is successful, Student submits synopsis for Ph.D. thesis and then proceeds to Writing Ph.D. Thesis.

16) Thesis work is a guided research carried out under the supervision of the guide and hence the Thesis draft must be submitted to Supervisor for corrections if any.

17) The thesis draft has been seen/fully marked by the guide, Student revisits/revises/rewrites his/her doctoral thesis draft in light of the markings, suggestions, comments of the supervisor and submits revised draft for checking (this step may have more than one cycle of actions).

18) If the revision(s) in draft and/or responses of the student are up to the satisfaction of the Supervisor, student proceeds for Printing of Thesis and then submission of thesis in compliances of all documents including having regularly paid all Semester Fees. Checklist of thesis submission documents is given in **Annexure 3**.

19) For thesis submission, a prior publication of at least one research paper in an SCI Journal is required. It is mandatory to include AcSIR affiliation in research paper.

20) Student signs the thesis, gets countersigns of Supervisor, gets approval of Director of Lab and Submits to AcSIR (at Lab Level AcSIR Office- Coordinator AcSIR). (**The Ph. D. thesis can be submitted any time within six months after clearing the DAC IV through Open Colloquium**.)

21) Coordinator, AcSIR communicates Supervisor-suggested panel of examiners as well as all other documents as per stipulated Check-List to AcSIR HQ for verification.

22) If found full compliant, AcSIR HQ communicates Panel of Examiners to Respective Dean/Associate Dean for determining examiners from amongst the list or others by his/her own knowledge of relevance.

23) Coordinator sends thesis to the examiners for evaluation.

24) If reports recommend acceptance of thesis, Oral Examination Board (OEB) is constituted (Reports from at least two examiners is mandatory for conducting Oral Examination)

25) Coordinator in consultation with AcSIR HQ schedules Viva-Voce Exam.

26) Successful defence (including addressing/response to questions/ suggestions/explanations/ incorporation of suggestions etc., depending upon their nature) of thesis at Viva-Voce and its approval by the Chairman, Senate (Director, AcSIR) on recommendation of the concerned Dean leads to AcSIR HQ's official process for issuance of Provisional Degree and award of Final degree.

## Notes

**(a)** *There are some timelines also amongst these steps/stages/step to step transitions etc. for such and other micro-details extant rules/provisions of AcSIR apply.*

**(b)** *CSIR-NEERI has an Institutional Academic Committee Chaired by Director of the lab or his/her nominee at the level of Professor to in situ monitor, oversee and improve quality of academic activities/affairs as well as address collateral issues, obstacles minor aberration etc., before they can be referred to AcSIRHQ.*

**(c)** *All publications out of research work contained in an AcSIR Thesis must have AcSIR as Affiliation of Student as well as of Supervisor (alongwith CSIR affilliation).*

**(d)** *IP of thesis work belongs to CSIR but copyright of the thesis rests with AcSIR. Therefore, after successful viva, student must assign copyright of the thesis to AcSIR.*

**(e)** *Date of award in the degree is the date of approval by the Chairman, Senate.*

**(f)** *These are guidelines of abstract nature for understanding of the students and supervisors. For more detailed guidelines and information, please follow AcSIR website through link* http://acsir.res.in/

# General Academic Calendar

The admissions to the academic programs of AcSIR at CSIR-NEERI are generally made twice in an academic year, in January and August semester sessions. The general academic calendar, common to all academic programs, is given below:

| Sl. No | Activity | January Session | August Session |
|---|---|---|---|
| i) | Enrollment | 2nd Monday–Tuesday of January | 2nd Monday–Tuesday of August |
| ii) | Session begins | 2nd Friday of January | 2nd Friday of August |
| iii) | Mid Semester Exams | 2nd week of March (Monday to Saturday) | 2nd week of October (Monday to Saturday) |
| iv) | Session Ends | 1st Friday of May | 1st Friday of December |
| v) | End Semester Exams | 2nd Week of May (Monday to Friday) | 2nd Week of December (Monday to Friday) |
| vi) | Grades Finalization | 2nd Friday of June | 1st Monday of January |
| vii) | Publication of Grades | 3rd Friday of June | 2nd Monday of January |

*@ This table is only indicative and the exact dates would be notified separately, before the beginning of each semester*

# Joining/Continuation in an Academic program

Joining dates of new students will be updated on AcSIR website along with selection list.

New students joining academic program should pay their fees before 31st December and 31st July for January and August Session respectively.                                                                        .
A Ph.D. student, who is already enrolled in AcSIR and wishes to continue his/her course of study in a semester, must fill-up and submit the Semester Academics Continuation Commitment (SACC) Form at the beginning of every semester. The SACC Form is required to be duly filled and signed by each student with counter-signatures of his/her Supervisor and submitted to AcSIR (by email to sacc@acsir.res.in) along with a documentary evidence of having paid the Semester Tuition-Fee by the last due date. Ph.D. students, enrolled under AcSIR, who do not timely submit their SAAC form along with the documentary evidence of the tuition-fee payment cannot undertake any academic activities (including, course work, DAC, thesis submission, etc) during that semester.

