



संत लॉगोवाल अभियांत्रिकी तथा प्रौद्योगिकी संस्थान,  
लॉगोवाल, संगरूर, पंजाब - 148106  
SANT LONGOWAL INSTITUTE OF ENGINEERING & TECHNOLOGY  
(DEEMED TO BE UNIVERSITY) UNDER SECTION 3 OF UGC ACT, 1956  
LONGOWAL (SANGRUR, PUNJAB)  
DEPARTMENT OF CHEMISTRY

Ref. No. SLIET/CHY/ 522

Date: 7/11/23

From : HOD Chemistry

To : Dean (A)

Subject : Proforma for Assessment for Academic Audit 2022-23

*jsutton*  
*08.11.2023*  
*coordinator IOAC*

With reference to letter no. Dean (Acad.)/1284 dated on 27.09.2023, the Proforma for Assessment for Academic Audit 2022-23 of the Department of Chemistry enclosed herewith.

D.No. Dean (Acad.) 1554  
Dated 08/11/23

*jsutton*  
*08/11/23*  
HOD Chemistry

**Encl:**

1. Proforma for Assessment for Academic Audit 2022-23
2. Annexure - I
3. Annexure - II

**"Proud To Be Part Of Team SLIET"**

Longowal, District: Sangrur-148106 (PB), India Phone No. +91-1672-280057, 253100 (Director), 253115 (Registrar) Fax No. +91-1672-280057

Reed on. 9-11-23

10/10/23

21/11/23

10/10/23  
21/11/23

10/10/23

~~10/10/23~~

10/10/23

5

**SANT LONGOWAL INSTITUTE OF ENGINEERING & TECHNOLOGY**  
 (Deemed-To-Be-University)  
**LONOGOWAL-148106**  
**ACADEMIC AUDIT (2022-2023)**  
**PROFORMA OF ASSESSMENT**

1. Name of the Department : Chemistry

Reviewer (Name, Designation & Address) : Prof. B. S. Kaith, Department of Chemistry, NIT Jalandhar

2. Date of Review: 03 /11/23

**NOTE:**

- i. Please grade in the box provided for the following parameters in the range of 1-10 with 10 being the highest.
- ii. Leave 'blank' for 'No Comment'.
- iii. Kindly give your opinion on the strength and weakness of the Department and your suggestions for future growth.

**A. ACADEMICS**

A.1	ICD Programme	Score	
		Self-assessment	Expert assessment
1.	Curriculum (Structure, Course Syllabi, Flexibility), Theory/ practical (contents/ratio).	10	9
2.	Equivalence and Relevance of curriculum at national level	10	10
3.	Formal Academic Load on Students [Teaching, Laboratory/Practical, Projects(minor/major)]	10	9
4.	Evaluation Process (Continuing Evaluation, and End-Term Evaluation)	10	10
5.	Tour/Training/Industrial visits/Internship opportunities provided during the year	10	9
6.	Effectiveness of Assisted Learning, Tutorial System for ICD Students/ Seminars (Refer Course File)	09	10
7.	Faculty Mentoring/Faculty Advisor System for Students/Class of Students	10	10
8.	Practical activities, non-academic and totally related to a specific trade for skill development and <i>developing expertise in a particular group of techniques.</i>	09	9
9.	Linkage of ICD programs to outcome based vocational education (Industry linkage)	09	9
10.	Availability of workshop type lab/laboratory for providing hand on training to the students for skill development	09	10
<b>Total Score (out of 100)</b>		96	91

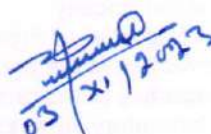
*[Signature]*  
03/11/23

A.2	UG Programme	Score	
		Self-assessment	Expert assessment
1.	Curriculum (Structure, Course syllabi, Flexibility, Choice based credit system)	10	10
2.	Status of study material developed by faculty for students	10	10
3.	Relevance of contents of courses taught to the students and scope of improvement (revision of syllabus, addition of new experiments)	10	10
4.	Formal academic load on students [Teaching, Laboratory/Practical, Projects(minor/major)]	9	9
5.	Modern teaching methods in practice other than the conventional methods E-Assisted Learning (i) Availability of Library Resources (ii) Multi-Media Assisted Teaching	10	9
6.	Evaluation Process (Continuing Evaluation, and End-Term Evaluation) (i) Theory and tutorial (ii) Practical (case studies)	10	10
7.	Faculty-Student Interaction (Whether any slot is fixed for the students to interact with a teacher, after classes/labs)	9	9
8.	Tour/Training/Industrial visits/Internship opportunities	9	8
9.	(a) Effectiveness of Assisted Learning in Tutorial classes/seminars for Students	10	10
	(b) Faculty Mentoring/Faculty Advisor System for Students/Class of Students	10	10
10	Placement %age/higher studies options (last three years)	8	7
<b>Total Score (out of 100)</b>		95	92
A.3	PG Programme (Separate for each programme)	Score	
		Self-assessment	Expert assessment
1.	Curriculum (Structure, Course Syllabi, Flexibility)	10	10
2.	Formal Academic Load on Students [Teaching, Laboratory/Practical, Projects(minor/major)]	10	10
3.	Evaluation Process (Continuing Evaluation, and End-Term Evaluation)	10	10
4.	Relevance of contents of courses taught to the students and scope of improvement	10	10
5.	Modern teaching methods in practice other than the conventional method E-Assisted Learning i. Availability of Library Resources and Major Search Engines (like Scopus, Web of Science) ii. Multi-Media Assisted Teaching	10	10



