

**Group of Institutions** 



### **Annual Report 2024-2025**

The Institute Innovation Council (IIC) at Regent Education and Research Foundation Group of Institutions continues to serve as a vibrant hub for fostering innovation, entrepreneurship, and creative problem-solving. Building on its steady progress since inception in 2020–21, the council has expanded its activities, strengthened its incubation and IPR ecosystem, and nurtured a growing culture of innovation among students and faculty. In the 2024–25 session, IIC RERFGI successfully conducted 78 diverse activities spanning IIC calendar events, MIC-driven initiatives, celebrations, and self-driven programs. With 16 intellectual property filings (6 granted, 3 published, 7 filed), 2 technology transfers, and 2 new student-led startups established under its guidance, the council has demonstrated tangible outcomes in translating ideas into impactful ventures. Active participation in the Smart India Hackathon 2024, where Team AquaVision reached the Grand Finale, further reflects the institution's growing national presence. This report highlights the initiatives, achievements, and contributions of IIC RERFGI during the academic year 2024–25, underscoring its role in shaping an innovation-driven academic ecosystem.

#### Vision:

To emerge as a leading center of innovation and entrepreneurship that empowers students and faculty to think creatively, act boldly, and deliver impactful solutions to real-world challenges. We envision a future where every stakeholder of RERFGI actively contributes to a dynamic ecosystem of ideas, startups, and technologies that drive societal progress and sustainable development.

#### **Mission:**

- To cultivate an entrepreneurial culture across the institution by integrating innovation into academics, research, and extracurricular activities.
- To provide students and faculty with opportunities for ideation, prototyping, patenting, and startup creation through structured support systems.

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- To strengthen collaborations with industry, academia, and government bodies for mentorship, funding, and technology transfer.
- To encourage intellectual property generation, technology commercialization, and the establishment of startups that contribute to the regional and national innovation landscape.
- To inspire students to participate in national and global innovation challenges, building skills and confidence to compete at the highest level.

#### Journey of IIC Established at the Institute:

The Institute Innovation Council (IIC) at Regent Education and Research Foundation Group of Institutions was established in the academic year 2020–21 as part of the national initiative of the Ministry of Education's Innovation Cell (MIC) to embed the spirit of innovation and entrepreneurship within higher education institutions. The journey began with the creation of the "Startup Shala", a dedicated incubation unit designed to nurture budding entrepreneurs and support their early-stage ventures. This foundational step laid the groundwork for fostering creativity, entrepreneurial mindset, and industry collaboration.

- In the 2021–22 session, the council witnessed significant expansion with its first government-recognized incubatee and the formal launch of structured mentorship programs. The IIC Cell started to emerge as a platform for both faculty and students to generate, refine, and showcase innovative ideas, complemented by training workshops and awareness campaigns.
- During the 2022–23 session, the council consolidated its role as an innovation driver, actively facilitating IP filings, developing prototypes, and aligning institutional policies with the National Innovation and Startup Policy (NISP). With growing interdisciplinary participation, the council became a hub for ideation and entrepreneurship within the campus.
- The 2023–24 session marked a turning point, with 55+ events conducted, 12 IPs filed (5 granted), and a strong presence at national-level competitions. A notable highlight was the success of an IIC-mentored team that secured the Runner-up position in Smart India Hackathon 2023 Grand Finale. The adoption and implementation of the RERFGI Innovation and Startup Policy 2024 further institutionalized innovation culture.
- In the current 2024–25 session, IIC RERFGI has scaled new heights with 78 activities conducted, expansion of incubation facilities through the Nirmiti Incubation Centre, growth of the IPR portfolio to 16 IPs (6 granted, 3 published, 7 filed), 2 technology transfers, and the establishment of 2 student-led startups under the council's guidance. The council's active participation in Smart India Hackathon 2024, where Team AquaVision reached the Grand Finale, stands as a testimony to the institution's national-level recognition.

From its modest beginning in 2020, the IIC Cell has steadily grown into a vibrant ecosystem that nurtures ideas, drives innovation, protects intellectual property, and creates pathways for commercialization and entrepreneurship, making Regent Education and Research Foundation a prominent name in the innovation

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landscape.

#### Diversified Representation in the IIC Established at the Institute:

The Institute Innovation Council (IIC) at Regent Education and Research Foundation Group of Institutions ensures inclusive and diversified representation, reflecting the institution's commitment to collaboration, interdisciplinarity, and holistic innovation. The council brings together faculty, students, and industry partners, creating a dynamic platform for entrepreneurial growth.

