NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

(AN AUTONOMOUS INSTITUTION)
Pampady, Thiruvilwamala, Thrissur Dt., Kerala – 680588
NBA Accredited Programmes – B.Tech CSE, B.Tech MTR | NAAC Re–accredited with 'A' Grade
Recognized by UGC under Section(2f) of the UGC Act, 1956 | ISO 9001:2015 Certified
Approved by AICTE | Affiliated to APJ Abdul Kalam Technological University

RESEARCH & DEVELOPMENT CELL

TEAM STRUCTURE & HIERARCHY

Patron	Dr R.Gowri , Director Research and Ranking, NGIK
Co-Patron	Dr Anoop K J , Principal, NCERC
Research Coordinator	Prof. Anoop B K
Core Research Members	Prof. M Appadurai (ME)
	Prof. Aswani M (ECE)
	Prof. Vinod R (MTR)
	Prof. Sudheesh S (ME)
	Prof.Thushara (ASH)
	Prof.Abeena (EEE)
	Prof.Divya P (MCA)
	Prof.Vinish (CSE)
	Prof. Anoop B K(AI)
	Prof. Shankar (MBA)

1. ROLES AND RESPONSIBILITIES

PATRON (DIRECTOR)
- Final approval for research budget & policies
- Champion research initiatives to management & stakeholders
- Represent NCERC in high-level research collaborations

CO-PATRON (PRINCIPAL)
- Provide academic & infrastructure support
- Resolve operational hurdles for research activities
- Support faculty in research endeavors

RESEARCH COORDINATOR
- Central operational hub for all research activities
- Manage communications, meetings, and documentation
- Assist with grant applications and patent filings
- Maintain research database and track progress
- Organize research workshops and seminars

CORE RESEARCH MEMBERS
- Departmental research champions
- Motivate faculty and form research clusters
- Map department expertise and facilities
- Identify interdisciplinary collaboration opportunities

- Report departmental research progress

2. IMMEDIATE ACTION PLAN:

OVERALL GOAL: 90% of faculty publish at least one paper within 18 months and file institute's first patents

PHASE 1: FOUNDATION & CAPACITY BUILDING (Months 1-6)

Goal: Get every faculty member "research active"

- **Mandatory Workshops:**
  - ✓ How to write conference papers for Google Scholar indexing
  - ✓ Literature review using free tools (Google Scholar, ResearchGate)
  - ✓ Introduction to patents - types and IPO search
- **Departmental "Idea Hackathons"**
  - ✓ Each core member conducts 2-hour brainstorming session
  - ✓ Output: Every faculty has one-paragraph research idea
- **Seed Funding "Micro-Grants"**
  - ✓ Institute allocates ₹5,000-₹10,000 per project
  - ✓ Simple one-page proposal required

PHASE 2: FIRST PUBLICATIONS & PATENTS (Months 7-12)

Goal: Achieve first publications and patent filings

PUBLICATION PATHWAY (STAIRCASE MODEL):

Step	Target	Timeline
1	Google Scholar Indexed Conferences	Months 7-9
2	UGC-CARE List Journals	Months 8-10
3	Scopus Q4/Q3 Journals	Months 9-12
4	Web of Science/SCIE Journals	Months 12+

PATENT PATHWAY:

- Awareness sessions on patent types:
  - ✓ Patent Publication (filing with Indian Patent Office)
  - ✓ Granted Patent (final enforceable right)
  - ✓ Design Patent (aesthetic protection)
- Identify top 2-3 novel ideas from hackathons
- Hire patent consultant for drafting and filing support

PHASE 3: SECURING FIRST GRANTS (Months 13-18)

Goal: Secure minor government/industry grants

- Target seed money from Institution/AICTE/SERB/DST
- Approach local industries for "Problem Statement" projects
- Apply for specific schemes:
  - ✓ SERB-SIRE (Faculty interns)
  - ✓ SERB-TARE (Teachers)
  - ✓ AICTE-RPS (Research Promotion Scheme)

3. KEY PERFORMANCE INDICATORS

Metric	Target (18 months)
Faculty with at least one publication	90%
Total publications	50+
Patent applications filed	5-10
Design patents filed	2-3
Small grants secured	3-5
Research workshops conducted	6-8

4. SUPPORT MECHANISMS

- **Research Database:** Maintained by Coordinator tracking all projects
- **Mentorship Program:** Senior faculty guide junior researchers
- **Incentive Structure:** Recognition and rewards for achievements
- **Regular Meetings:** Monthly core team meetings, quarterly review with Patrons

Principal   **Director Research**