Last date for submitting the SAAC forms for already enrolled students along-with  documentary evidence of tuition fee payment : August 31 (August-Semester) & January 31 (January-Semester).The tuition fee has to be remitted to AcSIR through AcSIR-SBI Collect Portal ONLY. Any direct payment to AcSIR bank account shall not be considered.

# Minimum Residence, Maximum Duration and Academic Requirements

The following table lists the minimum residence, maximum duration allowed in the program and credit requirements in the various academic programs of AcSIR :

| Program | Number of Credits | | | | | | Minimum residency in program | Period of completion (in years) | |
|---|---|---|---|---|---|---|---|---|---|
| | Course work | Project Proposal | Review Article | Research/ Project | Societal Program | Total | | Min | Max. |
| Ph.D. (Sciences) | 12 | 2 | 2 | Completion of thesis | 4 | **20** | Full-time | 3 | 6 |
| Ph.D Sciences (Industry Sponsorship) | 8 | 2 | 2 | Completion of thesis | 4 | **16** | 1 semester | 3 | 6 |
| M.Tech | 32 | | | Mini-project: 4; Thesis/ project: 24 | | **60** | Full-time | 2 | 3 |
| M.Tech (part-time) | 32 | | | Mini-project: 4; Thesis/ project: 24 | | **60** | NA | 3 | 5 |
| M.Tech (external) | 32 | | | Mini-project: 4; Thesis/ project: 24 | | **60** | 2 semesters | 3 | 5 |
| Integrated Dual Degree Program in Engineering | 32 | 2 | 2 | Mini-project: 4; Thesis/ project: 24 | 4 | **60** | Full-time | 3 | 6 |
| PhD Program in Engineering | 8 | 2 | 2 | Completion of thesis | 4 | **16** | Full-time | 3 | 6 |
| PhD Program in Engineering (part-time) | 8 | 2 | 2 | Completion of thesis | 4 | **16** | NA | 3 | 8 |
| PhD Program in Engineering (external) | 8 | 2 | 2 | Completion of thesis | 4 | **16** | 1 semester | 3 | 8 |

An orientation program will be conducted for every new batch and the course work as per the faculty will be circulated among students.

Ph.D. students are expected to complete the course work in 1st and 2nd semester only.

AcSIR Coordinator in consultation with Director, NEERI will allot supervisor for each student.

# Examination & Evaluation procedures for Thesis work

## MASTER'S THESIS WORK

a.  The thesis Oral Examination Board (OEB) for each student shall be constituted by the Director of the laboratory on the recommendation of the Coordinator and the thesis supervisor.

   The OEB shall have a minimum of three members:
   - One examiner from same field of research,
   - One examiner from areas other than the candidate's field of research and
   - The thesis supervisor(s).

b.  The candidate, at the earliest, would be allowed to submit the thesis two weeks before the completion of the fourth semester (middle of April) with recommendation of the thesis supervisor(s).

c.  The last allowable date for submission of the Master's Thesis is 15th May of every calendar year.

d.  The candidate shall present his thesis work physically in the colloquium in presence of the OEB members.

e.  The notification of the open seminar would be circulated by the thesis supervisor in consultation with members of the OEB.

f.  The candidate is considered to have passed the oral examination if all the OEB members consider that the performance of the candidate is satisfactory with award of grades C+ or above.

g.  Based on the presentation and responses to the questions raised during oral examinations, the committee may recommend re-submission of the thesis (at most once) after incorporating the suggestions made by the committee for evaluation.

h.  In the rescheduled oral examination, the OEB must declare the candidate either to have passed or failed with award of appropriate grades. There shall not be any recommendation for third oral examination.

i.  The grading system to be followed during evaluation of thesis work for Masters is illustrated below:

| Letter Grade | Performance | Numerical Value |
|:---:|:---:|:---:|
| A+ | Outstanding | 10 |
| A | Excellent | 9 |
| B+ | Very Good | 8 |
| B | Good | 7 |
| C+ | Fair | 6 |
| X | Unsatisfactory | |

j.  Last date for evaluation of the Masters project at Lab end is 15th June of every calendar year.

k.  Last date for submission of all results to AcSIR by the Coordinator is 30th June of every calendar year.

# Ph.D. THESIS WORK

Once a student completes compulsory coursework, Student submits research proposal to his/her supervisor and after evaluation supervisor sends note for Doctoral Advisory committee formation to Director, NEERI through AcSIR coordinator.                                    .
(Format for DAC formation Note is given in **Annexure 1**)

## Composition of the Doctoral Advisory Committee (DAC):

Thesis supervisor(s), who shall also be the Convener.
Two members from the same research area as recommended by the supervisor(s)
One member nominated by the Director of the Institute from different field of research.
**Responsibilities of DAC will be as follow:**

- Review the research proposal and finalize his/her topic of research.
- Guide the student to develop the study design and methodology of his/her research.
- Identify the course(s) that s/he may have to take. In absence of DAC, the PhD Supervisor shall advise on the courses to be taken by the student and inform the Coordinator, which would be subsequently need to be ratified by the DAC.
- Periodically review and assist in the progress of his/her research work

The Ph.D student shall appear before the DAC at least once a year to make a presentation of the progress of his/her work for evaluation and further guidance. The proceeding of the DAC meetings shall be recorded in a specified format of a DAC report *(as given in the AcSIR website under menu - "Forms")* and sent to the respective Dean for verification by the AcSIR Laboratory Coordinator. All the verified reports have to be forwarded to the AcSIR-HQ for archiving.