- Industry Representation: The IIC actively collaborates with industry experts and professionals who provide real-world perspectives, mentorship, and insights into the entrepreneurial journey. These connections help students and faculty align their innovations with industry demands and enhance prospects for commercialization.
- Interdisciplinary Representation: Members from diverse academic disciplines—including Engineering (CSE, EEE, EE, ME, ECE), Management, MCA, and Applied Sciences—are part of the council. This interdisciplinary approach ensures that innovation is not confined to one stream but benefits from the convergence of multiple domains, fostering creative problem-solving and broader applicability of solutions.
- Departmental Representation: Each department nominates faculty members, Innovation Ambassadors, and student coordinators to the IIC structure. In 2024–25, the council was further strengthened with a large student council of coordinators across all semesters and branches (CSE, EE, EEE, ME, MCA, ECE), entrusted with responsibilities such as Innovation, IPR, Startup, Internship, and Social Media coordination. This inclusive model ensures that innovation activities reach every corner of the institution.

Through this diversified representation, the IIC Cell at RERFGI has built a vibrant, participatory, and collaborative innovation ecosystem, enabling students and faculty from varied disciplines to work together on cutting-edge ideas, translate them into prototypes, and explore entrepreneurial ventures with real-world impact.

#### **Key Functionaries of the IIC Cell:**

The Institute Innovation Council (IIC) Cell at Regent Education and Research Foundation Group of Institutions is structured into two functional arms: the Faculty Council and the Student Council. Together, they ensure smooth execution of activities, mentoring, and ecosystem building.

- Faculty Council (12 Members): The Faculty Council provides leadership, guidance, and expertise in implementing innovation, entrepreneurship, and IPR initiatives.
  - o Dr. Suman Jana President, IIC Cell; NISP & ARIIA Coordinator
    - Strategic leadership and policy execution.

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- IA Training: Upskilled.
- o Dr. Arindita Saha Vice President, IIC Cell
  - Interdisciplinary collaboration and mentoring.
  - IA Training: Upskilled.
- o Dr. Kumaresh Halder Convener, IIC Cell
  - Operational coordination across departments.
  - IA Training: Upskilled.
- Mr. Bipul Dhali IPR Activity Coordinator
  - Leads awareness and facilitation of patent filings.
  - IA Training: Upskilled.
- o Ms. Shrabasti Roy Innovation Activity Coordinator
  - Drives innovation events and hackathons.
  - IA Training: Upskilled.
- Ms. Madhabi Ghosh NIRF Coordinator
  - Aligns innovation initiatives with ranking frameworks.
  - IA Training: Advanced.
- o Mr. Pulak Mazumdar Member
  - Supports innovation outreach.
  - IA Training: Nominated.
- Dr. Indrajit Debnath Member
  - Mentors interdisciplinary research and student projects.
  - IA Training: Nominated.
- o Mr. Rahul Das Member
  - Provides technical mentoring and guidance.
  - IA Training: Upskilled.
- o Mr. Sabyasachi Mukherjee Member
  - Startup mentoring and entrepreneurship facilitation.
  - IA Training: Advanced.
- o Ms. Abhilasha Shaw Member
  - Innovation awareness and student mentoring.
  - IA Training: Upskilled.
- o Mr. Chiranjit Ghosh Member
  - Mentorship and coordination of innovation clubs.
  - IA Training: Upskilled.
- **Student Council (31 Members):** The Student Council of the Institute Innovation Council (IIC), RERFGI, for the 2024–25 session consists of 31 members representing all major departments

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(CSE, EEE, EE, ME, ECE, MCA). The council ensures student-led ownership of innovation, incubation, and entrepreneurship activities.