6.	Technical Societies/ Colloquium for Students i. Departmental Society ii. Student Chapter(s) of Professional Societies	9	9
7.	Tour/Training/Industrial visits/Internship opportunities	08	9
8.	Collaboration with other departments (within institute)	07	8
9.	Faculty Mentoring/Faculty Advisor System for Students/Class of Students	09	9
10.	Monitoring and continuous evaluation of the project work assigned to the students (mechanism)	08	8
<b>Total Score (out of 100)</b>		86	88

A.4	Doctoral (Ph.D.) Programmes	Score	
		Self-assessment	Expert assessment
1.	Intake of Ph.D. Students	8	6
2.	Admission Process	10	10
3.	Pre-Ph.D. Courses and Evaluation Process	10	10
4.	Breadth and Depth of Knowledge of Students	9	9
5.	Seminar/ Presentations and Technical Communication	10	10
6.	Research Facilities available in the Department	8	7
7.	Average No. of Research Students/Faculty	9	9
8.	Average No. of Research Papers of Ph. D. Students (Indexed Journals)	10	10
9.	Average Duration to Complete Ph.D. (years)	9	9
10.	Participation of Research Scholars in Conferences/Workshops	10	10
<b>Total Score (out of 100)</b>		93	90

  
 03/21/2023

**B. RESEARCH**

B.1	Research and Industrial collaboration	Score	
		Self-assessment	Expert assessment
	Research Ambience in the Department	9	9
	Research Awareness among Doctoral Students	9	9
	Thrust areas of research in the department	10	10
	Quality of Research	10	10
	Collaborations with other departments (within the institute) and at National, and International levels.	9	8
	Impact and Quality of Publications	9	9
	Relevance of Research to Knowledge Generation and Social Relevance	9	9
	Student Exposure for Attending Quality Conferences/Symposia	10	10
	Inter departmental collaborations	8	8
	Industry/externally funded sponsored research (Numbers and amount)	7	7
	<b>Total Score (out of 100)</b>	90	89

**General Comments on,**

1. Plan of action of the department for the next five years (in view of NEP 2020)
2. Significant achievements of the department (faculty/Staff/Students)
3. Placement record of the department (Last three years)
4. Scope for training of faculty/staff for further strengthening the teaching-learning process for strengthening the curriculum with the addition of new courses having relevance at National and International levels.
5. Effective/Continuous monitoring of faculty/staff in delivery the course contents (at departmental level) for enhancing the teaching-learning process.
6. Technical Societies/ Colloquium for Students
  - (i) Departmental Society
  - (ii) Student Chapter(s) of Professional Societies
7. Scope of improvement in the presenting teaching –learning process
8. The skill and expertise of the faculty/Technical staff in the department (specific)
9. Strengthening laboratory infrastructure (adding of new equipment's and use of present facility for optimum use)
10. Any other point

*[Handwritten Signature]*  
03/11/2022

**C. Departmental Infrastructure**

C.1	Departmental resources	Score	
		Self-assessment	Expert assessment
1	Adequacy of Class Rooms and Multi-Media Facility	10	10
2	Availability of Laboratories	9	9
3	Availability of Conference/Seminar Room, etc	10	10
4	Availability of Seating Space for Faculty and Research Students	9	8
5	Availability of Internet Services in Research Labs and Class Rooms	10	9
6	Departmental Library and E-Resources	9	9
7	Computing Facilities and Software	9	8
8	Adequacy of Offices and Furnishing for Faculty	9	9
9	Faculty- Student Ratio	7	6
10	Support Staff (Technical/Administrative) Adequacy	9	8
<b>Total Score (out of 100)</b>		94	89

*Handwritten signature and date: 03/11/2023*

SWOT analysis by the department :

Strengths:

Weaknesses:

Opportunities:

Challenges:

Suggestions for improvement:

*Annexure - I*



## D. Outcomes

D.1	Placement/ higher studies/ Publications/ Consultancy, Ph.D. awarded etc.	Score	
		Self-assessment	Expert assessment
1	i. Placements for ICD ii. Placement of B.Tech iii. Placement of Masters Student iv. Placement of Ph. D. Students	7	7
2	Average No. of Ph. Ds Awarded per Year	8	7
3	Publications per Faculty in Indexed Journals/Year (Average of last three years)	9	9
4	Average Citations per Faculty/Year (Last-Three Years) (Web of Science/Scopus)	9	9
5	Recognitions; Awards(National/International) to Faculty/Students	10	10
6	Consultancy and Externally Funded Projects	7	7
7	No. of Ph.D. graduates who took Academics as Career (Last 5 Years)	10	10
8	Students offered for higher studies	8	8
9	No. of qualified students NET/GATE/CAT etc (State/Central Civil Services)	8	8
10	Entrepreneurship	6	6
<b>Total Score (out of 100)</b>		82	81

