

**SDM College of Engineering and Technology, Dhavalagiri, Dharwad-580002**

**Department of Chemistry**

# **STRATEGIC PLAN IMPLEMENTATION REPORT**



## **Annual Performance Report of Strategic Plan for the Year (2022 Jan – Dec)**

**Reference: 5 Year Plan 2022-2026**

## **INTRODUCTION:**

The purpose of this document is to record the **annual performance** of the Department based on their stated strategic plan for the year -**2022**(starting from 1<sup>st</sup> January and ending by 31<sup>st</sup> December).

In charge person indicted against each perspective/ Key areas have participated in the audit process and the records maintained by them are seen thoroughly by the audit team.

## **AUDIT TEAM:**

1. **Chairman:**Principal, SDMCET, Dharwad

2. **Members:**

- a) Dean Academic Program
- b) Dean R & D
- c) IQAC Coordinator— Member Secretary

## **INSTITUTIONAL VISION AND MISSION:**

### **VISION:**

To develop **competent** professionals with **human values**.

### **MISSION:**

- M1.** To have **contextually relevant** Curricula.
- M2.** To promote **effective Teaching Learning** Practices supported by **Modern Educational Tools and Techniques**.
- M3.** To enhance **Research Culture**.
- M4.** To involve the **Industrial Expertise** for connecting Classroom contents to real-life situations.
- M5.** To inculcate **Ethics and soft-skills** leading to overall personality development.

**ADDITIONAL FOCUS:**

F1: Curriculum relevance- **M1**

F2: Academic/ Exam results- **M1, M2, M4**

F3: Research papers, Sponsored Projects, Root cause analysis for rejected papers and filling gap.-**M3**

F4: Value additions: Teaching, Soft skills, Use of ICT / Presentation, Discussion Groups  
(Communication skills)- **M2 & M5**

F5: Community oriented services- **M3 & M5**

F6: Placement.

F7: Accreditation and Ranking: NBA, NAAC and NIRF -**M1 to M5 & Establishment of strong IQAC  
to support quality checks and Institutional repository.**

F8: National Educational Policy- NEP-2020 – **M1 to M5.( Experiential Learning)**

**CONTACT DETAILS:**

1. Dr. A. A. Kittur, **Professor and Head, Department** of Chemistry, SDM College of Engineering and Technology, Dharwad-580002.

Email:kittur1965@gmail.com

hodchemistry@sdmcet.ac.in

Mobile:9945258096

2. Mrs. Asma Tatagar, **Faculty/I/C- Strategic Plan**, Department of Chemistry, SDM College of Engineering and Technology, Dharwad-580002.

Email: asmatatagar@gmail.com

Mobile:9380520089

## Year 2022 23

Focus [1]	Perspective/ Key Areas [2]	PLANNING [3]	Observations / Remarks by Auditors		
			Outcomes achieved [4]	Reasons for any deviation [5]	Further action plan, if applicable [6]
			<b>F1 / M1</b>  <b>Curriculum Relevance</b>	<b>Re-establishing the relevance of critical thinking in Course outcomes and raising learning levels focusing on Experiential learning of NEP-2020.</b>	<b>1. Activity:</b> (i) <b>Brainstrom session.</b> (ii) <b>BOS Meet</b> <b>(iii) Outcome/Target:</b> 1. Reframing of COs 2. NEP impenetation as teaching activties  <b>In-charge Faculty:</b> Dr. A. A. Kittur <a href="mailto:kittur1965@gmail.com">kittur1965@gmail.com</a> Ph: 9945258096