In case the progress of the Ph.D student is unsatisfactory, the DAC shall record the reasons of the same and suggest corrective measures. If the Ph.D. student fails to implement these corrective measures in a specified time-frame, the DAC may recommend the cancellation of his enrolment/registration to the concerned Dean after the approval of the Laboratory Director. The decision of the Director, AcSIR shall be final in this matter.

The students are also encouraged to informally interact with the DAC members for guidance and advise pertaining to their research.

The DAC would also recommend the Ph.D. student for his/her comprehensive examination as well for submission of the thesis.

The Supervisor, who is also the convener of the DAC, will be responsible for timely conducting the DAC meetings and submitting the DAC reports to the AcSIR Laboratory Coordinator.

**In exceptional cases, a minimum of at least two months gap has to be mandatorily maintained between any two consecutive DAC meetings.**

**In general, the functions of the DAC are summarized in the table below:**

| DAC No. | Objective of the DAC | Time frame |
|---------|----------------------|------------|
| I | Discussion on the topic of research to be pursued, questions to be addressed, etc. | Before the end of Third Semester |
| II | Finalization of the Ph.D. proposal | Within 6 months of the Comprehensive exam |
| III | Monitoring the progress of the student | Before the end of 6th Semester |
| IV | Ph.D. colloquium (Open Seminar) | Minimum two weeks before submission of thesis |

## Comprehensive Examination

a. A student is eligible to appear for the Comprehensive Examination only after he/she has successfully completed the compulsory course requirements (minimum 12 credits, including the mandatory Research Methodology course) with more than the minimum CGPA.

b. Based on the recommendations of the supervisor(s), the Comprehensive examination board would be formed for each student and communicated to the AcSIR-HQ. (Format for the note for the Comprehensive Exam Board is given in **Annexure 2**)

c. The Comprehensive examination board shall at least include :
   - DAC members
   - Director/Director's nominee, who has demonstrated ability in supervising Ph.D. students.

d. The candidate in consultation with the DAC shall appear for the Comprehensive Examination between his 2nd and 4th semester (after completion of DAC I).

e. If the candidate fails to clear the Comprehensive Examination in two attempts, his/her enrolment in Ph.D. is liable to be cancelled.

f. The Comprehensive examination will consist of a presentation by the student followed by a rigorous oral examination. The recommendation of the board would be in only the form of "Cleared" or "Not Cleared".

g. The student will be allowed to take the comprehensive examination only if he/she has cleared all the AcSIR tuition fees dues.

## Maximum period of Extension for thesis submission after Open Colloquium

The time limit for thesis submission, after approval of the synopsis enabling the extension of tenure of completion of PhD beyond six years, will be considered on a case-to-case basis. The guidelines in this regard are as follows:

(i) The PhD thesis can be submitted any time within six months after clearing the DAC IV through Open Colloquium.

(ii) Submission beyond months will require Dean's approval for the requested extension

period (maximum up to 6 additional months), on the basis of satisfactory reasons for the delay/extension. The permission, if granted, will be recorded at Dean/Associate Dean's level under intimation to the Associate Director (Academic), AcSIR.

(iii) If the thesis is not submitted within one year (i.e., six months of usual time plus six months of extension, if granted) of clearing the Open Colloquium, student will have to request the Chairman, Senate (through the respective Dean) for continuation of the registration before the expiry of the granted period of one year. If such a request of the candidate is admitted, he/she will have to re- appear for Open Colloquium and clear the same within one month and must submit his/her thesis within the next eleven months after the re-clearance of the Open Colloquium.

(iv) No further request for reappearing for the Open Colloquium will be considered.

(v) During this period of special extension of one year, fees payable will be double and four times of the usual semester fee in the follow-up first and second semester, respectively. Further, fee charged will be for full semester(s), even if the period covered is only part of the semester.

All these provisions/relaxations and compliances thereunder must be completed within the period which is permitted (i.e., usually six years from date of enrollment) for completion of degree as per UGC guidelines.

## Extension of tenure of Ph.D. Thesis submission beyond the prescribed period

Provision exists for enabling an extension of tenure for the completion of PhD beyond the maximum prescribed period of six years, which would be considered for approval on a on a case-to-case basis.

