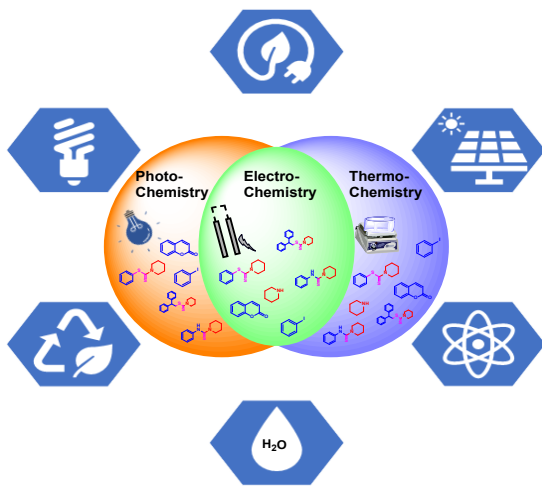


# Sustainable Methodologies for Organic Synthesis and C-H Bond Functionalizations

## Graphical Abstract/ Layout



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Proposal Approval	
Financial Management	
Account Setup	Budget Allocation
Project Execution	
Manpower Selection	Procure Equipment and Resources
Progress Monitoring	
Regular Reports	
Financial Reporting	
Project Completion	
Final Settlement	Asset Management
Publication and Acknowledgment	
Compliance & Audits	

## Project Description:

The recent year synthetic organic chemists focusing on sustainable and greener approaches for synthetically important biologically active molecules or material molecules interest. In this respect. Catalysis (Homogeneous and heterogeneous catalysis) is placed a crucial method for constructing a wide variety C-C, C-N, C-S, C-Se, C-O, C-Te, C-B etc., which is the very useful synthetic strategy to achieve a target molecule based on the molecule interest. The main classification will be focused on green solvents, green catalysis, and green energy resources for effective organic synthesis.

1. Transition Metal Catalyzed C-H bond Activation and Metal-Free C-H Oxidation methods;
2. Metalla-electro Organic Synthesis;
3. Metalla-photoredox Catalysis for Organic Synthesis;
4. Synthesis of Organic material molecules via sustainable catalytic methods

## Products/ Instruments/ Results/ Outreach Activities



Sponsored Research and Industrial Consultancy (SpoRIC)

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**Name of the Funding Agency**  
Department of Science and Technology  
(DST)

**Name of the Scheme**  
Science and Engineering Research  
Board (SERB)

**Sanctioned Amount (in Rupees)**  
Rs. 29,16,941

**Duration of the Project (years)**  
2