



Department of Chemistry
Maharshi Dayanand University Rohtak
(NAAC Accredited 'A' Grade)

Strategic Plan (2018-2023)



About the Department

The Department of Chemistry was established in 1970 as a wing of the Regional Centre, Punjab University, Chandigarh. In 1974 this became as a part of Regional Centre of the Kurukshetra University. When Maharshi Dayanand University came into existence in 1976, this Department became the University part.

The department imparts education in Chemistry at M.Sc. level with Inorganic, Physical and Organic specializations. The department also provides good opportunities for research at doctoral and post-doctoral levels on a variety of topics in conventional and inter-disciplinary areas in Chemistry with other departments and institutions. As a part of its academic activities, the department had organized seminars, symposia and workshops. The University Grants Commission had given special grants to organize several Refresher Courses in Chemistry.

The Department admits 90 students at entry level in M.Sc. course every year through an entrance examination strictly on merit basis. In the second year of the M.Sc. course, the specialization i.e. Inorganic, Physical and Organic Chemistry disciplines are opted. At present about 25 students are actively engaged in research work for their Ph.D. degree. Several students from the allied departments and Medical College, Rohtak also engage themselves for collaborative research work. The Department has collaboration with foreign as well as national institutes, such as Korea Institute of Energy Research (KIER) Daejeon, South Korea, National Physical Laboratory (NPL), New Delhi, Central Electronic Engg. Research Institute, Pilani, University of Polytechnica Valencia, Spain.

Vision

Vision of the Department is to meet the global challenges, to look forward to a future marked by innovative and important discoveries and excellence in learning.

Mission

The Department will promote interdisciplinary and international collaborations for quality research and excellence in teaching and innovation.

Strategic Goals

To achieve its Vision and Mission, the Department will endeavor to improve -

- Academic standard by implementation of online courses such as MOOCS (Massive Open Online Courses) and GIAN (Global Initiative for Academic Network), smart classrooms and revision of syllabi.
- Research outcome by publishing good quality of research papers in recognized journals. The faculty members will apply for individual and collaborative research grants from different funding agencies

- Revision of syllabi as per the need of industries and institutions
- Lectures, seminars, conferences and workshops organization to share view in academics and research. Interdisciplinary research will be promoted by collaborations with other department.

SWOC Analysis

Strength

- The department is equipped with highly sophisticated instruments such as XRD, SEM, Differential Scanning Calorimeter, Densimeter, UV Visible, Spectrofluorimeter, FT-IR and TGA/DTA for research and well equipped laboratories for PG course.
- On average more than 20 research scholars are enrolled in the department with fellowship from national level funding agencies like CSIR, UGC, DST etc.
- The department has published more than 276 research papers in last five years in the national and international journals of high repute.
- Department have many international collaborations in the research with countries like South Korea, Spain, Portugal, Poland.
- The department has received grant under DST -FIST, UGC-SAP and many other individual major research projects from CSIR, UGC and DST.
- The syllabi are updated on regular basis
- Students class attendance on regular basis

Weakness

- At present department is facing crises of regular faculties.
- Keeping in view the demand of practical subject department is having scarcity of funds.
- Department is in great need of a seminar hall having capacity more than 300 persons as the annual intake of the department is 90(M.Sc. Previous) + 90(M.Sc. Final)+Research Scholars +Faculty members.

Opportunities

- Chemistry has wide opportunities in the field of teaching, Industries, Pharmaceuticals, forensic sciences, material science etc.
- This is the subject, knowledge of which is applicable in all areas of sciences especially in the research field. Chemistry is also having a very important role in the daily life of human being.

Challenges

- To meet the growing demand of the subject our department need better infrastructure facilities, more funding and above all appointment of permanent faculties against the sanctioned vacant posts to strength the department. Establishment of Centre of Excellence

Action Plan

Academic year 2018-19

- ✓ In the Academics, Syllabus framework and teaching learning modes are prominent factors regarding the quality improvement. Keeping this in view, Syllabus will be revised accordingly. Syllabus will be revised according to CSIR UGC NET syllabus and to meet current challenges in chemistry. Courses will be designed to create skills and knowledge in the field of Industries also.
- ✓ Strengthen of Dept. by the recruitment of new faculties in the department.
- ✓ Induction and welcome programme in the month of July.
- ✓ Extension lecture will be programmed from distinguished faculties in the month of September- October.
- ✓ One educational Tour will be programmed.
- ✓ National conference will be organized in the Month of November or December.
- ✓ A chemical society function will be organized probably in the month of October.
- ✓ Strengthening of Research and Class Laboratory will be done by the purchase of New Equipments
- ✓ Efforts will be made to submit research proposals to various funding agencies by the faculty members.
- ✓ Efforts will be made to collaborate with national and international Universities and laboratories.
- ✓ Student will be encouraged by consultation programs regarding the application for various international fellowships.

