



SCIENCE & TECHNOLOGY CLUSTER

# BCKIC NEWSLETTER

**JANUARY - FEBRUARY 2024** 

### "Catch Them Young" event on National Startup Day

- Establishment of CoE on Molecular Diagnostics with ThermoFisher Scientific
- Mastering Bioprocessing on Recombinant Protein Purification
- Exploring Odisha's Marine Resources with National Conference on Blue Economy
- Forging Partnership with UK-India Critical Minerals Workshop

9th Jan 2024

## **INSIGHTS FROM BCKIC'S PRMC MEETING**

Shaping the Future of Technology Deployment and Collaborative Initiatives







The PRMC 11th meeting was convened for BCKIC Foundation on 9th Jan 2024. In this meeting, key discussions and strategic reviews took place, shaping the trajectory of ongoing projects and fostering collaborative initiatives.

The committee members offered valuable feedback, contributing to our continuous improvement and their recommendations will be instrumental towards greater success and societal impact.

One meeting highlight was the launch of the BCKIC Annual Impact Report 2023. This report sets the stage for BCKIC to evolve into a dynamic hub for technology validation and deployment, reaffirming our commitment to innovation.

### **IGNITING INNOVATION**

#### BCKIC Celebrates National Startup Day with 'CATCH THEM YOUNG' Event

BCKIC Foundation on "National Startup Day" organized an event "CATCH THEM YOUNG," at KIIT International School in collaboration with KIIT-Technology Business Incubator.

70+ enthusiastic students participated in a dynamic Idea Pitching Hackathon and Science Projects & Innovation Showcase, with over 120 attendees joining in the event. A significant milestone was achieved with the signing of a MoU between BCKIC Foundation and KIIT International School, setting the stage for future collaboration.











The event featured enlightening master sessions on Design Thinking and Effective Science Communication, a captivating storytelling session by startups, an interactive Q&A session, and an introduction to FICCI FLO. The day concluded with an Award Distribution ceremony, recognizing the outstanding contributions of participants.

The entrepreneurial spirit was palpable throughout the event, showcasing the dedication and creativity of the participants, mentors, and supporters. Together, we are poised to reach new heights and contribute to making the world a better place.



#### MASTERING BIOPROCESSING

### BCKIC's Hands-On Training Program Delivers Expertise in Recombinant Protein Purification

BCKIC Foundation in collaboration with KIIT-TBI, organized a training program on "Downstream Bioprocess Development on Recombinant Protein Purification and Characterization." on January 26th, 27th & 28th, 2024, at the KIIT-TBI Bioprocess Facility. It aimed to equip participants with essential skills in downstream techniques crucial for industrial recombinant protein production.

The weekend certified training program provided 33 participants with a comprehensive understanding of various downstream techniques. This immersive workshop was tailored for students pursuing microbiology/biotechnology degrees, serving as a platform for skill development.

#### The objectives of the training encompassed:

- Hands-on training on FPLC AKTA Pure & UNICORN7 software.
- Crude protein extraction from recombinant bacterial cells.
- Affinity chromatography for His-tag recombinant protein purification.
- Size Exclusion Chromatography for desalting.
- Gel Permeation Chromatography for protein characterization.
- SDS-PAGE for protein profiling.

Feedback from the participants highlighted their high satisfaction with the workshop, indicating its effectiveness in enhancing their skills and knowledge in downstream bioprocessing.









## TRANSFORMING SCIENCE WITH CUTTING-EDGE TECHNOLOGY

## Molecular Diagnostics Centre of Excellence and Strategic Partnerships with ThermoFisher Scientific

BCKIC Foundation, as a knowledge partner, established a cutting-edge Centre of Excellence on Molecular Diagnostics at KIIT Technology Business Incubator, with the generous support of ThermoFisher Scientific, inaugurated on February 6, 2024.

This initiative signifies a significant leap in fostering innovation. This state-of-the-art facility aims to drive advancements in Molecular Diagnostics.



The centre will not only serve as a hub for groundbreaking technologies but also prioritize training and capacity building for future innovators. Featuring High Throughput Screening Platforms, Imaging Platforms, Flow Cytometry Platforms, and more, it promises to revolutionize scientific research and technological innovation.