- Student Convenor Provides leadership and ensures effective coordination among all student members.
  - Golam Zaid (CSE 5th Sem) Student Convenor & Innovation Coordinator, Innovation Cell.
- Innovation Coordinators Promote ideation, prototyping, and innovation challenges.
  - Pankaj Pandey (EEE 5th Sem)
  - Nayan Ghosh (EE 3rd Sem)
  - Tirthankar Bhattacharya (CSE 5th Sem)
  - MD Amirul Mallik (ME 5th Sem)
  - Sayan Roy, Payel Guin, Rupam Dutta, Gourab Das, Dipanjan Das (CSE 5th Sem)
- Startup Coordinators Support entrepreneurship, incubation activities, and student-led ventures.
  - Preity Purkait (EE 5th Sem)
  - Anirban Ghosh (CSE 5th Sem)
  - Anindita Sadhukhan (CSE 3rd Sem)
  - Bithika Pore (EEE 5th Sem)
  - Tisha Bin (CSE 5th Sem)
  - Antima Bera (ME 5th Sem)
  - Sohom Chatterjee (CSE 5th Sem)
- o IPR Coordinators Create awareness and assist in documentation and IP filings.
  - Arpan Halder (EEE 3rd Sem)
  - Goutam Mondal (CSE 3rd Sem)
  - Rupankar Das (CSE 5th Sem)
  - Amresh Kumar (EE 5th Sem)
  - Akash Swarnakar (EE 5th Sem)
  - Kartik Maiti (EE 3rd Sem)
- o Internship Coordinator Supports students in connecting with industry-led innovation internships.
  - Goutam Mondal (CSE 3rd Sem)
- Social Media Coordinators Publicize IIC activities, manage outreach, and showcase achievements.
  - Arojit Paul (CSE 3rd Sem)
  - Shibam Sarkar (EEE 5th Sem)
  - Snehasish Sarkar (CSE 5th Sem)
  - Aman Jha (ME 5th Sem)
  - Kalyan Ghara (EE 3rd Sem)

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- Kartik Maiti (EE 3rd Sem)
- Shyamsundar Maity (CSE 3rd Sem)
- Suvam Rakshit (MCA 1st Sem)
- Shramana Guin (ECE 3rd Sem)

### Portfolio of Resource Strength:

#### **Human Capital:**

Category	Details
Total No. of IIC Members	43
Total No. of IAs	17
Total No. of Faculty Mentors	10

2 REO

#### **Physical Capital:**

Unit Type	Details	
Pre-Incubation	1 Startup Cell – Startup Shala	
Units	SUM CALANDER OF	
Incubation Units	1 Nirmiti Incubation Centre	
IP Facilitation Unit	1 IPR & Technology Transfer Cell	
Total Incubatee	5 (AquaVision, CampusVibes, QbitQR, VeloCT, AgriVest)	

#### **Overall Resources:**

Resource Type	Number
IIC Members	43
Innovation Ambassadors	17
Faculty Mentors	10
Pre-Incubation Units	1
Incubation Units	1
IP Facilitation Units	1
Incubatee	4
Idea Generated	20

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IPR Filed	16
IPR Granted	6
Technology Transferred	2
Prototype Developed	4
Commercialised Ideas	4

#### Facilities and Infrastructure Supporting Innovation and Entrepreneurship:

- **Pre-Incubation and Incubation Facilities (2024–25):** The Regent Education and Research Foundation Group of Institutions has built a comprehensive innovation ecosystem that nurtures entrepreneurial ideas from conception to commercialization. This ecosystem is anchored by both pre-incubation and incubation facilities, ensuring structured support at every stage of the innovation journey.
  - O Pre-Incubation Facility: Startup Cell (Startup Shala): The Startup Shala serves as the entry point for student and faculty innovators. It provides an environment that encourages experimentation, brainstorming, and early-stage project development. Equipped with coworking spaces, mentorship sessions, and peer-learning opportunities, the Startup Cell enables innovators to validate their ideas, develop prototypes, and build business models. Through workshops, ideation camps, and hackathons, Startup Shala instills entrepreneurial confidence and prepares incubatees for advanced incubation support.
  - o Incubation Centre: Nirmiti Incubation Centre: The Nirmiti Incubation Centre is the flagship incubation unit of RERFGI. It supports ventures that have passed the initial ideation stage and are ready for scaling and market entry. Nirmiti offers dedicated office space, access to advanced technical and business mentorship, investor networking, legal and IP support, and funding facilitation. By bridging academia and industry, it creates opportunities for startups to transform their prototypes into impactful ventures, contributing both to the local community and to national-level innovation challenges.