Comments &amp; Suggestions for Improvement

Annexure - II

  
 8/11/2023



**SANT LONGOWAL INSTITUTE OF ENGINEERING & TECHNOLOGY**  
(Deemed-To-Be-University)  
LONOGOWAL-148106

## ACADEMIC AUDIT (2022 - 2023)

## SUMMARY SHEET

1.	Name of the Department	Chemistry	
2.	Name of Reviewer Designation & Address	From Academia	From Industry
		Prof. B. S. Kaith Department of Chemistry, NIT Jalandhar	
3.	Date of Meeting	3/11/23	

Score Summary							
Academics (A)				Research (Max Score 100)	Departmental Infrastructure (Max Score 100)	Outcome (Max Score 100)	Total Score (700)
ICD Programme (Max Score 100)	UG Programme (Max Score 100)	PG Programme (Max Score 100) (Average of all PG programs)	Doctoral Programme (Max Score 100)				
(A.1)	(A.2)	(A.3)	(A.4)	(B)	(C)	(D)	(A+B+C+D)
91	92	88	90	89	89	81	620

**Note:** 1. Marks mentioned above are the average of the marks given by the experts.

2. If marks have not been allotted for some attributes by the experts, total score can be scaled to maximum marks.

  
 Name & Signature of HOD



**STRENGTH OF DEPARTMENT**

- Dedicated and Flexible faculty and Staff
- Well equipped laboratories and Well designed Lab Manuals for all courses
- Development of Video Lectures/ Power Point Presentation / Resource Material and question banks
- Continue review of the syllabi and curriculum by the subject experts
- Smart Class rooms and focus on Modern Methods of Teaching
- Internship in-house facilities
- Industrial exposure to students through educational tour and internship
- Dissertation work in M.Sc
- Result of M.Sc. upto 100% and opted for higher studies and placement
- SLIET Chemical Society and Chemistry Alumni Association
- Research Profile - Publications in high impact factor journals and citation Index
- Intra and interdepartmental and inter Universities /organizations collaborative research efforts
- Books authored and Book Chapters by faculties
- Research and Academic Awards and achievements of the faculty
- Consultancy Projects and Patent Filed by the Faculty

**WEAKNESS OF THE DEPARTMENT**

- Department lacks proper lab infrastructure and Additional Laboratories with proper infrastructure for UG, PG and Ph.D students
- Augmentation of sophisticated instrumentation facility
- Improvement of student teacher ratio
- Chemical waste disposal unit
- Lab space for PhD/M.Sc. Research students
- Specified grant of chemicals for PhD/M.Sc.
- Regular Physical chemistry faculty
- Regular technicians for Laboratories
- Regular office assistant/Incharge
- Reading room/common room/computer room for PhD/M.Sc.
- Subscription of Journals and eBooks
- No Research Projects

**FUTURE PLAN (2022-23)**

- Five year Integrated B.Sc. -M.Sc. Programme is under progress.
- For further strengthening of research, efforts will be taken towards development of sophisticated instrumentation laboratory
- Interdisciplinary approach in emerging research areas
- Strengthening industry –academic collaborative research
- Emphasis will be on publishing research work in high impact factor journals/Consultancy works/Research Funding
- Motivation to young faculty for research







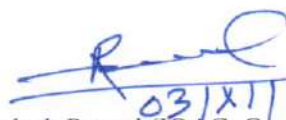
## Suggestions for Improvement

For the upliftment of Department the Academic Audit Committee suggested the following:

1. Inclusion of M.Sc. Project work in semester 3<sup>rd</sup> with "0" credit/Pass course.
2. Mid semester evaluation of M.Sc. Project students' presentation in front of Departmental Committee should be included which will help in refinement of the project work and good suggestions can be incorporated in the project work.
3. At the end of 2<sup>nd</sup> Semester M.Sc. Students to be sent to the Industry/ Academic Institutes for internship program and this should be included in course curriculum as a non credit course.
4. M.Sc. Students should be encouraged at least to communicate one research paper in the reputed journal (none paid), this will enhance the R&D output as well as the perception of the Institute.
5. M.Sc. Student should also be encouraged to participate in National/ International Conferences that will provide better exposure to the students.
6. M.Sc. Chemistry should be a general chemistry at par with IITs and NITs instead of specializations.

  
07/11/23

Prof. Ram Pal Chaurdhary (Chy)  
Member

  
03/11/2023


Prof. Kamlesh Prasad (IQAC, Coordinator)  
Member


  
03.11.2023

Prof. Sanjeev Garg (M&H)  
Member

  
03/11/2023

Prof. B.S. Kaith (NIT, Jalandhar)  
External Expert

  
03/11/2023  
Prof. A.P. Singh (ECE)  
Member  
(online attended)

  
03/11/23

HOD (Chemistry) – Convener

