



RICH COMMUNIQUÉ

A quarterly digest of happenings
at Research and Innovation
Circle of Hyderabad



COVER STORY

RICH Partners with Vaagdevi Incubation and Business Accelerator to Strengthen their Research and Innovation Ecosystem

In October 2020, RICH, an expert at facilitating collaboration and resource exchange, signed an MoU with VIBA, where the two organisations committed to foster R&D and innovation ecosystems and further mentor start-ups in the agriculture sector.



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COVER STORY

RICH Partners with Vaagdevi Incubation and Business Accelerator to Strengthen their Research and Innovation Ecosystem

In 2019, the Vaagdevi Group of Colleges set out to strengthen their existing research and innovation ecosystem and their business incubator arm Vaagdevi Incubation and Business Accelerator (VIBA). Within a year, they sought to expand their impact by partnering with experienced incubators/organisations to build a thriving research and development (R&D) and innovation ecosystem, primarily for their students. So, in October 2020, RICH, which has proven expertise in the research and innovation development space, signed an MoU with VIBA, where the two organisations committed to foster R&D and innovation ecosystems and further mentor start-ups in the agricultural sector.

As initial steps towards building an R&D ecosystem, RICH surveyed the research being conducted by the professors and students at Vaagdevi colleges. Based on the survey, RICH identified potential researchers and students, who could present their ideas and proposals to VIBA. Ten of these were selected for further growth through mentorship, funding, product development, and incubation support by VIBA.

To begin fostering an innovation ecosystem, RICH facilitated the Agro-Industry Research Roundtable in April 2021. This conference was attended by 51 researchers, 40 farmers, 4 industrialists, and 20 agriculturalists. All attendants weighed in on the problems faced in agriculture, particularly in the Warangal district. And at the end of the conference, a total of 40 farming challenges were identified.

Following this, on 14th and 15th March 2022, RICH and Vaagdevi Group of Colleges organised the Agri-Hackathon. The competition invited all farm innovators in India—including researchers, students, start-ups, agro-companies, NGOs, farmers, and other independent participants—to bring ideas and prototypes aimed at solving the top 10 of the 40 farming challenges identified at the Roundtable.

The event also doubled up as a platform for these participants to interact with representatives of government—who committed to scaling up the winning ideas—and experts from a variety of agriculture-related industries, such as spice and rice. The participants further had the benefit of mentorship from these experts and others to build and improve upon their prototypes before presenting them to online and offline juries comprising eminent personalities.





The event was a success, with 120 participants and 5 winners. The winners received sizable prize money and incubation support from either VIBA or Atal Community Innovation Centre—Chaitanya Bharati Institute of Technology (ACIC-CBIT), Hyderabad.

With the Agri-Hackathon, RICH and VIBA are well on their way to fulfilling their roles under the MoU signed in 2020, and this is only the beginning of a lasting collaboration. RICH is set to conduct many more events aimed at identifying ideas, prototypes, and research projects with the potential to be scaled through proper mentoring and taken to the market for the benefit of the agricultural community on the ground. RICH also aims to partner with more educational institutions to create innovation hubs that support and foster start-ups.

The ultimate goal is to create a robust network between innovators, researchers, institutions, organisations, and the government, such that the collective impact is felt not only by college students, but across Telangana and India.



Fostering Research and Innovation

Organised an R&D Day

Research proposals

50

Received

41

Evaluated

09

From VIBA-funded projects

14

From internal projects

Conducted an Agro-Industry Research Round Table

Participants

51

Researchers

40

Farmers

04

Industrialists

20

Agriculturists

Farming challenges identified: 40

Organised Agri-Hackathon to Solve 10 of these Challenges

Participants

257 Total



64

Student teams



23

Women teams



01

Rural innovators

Winners



Smart Farmers
Konthexa



Agri-Warriors
Dharini



4th Revolution

INITIATIVES

RICH–Acceleration Initiative for Diagnostics Chooses Eight Start-Ups as Its 2nd Cohort

In 2021, RICH began the Acceleration Initiative for Diagnostics (AID) programme to support start-ups in the MedTech domain and help address the challenges they face, such as lack of facilities for product development and testing, understanding regulatory requirements, support in clinical validation, and fundraising.