#### • Current Incubatees (2024–25):

- AquaVision: AquaVision is an AI-powered sensory vehicle system designed for underwater monitoring and 3D mapping of aquatic ecosystems. By integrating smart sensors with autonomous navigation, the system provides real-time environmental data, pollution tracking, and ecological insights. AquaVision has applications in water resource management, marine biodiversity studies, and disaster preparedness, making it a vital solution for sustainable development and climate resilience.
- CampusVibes: CampusVibes addresses the growing need for student mental wellness by combining neuroscience with artificial intelligence. The startup is developing an AI-

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integrated helmet that analyzes neural signals to monitor stress, focus, and mental health indicators. This wearable solution aims to provide real-time feedback, early detection of mental health issues, and personalized interventions, contributing to improved academic outcomes and overall wellbeing.

- ObitQR: QbitQR is pioneering a post-quantum secure, chip-based 4D QR system designed for supply chain traceability. By embedding secure bubble files in hardware and integrating post-quantum cryptography with layered security protocols, QbitQR ensures that data remains tamper-proof and future-proof even against quantum computing threats. This solution has applications in pharmaceuticals, agriculture, logistics, and government records, setting a new benchmark for next-generation digital security.
- VeloCT: VeloCT provides an affordable, QR code-based system for the tracking and management of public transport. Designed to work even in resource-constrained settings, the system enables commuters to access transparent route and schedule information, while operators benefit from efficient fleet management. By promoting affordable smart mobility, VeloCT supports sustainable urban transport and strengthens public confidence in shared mobility systems.
- AgriVest: AgriVest leverages blockchain technology to deliver end-to-end traceability in the agricultural supply chain. By tokenizing farm produce and enabling secure, transparent transactions, AgriVest ensures farmers receive fair pricing and consumers gain confidence in product authenticity. The solution empowers rural communities by reducing middlemen exploitation, encouraging direct farm-to-market linkages, and fostering trust and sustainability in agriculture.

#### **Supportive Infrastructure:**

#### 1. IPR Cell:

- **Purpose:** The Intellectual Property Rights (IPR) Cell at Regent Education and Research Foundation Group of Institutions is dedicated to fostering awareness about intellectual property among students and faculty. It provides guidance on protecting innovations and facilitates the process of patent filing.

#### - Key Features:

- IP Awareness Workshops: Regular workshops to educate students and faculty about the importance of intellectual property and the process of securing it.
- Patent Filing Assistance: The IPR Cell offers hands-on support in drafting, filing, and processing patents, ensuring that innovations are protected from the outset.
- Consultation Services: Experts are available to provide personalized advice on IP-related matters, including patentability assessments and legal implications.

#### 2. Research & Development (R&D) Cell:

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- **Purpose:** The R&D Cell at Regent Education and Research Foundation Group of Institutions plays a pivotal role in driving research activities within the institution. It provides the necessary infrastructure and support for research projects, fostering a culture of innovation and scientific inquiry.

#### - Key Features:

- **Research Laboratories:** State-of-the-art labs equipped with the latest technology to support research in various fields, particularly in engineering and applied sciences.
- **Project Funding Support:** The R&D Cell helps secure funding for research projects, including grants from government agencies and industry partners.
- Collaboration Opportunities: Facilitates collaboration between faculty, students, and industry partners to work on cutting-edge research projects that have the potential to lead to new innovations and startups.
- **Publication and Patent Support:** Assists researchers in publishing their work in reputable journals and securing patents for their innovations.

#### 3. Robotics Club:

- Overview: The Robotics Club is an integral part of the institution's supportive infrastructure, focusing on the exploration and innovation in robotics and automation. While not a student body, it involves both students and faculty working together on advanced robotics projects.

#### - Key Activities:

- Robotics Workshops: Hands-on workshops that provide participants with experience in building and programming robots.
- Competitions: The club organizes and participates in various robotics competitions, offering opportunities to apply theoretical knowledge in practical scenarios.
- Collaborative Projects: Works on interdisciplinary projects that bring together students and faculty from different engineering backgrounds to develop innovative robotic solutions.

#### 4. NISP Cell (National Innovation and Startup Policy Cell):

- **Purpose:** The NISP Cell at Regent Education and Research Foundation Group of Institutions is responsible for implementing the National Innovation and Startup Policy, fostering an entrepreneurial ecosystem within the institution.

#### - Key Features:

**Policy Implementation:** The NISP Cell ensures that the guidelines of the National Innovation and Startup Policy are followed, promoting a culture of innovation and entrepreneurship.

**Startup Facilitation:** Supports startups by providing necessary resources and guidance as per the NISP framework, helping them navigate the challenges of the startup lifecycle.