	<p><b>Re-establishing the relevance of Program Articulation Matrix-PAM</b></p>	<p><b>Activity-1: Pre BOS/ DUGC meeting</b>  <b>Activity-2:</b>Analyzing /reviewing current PAM continuation  <b>Target/ Outcomes:</b> Arriving at some points towards improving new PAM</p> <p><b>In-charge Faculty:</b>  Dr. Shashidhar  shashidhar66111@gmail.com  Ph: 9986971155</p>	<ol style="list-style-type: none"> <li>1. Pre BOS meeting of all the department staff was conducted on 4<sup>th</sup> August 2022.</li> <li>2. Implementation of CO-PO mapping for the modified COs was discussed in Pre-BOS conducted on 4<sup>st</sup> Aug 2022. It is verified and quantified by the Department IQAC.</li> <li>3. The PAM matrix for this Batch 21 scheme is documented and decided to continue the same.</li> </ol>
	<p><b>Conducting internal and External Audits</b></p>	<p><b>Activity-1: Internal Audit by inhouse IQAC team</b></p> <p><b>External audit by Dr. Suresh Tuwar, Professor, Karnatak Science College, Dharwad.</b></p> <p><b>Target/ Outcomes: Audit report generation.</b></p> <p>Incharge: Dr. A. A. Kittur  <a href="mailto:Kittur1965@gmail.com">Kittur1965@gmail.com</a>  9945258096</p>	<ol style="list-style-type: none"> <li>1. Both Internal and <a href="#">External Audits</a> are completed and documented.</li> <li>2. Internal Audit was conducted on 30/07/2022 by Department <a href="#">IQAC team</a>. Verified and quantified by the IQAC and HOD</li> <li>3. External Audit was conducted on 21/07/2022 by Dr. Suresh Tuwar, Professor Karnatak Science College Dharwad. The remarks made by him are attached here with. <ul style="list-style-type: none"> <li>✓ He has appreciated the way it written and presented.</li> <li>✓ He verified and quantified the details presented.</li> <li>✓ He appreciated for the reserch work carried out, publications and participation of staff in conferences.</li> <li>✓ Suggested to do research in advance fields of chemistry</li> </ul> </li> <li>4. sggestion received form auditors were incorporated.</li> </ol>
	<p><b>Others-</b> if any</p>		

## Year 2022-23

Focus [1]	Perspective/ Key Areas [2]	PLANNING [3]	Observations / Remarks by Auditors		
			Outcomes achieved [4]	Reasons for any deviation [5]	Further action plan, if applicable [6]
			<b>F2</b> <b>M1,M2,M4</b>  <b>Exam</b> <b>Results</b>	<b>Bridge Courses</b>  For all and specific to <b>Slow learners</b> & <b>Learning Extensions</b>	<b>Activity-1:</b> 1. Identification of Slow learners 2. Extra classes for slow learners  <b>Outcome/Target:</b> Improvement in results of IA-III and SEE  Prof. Asma M. Tatagar <a href="mailto:asmatatagar@gmail.com">asmatatagar@gmail.com</a> Ph:9380520089
<b>Tutorials for complex courses</b>	<b>Activity-1:</b> <b>Identification of topics.</b> <b>Outcome/Target:</b> 1. Tutorial classes conducted . 2. Improvement in subsequent results  <b>In-charge Faculty:</b> Dr. A. A. Kittur <a href="mailto:kittur1965@gmail.com">kittur1965@gmail.com</a> Ph: 9945258096	5. After the II IA, once again students performance is analyzed. Oral Feedback of students regarding the topics to be taught once again is taken. Based on this in tutorial classes selected topics(numericals on Bomb calorimeter and polymers) have discussed to complete the task. <ul style="list-style-type: none"> <li>• One hour per week Tutorial classes are conducted on selected topics.</li> <li>• Around 70 Students from all divisions have attended these classes.</li> <li>• <u>Improvement in subsequent results.</u></li> </ul>			

	<p><b>Strengthening Experiential Learning component</b></p>	<p><b>Activity-1:</b>  <b>1. Identification of experiments for Experimental based learning.</b>  2. Experiment based CTA activity</p> <p><b>Outcome/Target:</b></p> <ol style="list-style-type: none"> <li><b>Revised Curriculum with Experimental based learning</b></li> <li><b>Improvement in CO attainment</b></li> </ol> <p>Faculty I/C: Prof. Asma M. Tatagar  <a href="mailto:asmatatagar@gmail.com">asmatatagar@gmail.com</a>  Ph:9380520089</p>	<p>Incorporation of one or two <a href="#">experiments</a> in the revised curriculum. The following experiments were identified and discussed with subject expert in BOS meet for experimental based learning.</p> <ol style="list-style-type: none"> <li>Determination of pKa of weak acid by glass electrode.</li> <li>Potentiometric estimation of Iron in the given solution.</li> </ol> <p><a href="#">Experiment based CTA activity</a> is given to students.</p>		
	<p><b>Industry Connectivity for Class room</b></p>	<p>-----</p>	<p><b>Industry connectivity for class room is planned and carriedout</b></p>		
	<p><b>Others- if any</b></p>				