Speaking of the larger goal behind RICH–AID, Rashmi Pimpale, CEO of RICH, says, “RICH hopes to bring new ideas, through start-ups, into an already fertile ecosystem of industry, hospitals, clinicians, and mentors that Telangana has.”

Under the AID programme, selected start-ups receive an acceleration grant of ₹1 lakh each; incubation support from Atal Incubation Centre, Centre for Cellular and Molecular Biology (AIC–CCMB) and I-Venture@ISB; access to test beds under Project Tej's (another project by RICH) partner hospitals; and one-on-one mentorship from technical and business experts and vital connects with potential investors and industry.

To this end, RICH has onboarded over 22 mentors encompassing various expertise areas: technology, regulatory, clinical validation, business, operations, manufacturing, and sales. The mentors also include clinicians and healthcare professionals, investors, and others.

In February 2022, RICH announced the 2nd cohort of 8 start-ups. These start-ups span in the fields of point-of-care devices, wearable devices, psychometrics, nanotechnology, affordable devices, non-invasive tests, cloud-based analytics, and more.

“With this second cohort of the AID programme, we hope to continue to engage with and help transform the diagnostics space in Telangana,” says Ms. Pimpale.

At present, these start-ups have received their prize money and are undergoing tailored workshop and mentoring sessions on regulatory requirements, based on their needs. They will be guided on clinical validations, product development, and fundraising as well going forward.

Acceleration Initiative for Diagnostics - Cohort 2



Online psychometric testing software for behavioral health professionals



Non Invasive Blood Glucose Monitoring



Cloud based tool for 3D brain MRI image quality analysis

VisBio Technologies Private Limited

A point-of-care colposcope and an operating tool for examination



Deciphering molecular internet of the brain through nature's own tweets (exosomes).



Device for detection of three most prevalent mosquito borne diseases



Intignus Preeclampsia Screening Test



an AI powered wearable device to monitor real-time signals and in-depth insights on the vitals of an individual

INITIATIVES

RICH Signs MoU with British Council to Strengthen Telangana–UK Collaboration in Education, the Arts, and Innovation



In February 2022, RICH and the British Council signed a 3-year MoU aimed at internationalising higher education in Telangana, increasing mobility of people and resources between the two countries, and overall, continuing a partnership founded on great trust and success between the governments of Telangana and the UK.

Within the partnership, the British Council will act as a key knowledge partner for RICH, facilitating partnerships between RICH and UK higher education institutions in the areas of life sciences and pharmaceuticals, food and agriculture, and sustainability. Both the British Council and RICH will deploy innovation and entrepreneurship initiatives such as sharing best practices and developing courses on skill-building among the Telangana youth.

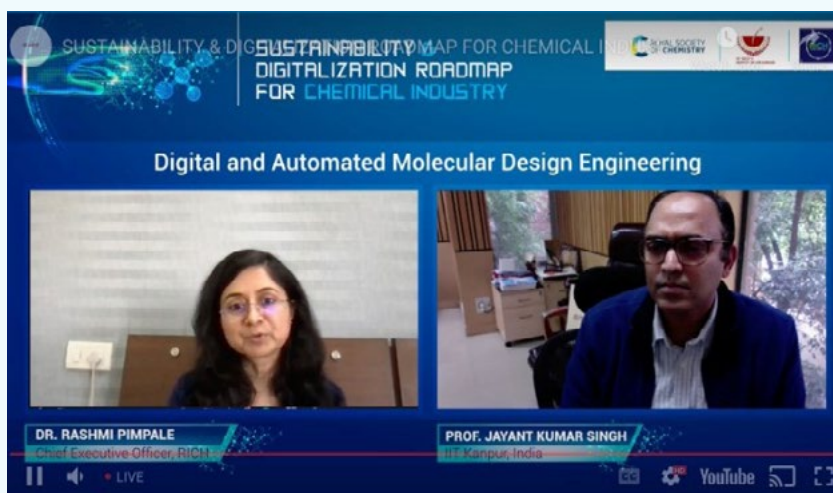
Shri Jayesh Ranjan, Principal Secretary to the Government, Department of Industries and Department of Commerce, Information Technology, Electronics, and Communication, said: *"Our vision for the state of Telangana is to be full of opportunities for its youth. We are glad to have found a partner in the UK that understands our philosophy and is able to work with us to achieve our vision."*