### **EXPLORING BLUE HORIZONS**

## National Conference on Blue Economy Sets Course for Sustainability, Hosted by BCKIC

A 2-day National Conference on Blue Economy, organized by BCKIC Foundation in collaboration with KIIT, DBT- ILS, CSIR-IMMT, CSIR-NIO Goa, and the Indian Phycological Society, was held at KIIT - Kalinga Institute of Industrial Technology on 19th- 20th Feb 2024. The event gathered significant attention.

The conference was graced by esteemed guests, from the ministry, academia, and industry, including Sh. Ashok Chandra Panda, Hon'ble Cabinet Minister of Science and Technology, Govt of Odisha, Dr (Mrs.) Parvinder Maini, Scientific Secretary to the Office of the Principal Scientific Adviser to the Government of India, Dr Achyuta Samanta, Founder of KIIT & KISS, Dr M V Ramana Murthy, MoES., Dr Jitendra Kumar , MD, DBT BIRAC, Prof D B Sahoo, President Indian Phycological Society, Dr Ajit Pattnaik, Consultant at World bank and ADB, Dr Debasis Dash, Director DBT-ILS, Dr. Ramanuj Narayan, Director CSIR-IMMT, Dr. Sunil Singh, Director CSIR-NIO Goa.







Technology Pitching



Poster Presentations



Startup Showcasing







Discussions revolved around the potential and challenges of the blue economy, highlighting themes such as Marine Industries, Marine biomanufacturing, Climate Change, Disaster Management, Artificial Intelligence in the Marine Ecosystem, Deep Sea Mining, Biodiversity Conservation, and many more.

Organizing this underscores Odisha's commitment to fostering innovation and sustainable development in marine industries.

We anticipate future collaborations and initiatives to further enhance our understanding and utilization of marine ecosystems for a sustainable future.











#### FORGING PARTNERSHIPS

#### UK-India Workshop on Critical Minerals for Green Technologies

The UK-India Industry-Academia Scoping Workshop on Critical Minerals (Exploration and Extraction) was held on 26-28th February, organized by the Foundation, an initiative of the Office of the Principal Scientific Adviser to Government of India, and the Centre for Process Innovation (CPI), UK at KIIT University under the UK-India Critical Minerals Partnership initiative, supported by the British High Commission in India.

The workshop brought together a diverse array of stakeholders from academia, government, and industry sectors to address the growing global demand for critical minerals essential for low-carbon technologies. It emphasized the importance of collaboration between the UK and India to identify and address grand challenges and leverage expertise for sustainable solutions.



More than 60 participants, including 27 from the UK, from academia, R&D organizations, industries, policymakers, and startups deliberated on various aspects of the theme. Mr. Joshua Bamford, Head of Tech, and Innovation at the British High Commission in New Delhi, extended a warm welcome to all stakeholders, setting the stage for the discussions ahead. Mr. Sunil Kumar, adviser the British senior at High Commission, coordinated the workshop. Dr. Achyuta Samanta, Founder of KIIT & KISS, mentioned that such a gathering of high-level intellectuals from countries on the focused theme will bring various opportunities.



The workshop featured esteemed speakers; Mr. Joseph Mansour, Team Lead, Indo-Pacific & Critical Minerals Delivery International Energy Unit, Ms. Anna Gibbons, Department for Business and Trade, UK Government, Prof. Paul Anderson, Director, University of Birmingham, UK, Dr. Garry Clawson, University of Cambridge, Dr. Sanak Mishra, former president-Indian National Academy of Engg, Dr Ramanuj Narayan, CSIR-IMMT, Dr. Elisabetta Mariani, University of Liverpool, Dr. Sam Brandon-Fendley, Camborne School of Mines, Dr. David Polya, University of Manchester, Dr. Anupam Agnihotri, Director, JNARDDC, Mr. John Willis, SRK Consulting, Mr. Kutty, CSO, Tata Motors, Mr. Jon Watson, Metatek, UK, Dr. Adrian Finch, University of St. Andrews, Dr. Martin Smith, University of Brighton, Dr. Paul Cornick, University of Birmingham, Dr. Robert Mitchell, CPI UK, Dr. Lousie Horsfall, University of Edinburgh, UK, Mr. Greg Bogie, Commercial Director, Mr Niall Ahern, Department for Business and Trade, UK Govt, Green Lithium, UK, Dr. Mr. Isabel Schenk, Watercycle Technologies, Dr Chinmaya Sarangi, CSIR-IMMT and others.