Such applications of the students, duly signed by the DAC members, have to be forwarded by the AcSIR Laboratory Coordinator to the Associate Director (Academic) and must include a proper justification for the same. The applicant should also mention the monthly plans of action for completion and submission of the thesis. Each case will be considered based on its merit by the AcSIR-Associate

Director (Academic) in consultation with the concerned Dean, and submit his recommendation to the Chairman, Senate.

Further, there exists a provision for a relaxation of upto 2 years in the maximum duration for women candidates and Persons with Disability (more than 40%) as per UGC guidelines 2016. These two years of relaxation period for women candidates will include, Maternity Leave/Child Care Leave, if availed, only once during the entire duration of PhD for up to 240 days.

## Change in the Title of the Ph.D. Thesis

The following are the guidelines pertaining to the change of the title of the Ph.D. Thesis:

(a) The broad area of the title of the Ph.D. thesis should be finalized by the time the student appears for the comprehensive examination

(b) Any subsequent request for the change in the thesis title must be reported through the DAC meetings.

(c) The last and final change in the thesis title will be allowed at the DAC IV (Open Colloquium) of the student and it must receive due approval of the concerned Dean.

(d) The title provided in the Synopsis (summary of the work) approved by DAC IV will be considered as final title of the thesis.

(e) Beyond the DAC IV, any request for the change in the title of the thesis will not be entertained unless suggested by the thesis external examiner(s) and is accepted by the competent authority.

## Taking course outside AcSIR and recognition of Credit

- Current AcSIR students who are considering taking course(s) at another institution should obtain permission from their guide(s) and Doctoral Advisory Committee (DAC) in advance. The information has to be sent to Associate Director (Academics).

- Guide, DAC and Lab Coordinator shall decide about the credit units of recommended courses with due approval from Associate Director (Academics).

- The guide will ensure the necessary academic requirements out of the course(s) credited elsewhere. Any discrepancy is to be settled in consultation with the Associate Director (Academics).

## Guidelines for the Mandatory inclusion of AcSIR Affiliation in all publications emanating from the Thesis work

Any student and/or faculty of AcSIR publishing a paper based on the AcSIR thesis research work of the student and/or the thesis content must <u>mandatorily</u> include their affiliation with the Academy of Scientific and Innovative Research (AcSIR) in the Title page of the paper under the Author lines (in addition to their affiliation with the CSIR institute). This affiliation must be in proper form as per example illustrated below:

Jyoti Yadav[1,2], Anurag Agarwal[1] and Balaram Ghosh[1,2]
[1]*CSIR-National Physical Laboratory, Dr. K.S. Krishnan Marg, New Delhi-110012, India*
[2]*Academy of Scientific and Innovative Research (AcSIR), Ghaziabad- 201002, India*

*Note: In this case Jyoti Yadav is an AcSIR Student working at CSIR-NPL and Balaram Ghosh is her supervisor and a faculty of AcSIR working at CSIR-NPL. Anurag Agarwal is a scientist/student but not a faculty/student of AcSIR*

Any publication without full compliance to the above form of the affiliation with AcSIR by the student and faculty of AcSIR would not be admitted as a qualifier for fulfilment of their AcSIR PhD thesis submission requirements. Also, any publication emanating from the thesis work of the student at any time without proper AcSIR affiliation (as mentioned above) would be considered as unethical and violative of academic norms and guidelines of AcSIR.

## Plagiarism Check Report made mandatory for submission of Dissertation or Thesis

It has been decided to implement the "Plagiarism Check Report", in compliance with the University Grants Commission (Promotion of Academic integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018 notified on July 23, 2018. The adoption of the parameters of UGC in this regard as detailed in
https://www.ugc.ac.in/pdfnews/7771545_academic-integrity-Regulation2018.pdf

Submission of a Plagiarism Check Report, through an appropriate licensed software, in compliance with the UGC Regulations 2018 (Gazette Notified in the Gazette of India on July 31, 2018), would be a mandatory requirement for submission of any Masters' Dissertation and Ph.D Thesis from January 01, 2019.

**As per the guidelines plagiarism similarity index should not be more than 10%.**

## Guidelines for the change of Faculty/School of study within AcSIR

The following procedure is to be adopted for the change of Faculty/School of Study of AcSIR students from one discipline to another:

(i)   Student seeking change of Faculty/School of study, should apply with justification including consent of the Supervisor and approval of the concerned Lab Director.

(ii)  Deans of both the Faculties should also accord their approvals on the proposed change on the basis of the background of the student and the research work, availability of faculty for guidance in the desired area and recognition and approved coursework of the concerned Lab in the new area (Faculty) of research.

(iii) Approvals of the Deans of the two concerned Faculties at AcSIR have to be obtained through the Lab Coordinator.

(iv)  All documents in a compiled manner is to be forwarded to AcSIR for obtaining approval of the Chairman, Senate.

## Guidelines for Change of Ph. D. Supervisor

1.  Change of supervisor at a later stage of the student's PhD should be avoided and all attempts should be made to take the relationship to its logical conclusion – namely submission of the thesis. Prior to submission of the application by the student for change of guide, students may discuss the issues with coordinator, AcSIR or Chairman, AcSIR (in case of conflict of interest). The possibility of having the past supervisor continue as a co-supervisor should also be explored. Change of supervisor at a late stage should happen only as the last resort.