Shri Ajit Rangnekar, Director General, RICH, says: *"Going forward, we want to make Telangana and Hyderabad the preferred location in the world for anything related to the life sciences, including sustainability and personalized medicine. The UK and India have been at the forefront in this sector, given the vaccine discovery and production. With large number of universities already in place, our focus will now be to help create centres of excellence. We are actively working with universities in the UK to foster collaborations that are mutually beneficial."*

EVENTS

Industry-Academia Conclave: Enabling Discussions on Sustainability and Digitisation in Chemical and Pharmaceutical Industries

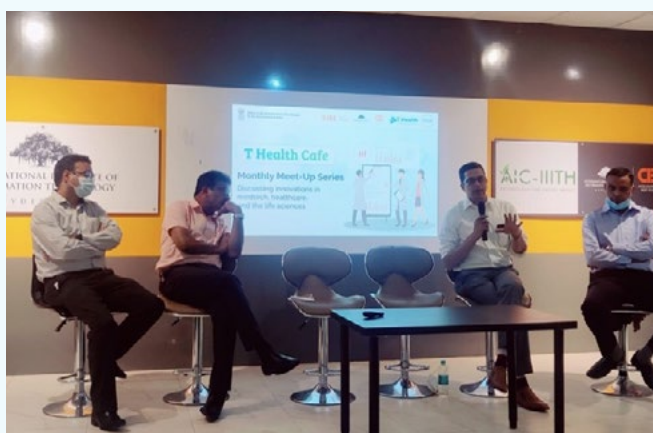
On 1st and 2nd February 2022, RICH organised an online conclave in collaboration with Dr. Reddy's Institute of Life Sciences and the Royal Society of Chemistry to discuss recent advancements in the design, creation, and implementation of digital and sustainable practices across the industry. The event saw several sessions by experts from industry, academia, the research community, and start-ups on how digitisation and technological innovation is leading to more sustainable practices throughout the industry. There was also a special session for start-ups to showcase innovations across biotechnology, drug discovery, the immunisation supply chain, cleantech, and waste management.



Know more here: <https://rich.telangana.gov.in/News-and-Events.html>

T Health Café: A Monthly Meetup Series for the MedTech Ecosystem

RICH and OJAS MedTech at CIE International Institute of Information Technology Hyderabad have partnered to organise the T Health Café, a monthly meetup series for research institutes, hospitals, start-ups, and incubators in the MedTech ecosystem to discuss grant writing, prototype development, clinical validations, access to samples, Go-to-Market services, and funding opportunities. The first meetup took place on 31st March 2022 at the CIE-IIIT campus and included insightful conversations by expert panellists on the role of hospitals in MedTech. The second meetup just took place on 29th April 2022.



Know more here: <https://cie.iit.ac.in/events/t-health-cafe/>

COLLABORATIONS

Joining Hands with Evergreen Energy Enterprises Inc.

In an attempt to contribute to the National Mission on Oilseeds and Oil Palm (NMOOP), RICH, in February 2022, partnered with Evergreen Energy Enterprises Inc. to build and deploy a unique service platform for farmers involved in the cultivation of oil palm in Telangana. Under the MoU, both organisations are working to identify start-ups with technology that can be used to enrol farmers on a farm management platform, apply blockchain to monitor oil palm plants across their lifetimes, use drones to create land use plans, use IoT for precision irrigation, etc. The platform will serve as one stop solution for all cultivation needs for oil palm farmers.