Academic year 2019-20

- ✓ Celebration of science day on Feb 28, 2019.
- ✓ Annual Sports meets will be organized in the month of March.
- ✓ Induction and welcome programme in the month of July
- ✓ Extension lecture will be programmed from distinguished faculties in the month of September- October
- ✓ One educational Tour will be programmed

- ✓ International conference will be organized in the Month of November and December.
- ✓ A chemical society function will be organized probably in the month of October
- ✓ Proposal will be made to improve quality of research. In this regard Research instruments will be proposed in Central Instrumental laboratory as well as purchased through Dept.
- ✓ Efforts will be made to submit research proposals to various funding agencies by the faculty members.
- ✓ Efforts will be made to collaborate with national and international Universities and laboratories
- ✓ Student will be encouraged by consultation programs regarding the application for various international fellowship

Academic year 2020-21

- ✓ Celebration of science day on Feb 28, 2020
- ✓ Annual Sports meets will be organized in the month of March.
- ✓ Induction and welcome programme in the month of July
- ✓ Extension lecture will be programmed from distinguished faculties in the month of September- October
- ✓ One educational Tour will be programmed
- ✓ National conference will be organized
- ✓ A chemical society function will be organized probably in the month of October
- ✓ Strengthening of Research and Class Laboratory will be done by the purchase of New Equipments
- ✓ Efforts will be made to submit research proposals to various funding agencies by the faculty members.
- ✓ Efforts will be made to collaborate with national and international Universities and laboratories
- ✓ Student will be encouraged by consultation programs regarding the application for various international fellowship

Academic year 2021-22

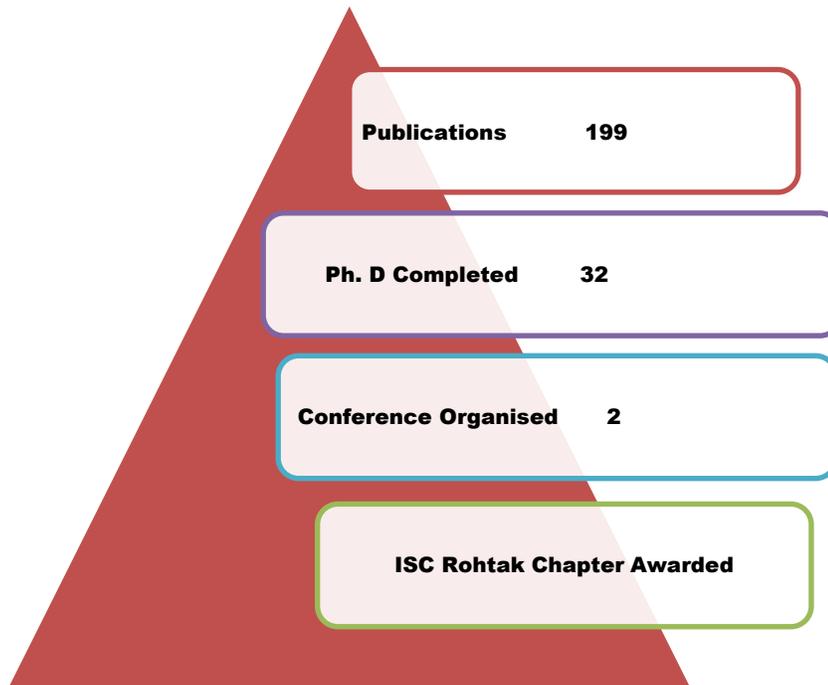
- ✓ Celebration of science day on Feb 28, 2021
- ✓ Annual Sports meets will be organized in the month of March.
- ✓ Induction and welcome programme in the month of July
- ✓ Extension lecture will be programmed from distinguished faculties in the month of September- October

- ✓ One educational Tour will be programmed
- ✓ National conference will be organized
- ✓ A chemical society function will be organized probably in the month of October
- ✓ Strengthening of Research and Class Laboratory will be done by the purchase of New Equipments
- ✓ Efforts will be made to submit research proposals to various funding agencies by the faculty members.
- ✓ Efforts will be made to collaborate with national and international Universities and laboratories
- ✓ Student will be encouraged by consultation programs regarding the application for various international fellowship

Academic year 2022-23

- ✓ Celebration of science day on Feb 28, 2022
- ✓ Annual Sports meets will be organized in the month of March.
- ✓ Induction and welcome programme in the month of July
- ✓ Extension lecture will be programmed from distinguished faculties in the month of September- October
- ✓ One educational Tour will be programmed
- ✓ National or international conference will be organized
- ✓ A chemical society function will be organized probably in the month of October
- ✓ Strengthening of Research and Class Laboratory will be done by the purchase of New Equipments
- ✓ Efforts will be made to submit research proposals to various funding agencies by the faculty members.
- ✓ Efforts will be made to collaborate with national and international Universities and laboratories
- ✓ Student will be encouraged by consultation programs regarding the application for various international fellowship