2.  If the student continues with some other supervisor and does not want to use previous work (e.g., start on a new problem), then shall be treated as the normal change of supervisor, the following steps will be taken which can be decided by the institutional AcSIR committee.

    a.  Submission of duly filled request letter for Change of supervisor from student to CSIR-NEERI AcSIR Coordinator per **Annexure 4**.

    b.  In case of conflict of interest, the form can be submitted to Chairman, AcSIR Committee.

3.  If the student continues in the Institute with some other supervisor and wishes to use some of the past works in his/her thesis, the following steps will be taken:

    a.  A meeting shall be called between the previous supervisor, new supervisor and the student. If they can reach an agreement on use of previous work and role of previous supervisor (including, for example, him/her remaining as a co-supervisor without being an examiner for the thesis), that agreement will be recorded and followed. Due approval of the supervisors shall be taken.

    b.  If the meeting does not result in any agreement, then in the final thesis certificate, contribution of the previous supervisor will be explicitly recorded (e.g., it may be stated that Prof. X was supervisor from date1 to date2, and Prof. Y from date2). If the previous work included in the thesis is substantial, the previous supervisor can also ask to be a co-supervisor, without any administrative rights and without being an examiner for the PhD thesis.

    c.  The application shall then be processed through duly filled **Annexure 5** and **Form 1** for further processing through AcSIR Coordinator.

4.  Other cases not covered by the above, or any exceptions to the above, or any disputes in implementing these guidelines, will be brought to the AcSIR Cordinator, who will discuss the matter with the institutional AcSIR Committee on case-to-case basis.

5.  In case of change of supervisor for M.Tech/ MS (Research) thesis shall not normally be submitted earlier than three months and PhD thesis shall not normally be submitted earlier than six months from the date of such change. However, the Dean of the particular discipline shall have the right to waive this requirement if he is satisfied that in spite of the change/addition of supervisor the candidate is ready for submission of the thesis.

## Guidelines for availing Academic Break

A provision of a one-time Academic Break has been introduced for all the academic programs (PhD, Masters' and PG Diploma programs) that have a minimum duration of two semesters (one year) with the following guidelines:

a. Academic Break can only be availed after completion of first semester of any program.

b. Students pursuing semester-structured programs with maximum duration of 2 years (Masters' degree) or 1 year (PG Diploma), a one-time Academic Break of upto two semesters may be allowed, subject to (i) the program is continued at the concerned Laboratory at the time of the intended resumption of studies after the Academic Break and (ii) the desired courses being offered in the semester of joining after Academic Break.

c. For PhD programs, including Integrated Masters'-PhD programs (regular or part-time mode) a one- time Academic Break of maximum upto 2 years (4 semesters) would be allowed.

d. The duration of the academic break period availed by a student will not count towards assessing the residency period spent by him/her in the program.

e. The semester Tuition Fees payable by the student during his/her academic break would be the same as applicable to him/her during regular semesters of study.

f. The requests of Academic Break would be considered on a case-to-case basis, based on its merit and admissibility.

g. These provisions would be applicable to the requests received by AcSIR from January 01, 2019 onwards as well as to those students who would remain on Academic Break or who would be beginning the Academic Break w.e.f January 2019 semester onwards.

The student's request for the Academic Break, endorsed by the Supervisor and recommended by the Director of the Lab, should be forwarded by the AcSIR Laboratory Coordinator to the Director, AcSIR

for approval at AcSIR-HQ. However, such request would be considered on a case-to-case basis at AcSIR-HQ and would require approval of the Senate.

## Continuation of Ph.D. as a Part-time student after completion of all academic requirements

Provision exists wherein a regular Ph.D. student may be allowed to continue as a "part-time" PhD student for the purpose of writing/submitting his/her thesis. Such cases will only be considered provided the student has completed all the academic requirements, which include fulfillment of the minimum residency period and completion of the comprehensive examination and DAC IV. Such students would have to continue paying the tuition fees till thesis submission and that he/she would have to submit the thesis within the maximum stipulated period as per AcSIR rules. However, Trainee Scientists quitting their CSIR job for

taking-up new assignment will not be given this relaxation.

Such requests of the students, endorsed by the Supervisor and recommended by the Director of the Lab, should be forwarded by the AcSIR Laboratory Coordinator to the Director, AcSIR for approval at AcSIR-HQ.

## Procedure for inter-institutional transfer of AcSIR student (from one CSIR Lab to another)

The following procedure is to be adopted for the transfer of AcSIR students from one CSIR Laboratory to another:

(i) Student seeking transfer of Lab should apply to AcSIR through the Laboratory Coordinator with due justification and consent of the current and prospective Supervisors of the respective Labs.

(ii) Directors of both the Laboratories should accord their approvals on the proposed transfer.

(iii) All the documents have to be forwarded to the Dean of the concerned Faculty through the AcSIR Laboratory Coordinator, keeping the Coordinator in the receiving Lab in loop, for approval.