Know more here: <https://rich.telangana.gov.in/News-and-Events.html>

Partnering with the Agri Collaboratory to Support Agri-Innovations

In March 2022, RICH signed an MoU with The Agri Collaboratory (TAC) to accelerate the development of an open-source information sharing ecosystem. It is a unique platform where government organizations, private sector firms, research institutes, and agro-companies can share and promote innovations in the food and agri-industry, thereby supporting innovation.



Know more here: <https://rich.telangana.gov.in/News-and-Events.html>

START-UP SPOTLIGHT

Under National e-Governance Plan in Agriculture (NeGPA), RICH, along with Professor Jayashankar Telangana State Agricultural University (PJTSAU), has been supporting the piloting of agri-technologies to solve farming problems such as nutrient management, irrigation management, crop monitoring, farm automation, farm monitoring, and traceability. Last year, as a part of this project, RICH

began supporting a Secunderabad-based start-up, Aquastride, for the pilot of their flagship product, WaterVise.

This is a smart irrigation system that uses artificial intelligence to monitor soil, crop, and weather conditions in the field; computes the optimal amount of irrigation needed; and automatically irrigates the field. Through a web-based application, it makes recommendations on the optimal irrigation needed, and at the end of an agricultural season, reports the water use efficiency for that cycle in that field.

At the end of last month, Aquastride successfully conducted field pilots on one of the three crops—groundnut, maize, and grapes—in the Meheshwaram district of Telangana. The findings and learnings from these pilots are being recorded and will be used to further scale the product.

Read more on Aquastride here: <https://aquastridetech.com/>



In March 2022, Briota, a start-up that was a part of the AID first cohort, was honored with the “Excellence in Innovation Award for Healthcare Start-Up of the Year 2021” at the Organisation of Pharmaceutical Producers of India (OOPI) Annual Summit.

Briota is a Pune-based start-up specialising in lung health. It has created programmes for asthma, COVID-19, and chronic obstructive pulmonary disorder patients requiring lung power rehabilitation. It has also manufactured an artificial intelligence and machine learning based inhaler and a portable spirometry device.

The co-founder of Briota, Aditi S. Pais, was recently invited as a Tech Supergirl to Techversify 2022, a tech summit in Delhi, where she gave a speech. At the summit, Briota also received the award for Best Health-Tech Innovation Company.

Read more on Briota here: <http://www.briota.co/>

RICH IN THE NEWS

An article authored by Rashmi Pimpale, Chief Executive Officer, RICH, and Manisha Bhinge, Managing Director, Programmes and Partnerships, Health Initiative, the Rockefeller Foundation, titled **“Demand forecasting: A vital tool to enable India’s COVID-19 testing industry to be response ready”** has been published on ETHealthWorld. The article talks about how diagnostic testing is critical to India’s COVID-19 pandemic strategy.

Read the article here: <https://health.economictimes.indiatimes.com/news/industry/demand-forecasting-a-vital-tool-to-enable-indias-covid-19-testing-industry-to-be-response-ready/88745764>

Message from Our Sustainability Director

“Since its inception in 2017, RICH has spearheaded several initiatives in agriculture and the life sciences. In line with India’s renewed emphasis on achieving net zero emissions, we have been taking rapid strides in the integration of clean energy, electric mobility, and circular economy. Comprehensive engagement involving these areas can help develop a robust ecosystem with sustainability at its center. Therefore, it was a natural choice for us to focus on sustainability in the context of energy, e-mobility, and circular economy. As John C. Sawhill very eloquently put it, ‘A society is defined not only by what it creates but by what it refuses to destroy.’ RICH is committed to finding more environmentally sustainable, economically viable, and socially beneficial approaches to conducting business than the current ways.”



Srinivas Cherla
Director, Sustainability