Entrepreneurship Awareness Programs: Organizes events and workshops to raise awareness about entrepreneurship and the various opportunities available to students and faculty.

Linkage with External Bodies: Establishes connections with external incubators, accelerators, and

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funding agencies to provide startups with broader support and opportunities.

#### **Achievements of the Institute Innovation Council (IIC):**

The Institute Innovation Council (IIC) of Regent Education and Research Foundation Group of Institutions has made remarkable progress in strengthening its innovation ecosystem, fostering entrepreneurial thinking, and contributing to the national innovation landscape. The 2024–25 session reflects significant growth in the number of activities, intellectual property outcomes, technology transfer, and student-led startups.

- 1. Innovation & Entrepreneurship Activities
  - o Total Events Conducted: 78 activities, including:
  - o IIC Calendar Activities: 27 (Q1: 7, Q2: 7, Q3: 6, Q4: 7)
  - o MIC Driven Activities: 9 (Q1: 1, Q3: 7, Q4: 1)
  - o Celebration Activities: 8 (Q1: 3, Q2: 5)
  - o Self-Driven Activities: 34 (Q1: 10, Q3: 9, Q4: 15)
  - These activities covered ideation, innovation challenges, entrepreneurship development workshops, IPR awareness, industry interaction, and celebration of national innovation days.
  - Participation levels significantly increased compared to the previous year, indicating stronger engagement from both students and faculty.
- 2. Ideas, Prototypes, and Innovations
  - Ideas Generated: 20 new ideas from students and faculty were formally submitted to the innovation repository.
  - Prototypes Developed: 4 working prototypes were built, tested, and demonstrated during internal hackathons and exhibitions.
  - Innovations Verified: 1 innovation formally verified and approved under the national repository.
  - Several projects are now under further refinement for potential patent filing and commercialization.
- 3. Intellectual Property (IP) Achievements
  - Total IPs till date: 16 (compared to 12 in the previous year). Granted: 6, Published: 3, Filed: 7
  - These IPs span multiple domains including renewable energy, AI-integrated systems, water resource management, and secure digital technologies.
  - The institution has developed strong internal expertise in IP documentation, filing, and commercialization, guided by the IPR & Technology Transfer Cell.
- 4. Technology Transfer and Commercialization
  - 2 successful technology transfers facilitated this year.
  - 4 ideas commercialized, generating impact beyond the academic ecosystem.

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• These transfers reinforce the role of RERFGI as a technology enabler for industry and community applications.

#### 5. Startups and Ventures

- 2 new student-led startups were formally incubated under IIC in the 2024–25 session, joining the existing incubatee portfolio.
- With the addition of AquaVision, CampusVibes, QbitQR, VeloCT, and AgriVest, the institution now has 5 active incubatees under Startup Shala and Nirmiti Incubation Centre.
- These startups represent diverse domains including AI-driven underwater monitoring, mental wellness, post-quantum security, smart transport, and blockchain-based agricultural traceability.

#### 6. Participation in National Programs

- Smart India Hackathon 2024:
  - o 12 student teams participated.
  - Team AquaVision reached the Grand Finale, bringing national recognition to RERFGI's innovation capabilities.
- Continued participation in Ministry of Education's MIC initiatives, Atal Ranking of Institutions on Innovation Achievements (ARIIA), and adoption of National Innovation and Startup Policy (NISP) frameworks.

#### 7. Financial Investment and Support

Institutional funding was allocated for IPR filing, prototype development, and innovation awareness programs.

Student startups received incubation support in the form of infrastructure, mentorship, and access to investor networks.

#### 8. Recognition and Growth of Innovation Culture

RERFGI achieved a 3-star rating in the IIC Performance Report (2023–24: Score 53.41/100, Reward: 4.18).

The number of Innovation Ambassadors trained (faculty + students) grew to 17, strengthening leadership capacity across the institution.

More than 43 IIC members and 10 faculty mentors are now actively engaged in mentoring and guiding students.

The 2024–25 session has firmly established IIC RERFGI as a multi-dimensional innovation ecosystem, producing tangible outcomes in IP, technology transfer, and startup creation. The institution's achievements showcase its commitment to aligning with national innovation priorities while ensuring that innovation and entrepreneurship become an integral part of academic culture.