(iv) The student is to submit approval of the funding agency for transfer of the fellowship (after receipt of consent from both the Labs and the Dean of the Faculty).

(v) Finally, all documents in a compiled manner (along with the approval of the funding agency) is to be forwarded to AcSIR for obtaining approval of the Chairman, Senate and placing the matter for information at the Senate.

(vi) Any request received at AcSIR without any of the documents/approvals mentioned above, will not be entertained

(vii) The transfer will be at the risk, cost and responsibility of the student and/or funding agency with respect to fellowship and associated issues.

Furthermore, a student seeking transfer must not resign from his/her affiliation as an enrolled/registered student of AcSIR at the current Laboratory. Resignation implies termination of his/her affiliation with AcSIR whereas transfer is only a change of location/Lab for pursuing the AcSIR degree.

(v) No such request for change in Faculty/School of study will be allowed after Registration to the PhD program i.e., clearance of the Comprehensive Examination in the original Faculty.

(vi) Any request received at AcSIR without any of the documents/approvals mentioned above, will not be considered.

# Guidelines for Societal Project for AcSIR Ph.D. students

The major objective of the societal project is to create and nurture a sense of social consciousness and responsibility by participation in Science & Technology activities relevant to the nation.

Background

The objective of the Academy of Scientific and Innovative Research (AcSIR) is to disseminate advanced knowledge in science and technology, particularly in emerging inter-disciplinary and multi- disciplinary areas to create socially conscious, highest quality personnel. The ultimate aim is to create human resources who will promote research in science and technology having a bearing on social economic, cultural, intellectual and academic welfare of the people of our nation. Keeping this in view AcSIR has mandated that students aspiring to obtain a Ph.D. degree from the academy undertake a 6-8 weeks project concerned with societal/ rural issues under the (4 credits). The premise of this course is aspiration of inclusive growth and improved quality of lives of the fellow underprivileged Indians through S&T interventions that are socially and economically relevant.

Societal Project focus areas

The two major focus areas of Societal program are to enhance income and to improve the quality of life of the fellow underprivileged Indians. Some typical examples are as the following:

*Enhancing Income of the downtrodden*

- ➢ Value added Agriculture
- ➢ Waste to Wealth
- ➢ Energy efficiency

*To Improve Quality of Life*

- ➢ Low cost housing
- ➢ Affordable health care
- ➢ Potable Water supply
- ➢ Sustainable energy
- ➢ Means of protecting environment

Broad Guidelines for undertaking the Societal project

- Students shall select a scientific topic of social relevance and aligned with the focus areas of the Societal program and studying the problem in detail.

- Students shall try to find out solutions which are techno-commercially viable and have the potential to be scaled up to reach out to uplift the life of millions**.**

- It shall not be a mandatory requirement to live and work in the targeted areas, however, the ultimate objective of addressing societal problems shall not be compromised.

- The students shall select the project and the target area in consultation with his/her DAC

members.

- Students can participate in a societal project either in his/ her Institute or any other CSIR institute.

- In case the student wants to do the project in any other CSIR Institute, he/she should send a request to the coordinator of his/ her laboratory forwarded through the thesis supervisor well in advance.  The

  Coordinator in turn shall forward the request after taking the approval of the Director to the coordinator of the laboratory where the project is intended to be undertaken.

- The coordinator of the laboratory where the project will be undertaken shall obtain an approval from the Director of the laboratory which shall then be communicated to the student through the coordinator of the student's parent Institute.

- The Institute where the project is to be undertaken shall provide all necessary infrastructural facilities and extend all possible help and cooperation to facilitate the student to complete the project.

- After carrying out the project, the student should submit a report and give a presentation highlighting the observations/results of the project and provide recommendations (if any). This will be reviewed by the DAC and the thesis supervisor (who is a member of DAC).

- In case the project was undertaken in other Institutes, the supervisor with whom the project was undertaken shall also be a member of the committee reviewing the project.

- The DAC can approve or ask for modification, if they are not satisfied with the report or Presentation. The committee may recommend re-submission of the project at most once after incorporating the suggestions made by the committee for evaluation.

- It is encouraged that the student prepares a shorter version of the report for societal usage highlighting the objectives of the project, observations and recommendations (if any). Such reports may be sent to the relevant officers (District magistrate/ BDO's etc) of the target area for information if felt necessary only after the approval of the Director(s) of the student's host Institute and where the student has undertaken the project work. Host Institute is expected to translate the short report into different regional languages that are spoken locally.