Focus [1]	Perspective/ Key Areas [2]	<b>Year 2022-23</b>			
		<b>PLANNING [3]</b>	<b>Observations / Remarks by Auditors</b>		

**3**  
**M3**  
**Research**

	<p>Quality assessment of all research proposals</p>	<p><b>Activity:</b> Establishment of core team</p> <p>Guiding young researchers to write project proposals</p> <p><b>Outcomes/Targets :</b> Focus on research To Secure external fund from agencies Proposals preparation review Publications Faculty I/C :Dr. A. A. Kittur</p>	<p>Formation of research core team consists of two members to look after all research activities..</p> <p>HOD and senior faculty are the members are team members.</p> <p>The team Guiding young researchers to write project proposals to get the fund from external agency.</p> <p>List of <a href="#">project proposals</a> submitted are as follows:</p> <ol style="list-style-type: none"> <li>1. Dr. A. A. Kittur applied a project proposal “Design, Development and Characterization of Nanomaterials for Energy storage Device Applications” worth Rs.40,00,000/- to VGST Bangalore under K-FIST L2.</li> <li>2. Dr. N. Shashidhar applied a project proposal “Challenges in framing the Basic sciences Curricula in NEP scenario of Technological Education” Low-dimensional semiconductor hetero structures applications for energy and environment” worth Rs.2,00,000/- to VGST Bangalore.</li> <li>3. Dr. N. Shashidhar applied a project proposal “Synthesis, characterization and biological activities of solid state and solution state metal complexes with P-L and M-L” worth Rs.20,00,000/- to VGST Bangalore under K-FIST L1</li> <li>4. Prof. Asma Tatagar applied a project proposal “Sustainable development in energetic and technology- a focus on clean and green energy enhancing the livelihood” worth Rs.2,00,000/- to VGST Bangalore.</li> <li>5. Prof. Sahana Nayak applied a project proposal “Synthesis and fabrication of electrode materials for Supercapacitor applications using transition metal phosphides and their composites” worth Rs.2,42,000/- to VGST Bangalore under RGS/F.</li> </ol>
	<p><b>IPR:</b> Copyrights and Patents</p> <p><b>Paper</b> Publications</p>	<p><b>Activity:</b> Brainstrom session arranged to understand IPR/Patent filling</p> <p><b>Outcomes/Targets:</b> Faculty have the idea of IPR and patents Research papers writing Faculty I/C Dr. Shashidhar</p>	<p>Not yet initiated the activity but attended the webinar on this topic.</p> <ul style="list-style-type: none"> <li>▪ Published <b>04</b> research papers in international journals of high impact factor and <b>01</b> is in national journal. All 04 papers are Q2 rated with high impact factor.</li> <li>▪ Published <b>05</b> conference papers in Elseweir proceedings.</li> <li>▪ Attended FDP, Seminars, Workshops, conferences and presented papers.</li> <li>▪ <b>One</b> project is ongoing. <b>Five</b> proposals were submitted to VGST for the grant. Details are listed in attachment enclosed.</li> </ul>



[Published Papers list](#) is attached for reference.

A research proposal entitled “Production and Fabrication of Commercially viable, non-hazardous and eco-friendly bio plastic from aquatic weeds- an alternative to conventional nonbiodegradable plastics” under RGF/S worth Rs. 3,00,000/- is sanctioned to Prof Asma Tatagar, Lecturer, Department of Chemistry, SDMCET, Dharwad.