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# **Notable Faculty and Student Achievements within the IIC:** Faculty Members:

- **Dr. Suman Jana President, IIC Cell:** Dr. Suman Jana is a distinguished faculty member with over 20 journal publications and 12 patents. His expertise in innovation has led to the granting of 3 patents, the publication of 6, and the successful transfer and commercialization of 4 technologies. His leadership in the IIC has been instrumental in driving the institution's innovation agenda.
- **Dr. Arindita Saha Vice President, IIC Cell:** Dr. Arindita Saha has made significant contributions to research and innovation, with more than 35 journal publications and 3 patents to her name. In addition to her scholarly achievements, she has generated several innovative ideas, furthering the mission of the IIC to foster a culture of innovation and entrepreneurship.

#### **Student Members:**

- Golam Zaid: Golam Zaid is an enterprising student member of the IIC who has generated an innovative idea that has been recognized at a national level. He holds a patent for his idea, which was selected for the prestigious Smart India Hackathon 2024, where his team secured the runner-up position.
- **Arojit Paul:** Arojit Paul, a proactive student innovator, has made notable contributions by generating a unique idea that led to a patent. His participation in the Smart India Hackathon 2024 resulted in his team achieving the runner-up position, showcasing the practical application of his innovation.
- Goutam Mondal: Goutam Mondal is a dedicated IIC student member who has demonstrated his innovative prowess by contributing to the generation of a patented idea. His participation in the Smart India Hackathon 2024 culminated in a runner-up position, marking a significant achievement in his academic and entrepreneurial journey.

#### **Selected Best Innovations:**

#### 1. AquaVision

Inventors: Dr. Suman Jana and Mr. Chiranjit Roy

AquaVision is an AI-powered waterbody monitoring system designed to revolutionize water quality management and environmental protection. This innovative system integrates real-time IoT-enabled sensors, AI-driven predictive analytics, and advanced 3D mapping to provide comprehensive



insights into aquatic ecosystems. AquaVision monitors key water quality parameters, generates high-resolution 3D maps of underwater terrains, and predicts future changes, enabling proactive water resource management.

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#### 2. Rainfusion

Inventors: Dr. Suman Jana and Dr. Arindita Saha

Rainfusion introduces an innovative, AI-driven system that integrates solar energy and rainwater harvesting for sustainable green hydrogen production. Utilizing diagonally adjustable solar panels and a dual-stage filtration system, Rainfusion optimizes sunlight capture and water usage, ensuring efficient hydrogen generation.

#### 3. AquaFusion

Inventors: Dr. Suman Jana and Mr. Sandeep Chakraborty

AquaFusion is an innovative floating platform that integrates wave, solar, and wind energy harvesting with AI-driven environmental monitoring. Designed for autonomous operation in marine environments, AquaFusion provides continuous renewable energy while performing real-time wave analysis and oil spill assessment. The platform's unique combination of multi-source energy generation and advanced AI analytics makes it a comprehensive solution for sustainable energy production and proactive environmental protection in offshore and coastal areas.

### Selected Startups Established by Students/Faculty:

#### 1. School Dekho

Founders: Mr. Raju Kr. Shaw

School Dekho is a dynamic platform designed to connect students with schools, offering detailed insights and reviews to guide their educational choices. This startup has quickly gained popularity for its comprehensive database and user-friendly interface, making it a go-to resource for parents and students alike.

#### 2. Career and Courses

Founders: Ms. Debika Bhakat

Career and Courses offers a range of educational resources and career counseling services, supporting students in their academic and professional development. This startup focuses on providing personalized guidance and tools to help students navigate their educational and career paths effectively.

#### **Breakthrough Innovations/Technologies:**

**1.** Hybrid Floating Device for Harvesting Solar, Wind, and Wave Energy: Developed by Dr. Suman Jana and his team, this hybrid floating device is an advanced platform capable of harnessing energy from solar, wind, and wave sources simultaneously.

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- **2. AI-Powered Waterbody Monitoring System (AquaVision):** AquaVision, created by Dr. Suman Jana and Mr. Chiranjit Roy, is an AI-powered system designed to revolutionize water quality management and environmental protection.
- **3. Rainfusion: AI-Driven Green Hydrogen Production System:** Rainfusion, developed by Dr. Suman Jana and Dr. Arindita Saha, is an innovative system that combines solar energy and rainwater harvesting for sustainable green hydrogen production.