## Grievance Redressal of the Students

The first level of grievance redressal for the AcSIR students is the CSIR Laboratory where student is enrolled for his academic program. The students are required to contact their AcSIR Laboratory Coordinator for redressal of their grievance, who in his wisdom would get it resolved from the concerned authorities at the CSIR Laboratory or AcSIR-HQ, as the case may be. Depending on the nature of grievance it can also be addressed to the Academic committee of the CSIR-NEERI

In case the student feels that his grievance has not been addressed/resolved to his satisfaction,

s/he may e-mail the following functionaries at AcSIR-HQ (<u>with a cc to his Laboratory Coordinator</u>), depending on the nature of their grievance:

Associate Director - Student Affairs): Prof. Ajay Dhar (ad_studentaffairs@acsir.res.in) Associate Director - Academics: Prof. K. Ravikumar (ad_academic@acsir.res.in) Senior Manager: Ms. Arpita Sengupta (arpita.acsir@acsir.res.in)

Manager: Mr. Ashwini Mishra (ashwini@acsir.res.in)

# [Department Name]

Date: **/**/**

**Subject: Constitution of Doctoral Advisory Committee (DAC) for Ph.D. Program under AcSIR Registration**.

[Student Name] has joined Ph.D. program at CSIR-NEERI in [session-year] under AcSIR [faculty of study] (Ph.D. Enrolment No. : ************). The candidate will be working on [Research topic] under my guidance.

For this purpose, it is proposed to constitute DAC as per AcSIR guidelines.

**The DAC should have following members:**

Thesis supervisor(s), who shall also be the Convener.

Two members from the same research area as recommended by the supervisor(s)

One member nominated by the Director of the Institute from different field of research.

The Director is requested to kindly approve the constitution of DAC consisting of following members and nominate one member for the DAC from different field of research.

Suggested Members from Ph.D. Supervisor:

1) [1st Member]
2) [2nd Member]
3) 3rd member nominated by Director from different field of research: _____

[Name of Supervisor]

Ph.D. Supervisor

Scientist & Head

AcSIR Coordinator

**DIRECTOR**

# Annexure 2

## Format for Comprehensive Exam Approval Note

[Department Name]

Date: **/**/**

**Subject: Approval for Comprehensive Exam Board for Ph.D. Program under AcSIR Registration.**

[Student Name] has enrolled as Ph.D. candidate under AcSIR [faculty name] program in [session-year] (Ph.D. Enrolment No.: ************). The candidate will be working on [research topic] under my guidance. S/he has successfully completed her/his credit requirement and DAC 1, hence eligible for appearing in comprehensive exam.

Approved DAC Members:
1) [ 1st Member ]-Member nominated by Director from different field of research.
2) [ 2nd Member]
3) [ 3rd Member]

As per the AcSIR guidelines, Director/ Director Nominee chairs the comprehensive exam committee board. For this purpose, Director is requested to suggest Scientist to chair CEC Board.

**Director / Director's Nominee: _____**

[Name of Supervisor]
Ph.D. Supervisor

Scientist & Head

AcSIR Coordinator

**DIRECTOR**

# Annexure 3

## Checklist for Ph.D. Thesis Submission Documents:

**List of documents to be submitted to the AcSIR Laboratory Coordinator for further processing at AcSIR-HQ are:**

1. Thesis Submission Checklist (In excel format)
2. Plagiarism Check Report
3. All Grade cards
4. DAC Reports including Comprehensives Report
5. Societal Project report.
6. Project proposal and Review Article
7. List of Publication - Semester wise
8. Synopsis of Thesis (Summary of work done)
9. Thesis Board (along with consent of examiners)
10. Tuition fees submission details (with documentary evidence)
11. Thesis submission fee details (with documentary evidence)
12. Copy of any additional approval sought from AcSIR (Change in supervisor, academic break, etc)

# AcSYR

## वैज्ञानिक और नवीकृत अनुसंधान अकादमी

### ACADEMY OF SCIENTIFIC AND INNOVATIVE RESEARCH
*(An Institution of National Importance by an Act of Parliament)*

### APPLICATION FOR CHANGE OF SUPERVISOR/CO-SUPERVISOR

| | | | |
|---|---|---|---|
| **Name of the student:** | | **Faculty:** | **Engineering/Science** |
| **Name of Laboratory:** | | **Joining Session** | |
| **Registration No:** | | **Name of the Present Supervisor** | |
| **Date of Registration:** | | **Name of the Present Co-Supervisor (if any)** | |
| **Reason for Change of Present Supervisor/ Co-Supervisor** | | | |
| **Revised/New topic of the Thesis** | | | |
| **Particulars of Proposed Supervisor/Co-supervisor (s)** | | | |
| **What technical and scientific benefit is envisaged with the new supervisor/Co-supervisor?** | | | |

I, hereby, acknowledge forfeit of financial support offered by my present supervisor including, all IPR or publication issues.

**(Signature of the Student with date)**

I have no objection to Change of Supervisor/ Co-Supervisor

**(Signature of present supervisor/Co-supervisor with date)**

The area of student matches with my expertise and I am willing to guide the student.