ACHIEVEMENTS OF THE DEPARTMENT IN LAST FIVE YEARS



HUMAN RESOURCE

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STUDENT AND SCHOLAR 200

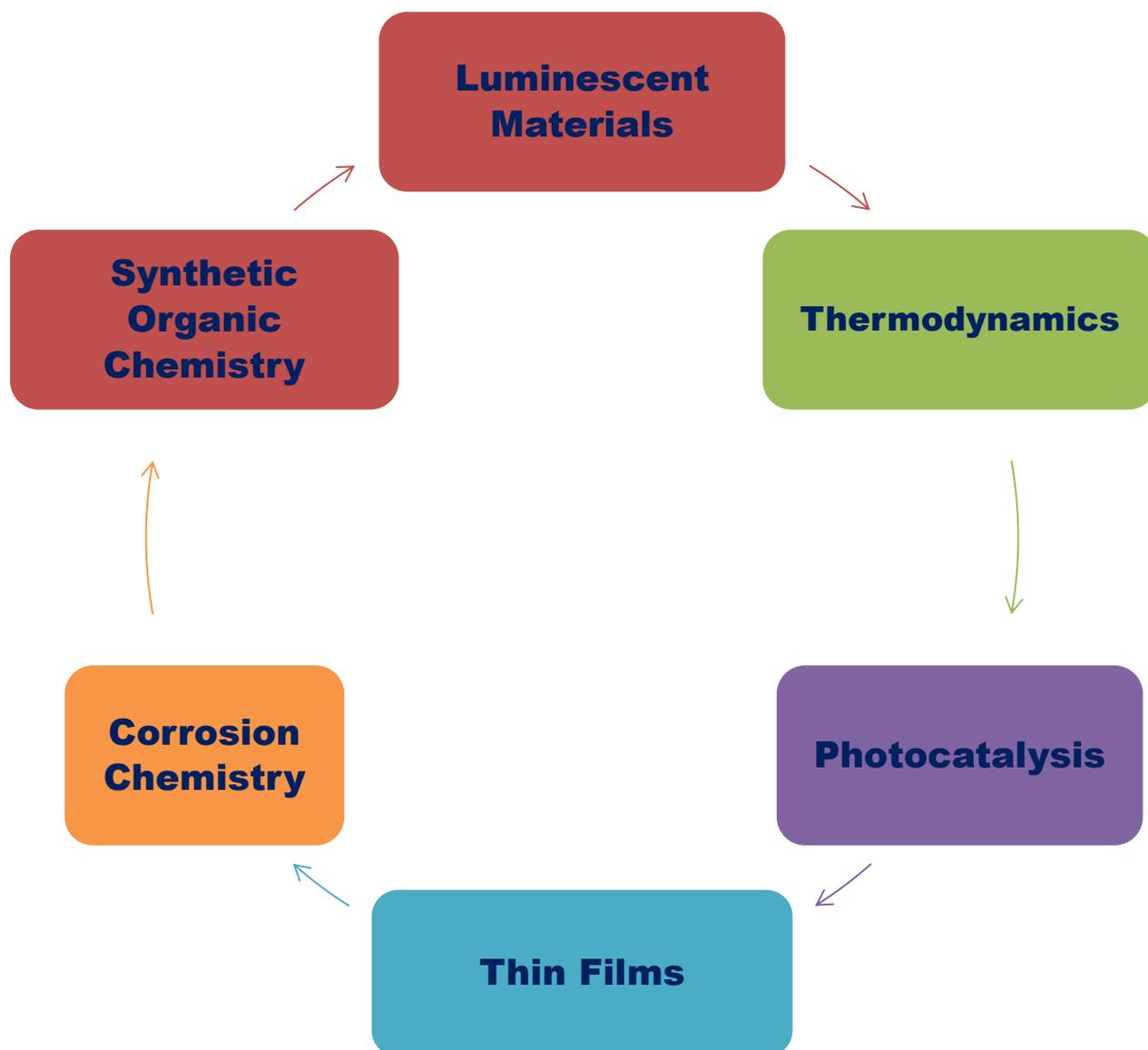
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FACULTY 10

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SUPPORTING STAFF 12

THRUST AREAS OF THE DEPARTMENT OF CHEMISTRY



Activity Calendar (2018-19)

S. No.	Activities	Time
1	Induction Programme	August,2018
2	Teacher Day Celebration	September 5, 2018
3	Seminar / Inauguration Indian Science CongressRohtakChapter	October 8, 2018
4	Education Tours	October, 2018/March, 2019
5	Extension Lecture in Chemistry	November, 2018
6	Student sports Meet	Feb, 2019
7	National Science day Celebration	Feb 28, 2019
8	Outreach Programme	March, 2019