**Funded Projects**

**Others-** if any

Focus	Perspective/ Key Areas	Year 2022-23			
		PLANNING	Observations / Remarks by Auditors		
			Outcomes achieved [4]	Reasons for any deviation [5]	Further action plan, if applicable [6]
<b>F4</b> <b>M2 &amp; M5</b> <b>Value additions</b>	<b>Learning for Placement</b>				
	<b>Soft Skills</b>				
	<b>Discussion Group</b>		Group discussion is carried out in each division of first year.		
	<b>English Communication Skills</b>				
	<b>Use of ICT Information Communication Technology</b>	<b>Activity:</b> Use of online platforms like Zoom, Google meet and MS teams for the conduction of online classes if	<a href="#">Study material provided</a> through google classroom <a href="#">Videos</a> and ppts related to designed curriculum are shared with students using ICT so as to understand the subject matter clearly.		

		necessary Outcomes/Targets :Easily reachable to students Easily provide study material to students Faculty I/C Prof. Sahana Nayak			
	<b>Others-</b> if any				

<b>Year 2022-23</b>					
Focus	Perspective/ Key Areas	PLANNING	Observations / Remarks by Auditors		
			Outcomes achieved [4]	Reasons for any deviation [5]	Further action plan, if applicable [6]
<b>F5 Community Oriented Services  M3 &amp; M5</b>	<b>Awareness Program</b>	<b>Activity:</b> Identification of village Visit to village school to bring awareness about health & Hygeine Outcomes/Targets Faculty I/C Prof. Sahana Nayak	Yerrikoppa Vvillage is identified and talked to school authorities. Soon we will attend this task.		
	<b>Learning Programs through workshops</b>	<b>Activity:</b> Demonstration of quality of drinking water. Outcomes/Targets Testing the water parameters Faculty I/C Prof. Sahana Nayak	Planned for the activity but not yet initiated.		
	<b>Technology Transfer Programs</b>				
	<b>Others-</b> if any				

Focus	Year 2022-23				
	Perspective/ Key Areas	PLANNING	Observations / Remarks by Auditors		
			Outcomes achieved [4]	Reasons for any deviation [5]	Further action plan, if applicable [6]
<b>F6</b> <b>Placement</b>	No. of Offers				
	No. of students getting Placed				
	pay packages being offered				
	MoUs				
	Internship				
	Others- if any				

Focus	Year 2022-23				
	Perspective	Perspective/ Key Areas	Observations / Remarks by Auditors		
			Outcomes achieved [4]	Reasons for any deviation [5]	Further action plan, if applicable [6]
<b>F7</b> <b>Accreditation and Ranking</b>	<b>NBA</b>  Faculty I/C: NBA Coordinator		NA		
	<b>NAAC</b>	<b>Activity-1: NAAC</b>	Department level documents submitted to core committee.		

	<b>Faculty I/C:</b> Dr. Shashidhar NAAC Coordinator	<b>preparedness</b>  <b>Outcome/Target:</b> 1. <b>Data collection and Documentation for submission</b>	
	<b>NIRF</b> ranking.  <b>Faculty I/C:</b> PG Coordinator	<b>Activity</b> Aiming for ranking within 200 Strenthening institute by publication in high impact journals, by getting more fund from external agency	<ul style="list-style-type: none"> <li>▪ Published <b>04</b> research papers in international journals of high impact factor and <b>01</b> in national journal.</li> <li>▪ Published <b>05</b> research articles in Elseweir proceedings.</li> <li>▪ <b>One</b> paper is accepted in <b>Q1</b> rating journal.</li> <li>▪ Attended FDP, Seminars, Workshops, conferences and presented papers.</li> <li>▪ One project is ongoing.</li> </ul>

**Remarks**-by the auditing team.

The progress report mentioned above is presented by the concerned department team, verified for its correctness by the auditing team and approved by the concerned authorities mentioned below.

X Quarter	Name and Signature with Date of the concerned authority							
	DUGC Member Secretary	IQAC Coordinator	Faculty I/C of Strategic Plan	Head of the Department	Member-3 Audit Team	Member-2 Audit Team	Member-1 Audit Team	PRINCIPAL