**(Signature of proposed supervisor/Co-supervisor with date)**

Recommended/Not recommended

**(Signatures of AcSIR Coordinator**

**in consultation with AcSIR Committee)**

Endorsed by Chairman AcSIR Committee

Approved/Not approved

**Dean (AcSIR)**

**Chairman, AcSIR Senate**

# AcSYR

**वैज्ञानिक और नवीकृत अनुसंधान अकादमी**

**ACADEMY OF SCIENTIFIC AND INNOVATIVE RESEARCH**

*(An Institution of National Importance by an Act of Parliament)*

**REQUEST FOR CHANGE OF SUPERVISOR/CO-SUPERVISOR**

| | | | |
|---|---|---|---|
| **Name of the student:** | | **Faculty:** | Engineering/Science |
| **Name of Laboratory:** | | **Joining Session** | |
| **Registration No:** | | **Name of the Present Supervisor** | |
| **Date of Registration:** | | **Name of the Present Co-Supervisor (if any)** | |
| **Topic of the Thesis** | | | |
| **Details of Work carried till date in bullets  (Also fill Form -1)** | | | |
| **Reason for Change of Present Supervisor/Co-Supervisor** | | | |
| **Particulars of Proposed Supervisor/Co-supervisor (s)** | | | |
| **What technical and scientific benefit is envisaged with the new supervisor/Co-supervisor?** | | | |

**I, hereby, acknowledge forfeit of financial support offered by my present supervisor including, all IPR or publication issues.**

**(Signature of the Student with date)**

**I have no objection to Change of Supervisor/ Co-Supervisor**

**(Signature of present supervisor/Co-supervisor with date)**

**The area of student matches with my expertise and I am willing to guide the student.**

**(Signature of proposed supervisor/Co-supervisor with date)**

**Recommended/Not recommended**

**(Signatures of AcSIR Coordinator**

**in consultation with AcSIR Committee)**

**Endorsed by Chairman AcSIR Committee**

**Approved/Not approved**

**Dean (AcSIR)**

**Chairman, AcSIR Senate**

# Form 1

| Sr. No | Thesis Objectives | Work Progress | Remark by the present supervisor* |
|--------|-------------------|---------------|-----------------------------------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |

*This can be obtained during the meeting between the previous supervisor, new supervisor and the student.

**(Signature of the Student with date)**

**(Signature of present supervisor/Co-supervisor with date)**

# Template for Research Proposal

A research proposal for a Ph.D. application should help you to discover your Ph.D. potential. Hence the research proposal that you submit should be well thought-out and achievable. It also gives you a sense of the self-study that is an essentially component of doctoral research.

A good research proposal should ideally include the following:

1. <u>Working title</u>:

The title should reflect the main idea of a research in a simple or non-complicated way. It may contain a main title and a sub-title

2. <u>Introduction (200 words)</u>

Elucidate what excites you about this research, what is the problem that needs study, why this research is important, and what is the existing state of knowledge on this topic.
Identify the historical and contemporary backdrop of the problem you are interested in.

3. <u>Background / Context and Literature Review (500 words)</u>

Briefly outline the academic context within which your proposed research is located. This can include both theoretical and empirical context. This involves a critical review and understanding of the existing theoretical and/or empirical literature (/s).

This section should show the extent to which your proposed Ph.D. research makes a contribution to a particular field; what is the addition to knowledge and understanding that can be achieved by your research. Introduce the issues that the research will address, research gaps, and explain why your topic is important and worth researching. This is the rationale or motivation for your thesis. You should clearly demonstrate a problem that needs explanation or understanding through research.

If relevant, identify the geographical, socio-cultural, political, economic, or spatio-temporal context of your work? Where do you plan to undertake this study? What is interesting about the location and the people / community you are interested in? What is the uniqueness of your field site and location?

Define any terms and concepts you propose to use.

4. <u>Research Questions or Aims (200 words)</u>

Specify your research questions and objectives. If possible provide a central or over-arching question and objectives and a few sub-questions and objectives. The research objectives should draw from and relate to your research questions

The research questions can be in the form of hypotheses or exploratory in nature. However, they should not be too general, broad or vague. They need to be focused,

Specific and narrow in scope. Please frame these in academic terms not as a social work, action research, social change, revolutionary, or policy recommendation terms.

5. Research Methods (300 words)

In this section, briefly outline the empirical, analytical, or theoretical work you plan to undertake. You may refer to other studies from which you have drawn your methodological tools and techniques. Explain your overall research design.

Identify the methods or tools you wish to use, and justify the choice of these techniques. Why are they appropriate for your research, your objectives, and field site? How are the chosen methods more appropriate compared to other tools and methods? If relevant, mention sampling strategy and size, sources of information and data (primary and secondary). Identify any potential problems in accessing data and the field, and in conducting research, and how you propose to address them. Briefly explain issues related to how your own social background and individual personality are likely to affect the research, and in what way do you propose to address issues of objectivity and subjectivity.

6. Expected Deliverables / Outcomes (100 words)

Summarize the key points of your research; identify the likely contributions, and the expected output from your research

7. Suitability for the project (100 words)

Describe why you think that you are suitable for the project

8. References

List all the works referred to in this proposal. Avoid quantity in favor of citing and referring to most relevant literature and material. Ensure that you refer to theoretical, empirical, and methodological works relevant for your research.