The workshop featured engaging sessions highlighting challenges and opportunities in critical mineral exploration, extraction, and surveying methods for the transition to green energy, emphasizing sustainable supply chains and ESG principles. Discussions covered investment opportunities, novel exploration approaches, recycling innovations, and the role of government fostering industry-academia partnerships. **Participants** explored strategies to accelerate transformative changes and leverage exploration potential.



Delegates engaged in insightful site visits to **Jindal Stainless (JSL)**, Kalinganagar, Jajpur, and **CSIR-Institute of Mining and Minerals Technologies (CSIR-IMMT)**, Bhubaneswar, facilitating discussions on metal extractions, latest research advancements, and potential technology collaborations.









The workshop emphasized collective action and tangible technology solutions to address critical mineral challenges, stressing the need for bridging the industry-academia gap to commercialize technologies, initiate research programs, and build capacity in mining and geology. forward, stakeholders Moving committed to continuing collaboration, innovation. driving sustainable and solutions to meet the global demand for critical minerals.















#### VISITOR ENGAGEMENT

#### **Fostering Innovation Through Collaborations**





#### 19th Feb 2024

BCKIC Foundation, hosted the UNOPS team from New Delhi, including Sh. Ramesh Chandra, Sh. Jyoti Shankar Choudhary, and Sh. Nilakantha Bhoi. Their visit to BCKIC Foundation and KIIT-TBI was enlightening, as we explored collaborative opportunities. Meeting with Dr. Achyuta Samanta, Founder of KIIT & KISS, they expressed a keen interest in building strategic partnerships for community development and technology deployment. Such engagements highlight the potential for impactful collaborations, paving the way for transformative initiatives.



#### 28th Feb 2024

BCKIC Foundation hosted Sh. Jyotin Kutty Sastabhavan. Vice President and Sustainability Officer of Tata Motors Ltd. His visit marked a significant step towards strengthening fostering innovation and industry-academia partnerships. During the meeting, we had a fruitful discussion about startup technology deployment programs and the importance of strategic collaboration. At BCKIC Foundation, we believe that strategic focused collaboration and can drive transformative change. We are excited about the possibilities that lie ahead and look forward to exploring new avenues for collaboration with Tata Motors Ltd.



#### **ANNOUNCEMENT**

#### **UK India HealthTech Bootcamp 2024**

In association with the **British High Commission** in India and KIIT-TBI, BCKIC Foundation is thrilled to announce the launch of the **UK-India HealthTech Bootcamp 2024**. Building on the success of last year's program, this year's bootcamp promises to be even bigger and more impactful.

The bootcamp aims to empower Indian companies by providing insights into the UK's health ecosystem, helping them develop robust market access strategies, and facilitating potential overseas partnerships. It serves as a launchpad for startups and companies to gain the necessary knowledge and connections for growth in the UK's health market.



## **Program Details:**

#### STAGE 1

Top **30 companies** will participate in a fully funded 3-day HealthTech Bootcamp in Bhubaneswar in the second half of May.

#### STAGE 2

**6 companies** from the initial cohort will be selected for a fully funded, bespoke 5-day program in the UK.

#### **Registration Details:**

Registration Link: https://lnkd.in/gRWhz3RE
Registration Deadline: 15th March 2024
For more details visit us at: https://lnkd.in/gWJmEwUj
Join us on this exciting journey to accelerate your HealthTech Innovation and Global Expansion.



# **Bhubaneswar City Knowledge Innovation Cluster Foundation (BCKIC)**

BCKIC Foundation, Section 8 Company is the bonafide legal entity of the Bhubaneswar City Knowledge Innovation Cluster, an initiative of the Office of the Principal Scientific Adviser to the Government of India.

Email: chairman@bckic.in | ceo@bckic.in www.bckic.in