#### **Participation in Various Government Programs:**

The Institute Innovation Council (IIC) at Regent Education and Research Foundation Group of Institutions has actively participated in several Central and State Government initiatives, furthering our commitment to innovation and entrepreneurship. Below are the key highlights of our participation:

- 1. Government of India and MIC-Driven Activities:
- **Participation:** Our institution has actively participated in almost 7 activities driven by the Ministry of Education (MoE) and the Government of India. These activities have been crucial in aligning our innovation and entrepreneurship goals with national priorities.
- 2. Atal Ranking of Institutions on Innovation Achievements (ARIIA):
- Participation and Rank: We have been consistently participating in ARIIA, demonstrating our commitment to fostering a culture of innovation. While we are continuously striving to improve our rank, our participation in ARIIA reflects our dedication to benchmarking our institution's innovation ecosystem against national standards.
- 3. National Innovation and Startup Policy (NISP) Adoption:
- NISP Adoption Status: We have adopted the Ministry of Education and Government of India's NISP 2019 policy. Our faculty members have been trained under this policy, and we are currently in the process of formulating and implementing our own institutional policy, closely aligned with the government's framework. This policy will guide our efforts in fostering a robust startup culture within our institution.
- 4. Smart India Hackathon (SIH):
- 2023 Participation: In 2023, we participated with 4 teams, each presenting unique and innovative ideas. We are proud to highlight that one of our teams achieved the runner-up position, showcasing the high caliber of innovation at our institution.
- **2024 Participation:** As part of IIC 6.0, we have significantly scaled up our participation for the 2024 session, with 12 teams presenting 20 ideas. This increased involvement underscores our growing emphasis on student-driven innovation and our commitment to competing at the highest levels.

#### **Testimonials:**

**Dr. Suman Jana, President, IIC Cell:** "Being part of the IIC has been an incredibly enriching experience. It has empowered our institution to nurture innovative ideas and convert them into impactful solutions. The guidance from MoE's Innovation Cell has been invaluable in shaping our strategies and achieving

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our innovation goals."

**Dr. Arindita Saha, Vice President, IIC Cell**: "The IIC at our institution has been a catalyst in transforming the entrepreneurial landscape among our students and faculty. The support from MoE's Innovation Cell has been instrumental in guiding us toward creating a robust innovation ecosystem that is not just a part of our curriculum but a core aspect of our academic culture."

**Dr. Sudip Basack, Principal:** "The establishment of the IIC has significantly elevated the research and innovation activities within our institution. Our collaboration with MoE's Innovation Cell has provided us with the right framework to encourage and support entrepreneurial initiatives among our students and faculty."

Mr. Milan Majumder, Principal, Regent Institute of Science and Technology (RIST): "The IIC has been instrumental in fostering a culture of innovation at RIST. The resources and guidance from MoE's Innovation Cell have empowered our students and faculty to think creatively and pursue their entrepreneurial aspirations with confidence."

Mr. Arka Banik, Student Member, RERFGI: "Being a part of the IIC has been a game-changer for me. The opportunities to innovate and the support to turn ideas into reality have been immense. I am grateful for the platform provided by the IIC and MoE's Innovation Cell to showcase and develop my ideas."

Mr. Avishek Majumder, Student Member, RERFGI: "The IIC has opened doors to a world of innovation and entrepreneurship for us students. The mentorship and resources provided have helped me grow my ideas and achieve recognition at national platforms like Smart India Hackathon. The impact of IIC on my academic journey has been profound."

**Dr. Pabitra Kumar Biswas, Associate Professor, NIT Mizoram:** "The collaboration with the IIC at Regent Education and Research Foundation Group of Institutions has been highly productive. Their commitment to innovation and entrepreneurship, supported by MoE's Innovation Cell, is evident in their consistent efforts to foster a thriving startup culture among their students and faculty."

**Dr. Roystan V. Castelino, General Manager, R&D, Ola Electric:** "The IIC at Regent Education and Research Foundation has set a benchmark in promoting innovation and entrepreneurship. Their proactive approach, supported by MoE's Innovation Cell, has led to the development of several groundbreaking ideas and startups that have the potential to create significant impact in the industry."

Mr. Prodip Mukhopadhyay, Former Managing Director, Webel: "The IIC at Regent Education and

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Research Foundation Group of Institutions stands out for its dedication to nurturing innovation and entrepreneurship. The strategic guidance from MoE's Innovation Cell has played a crucial role in their success, and it's inspiring to see the tangible outcomes of their efforts in the form of student and faculty-led startups."

#### **Contact:**

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#### **Photographs:**



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