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FROM THE EDITOR'S DESK



April is the cruelest month, wrote T. S. Eliot in his poem The Waste Land. While the soaring summer temperatures of recent years make us echo similar sentiments, it was business as usual at K-DISC as we **Dr. P. V. Unnikrishnan** launched exciting new programs,

imbibing the spirit of the World Creativity and Innovation Week. Celebrated worldwide from 15th to 21st April, the week begins on the birth anniversary of the fifteenth century Italian polymath Leonardo da Vinci. A genius who excelled as artist, engineer, scientist and architect, da Vinci conceptualized several later inventions like the parachute, helicopter, car, gun, armored vehicle and the use of concentrated solar power. He proved that in order to

be a disrupter, you sometimes need to let your reach extend your grasp. Innovation depends on challenging yourself and the people around you, and importantly, often failing. The age of fossil fuels will soon be passé and electric vehicles are here to stav. The Government of Kerala's EV policy outlines a robust infrastructure including adequate power availability, network of charging points, and attractive power tariff. Batteries are the most critical components of these vehicles. The advanced batteries in electric vehicles which are designed for extended life will wear out in course of time. Therefore, the launch of the EV Conclave series 2023 this month with its focus on Lithium Titanium Oxide batteries, is an important step in the direction of achieving the state's vision of carbon neutrality by 2050.



ELECTRIC VEHICLES CONSORTIUM CONCLAVE SERIES 2023

Kerala Development and Innovation Strategic Council (K-DISC) along with its Electric Vehicles Consortium partners Travancore Titanium Products Ltd (TTPL), Vikram Sarabhai Space Centre (VSSC), Centre for Development of Advanced Computing, (C-DAC), and Trivandrum Engineering Science & Technology (TrEST) Research Park have launched an EV Conclave series. The series which is the first of its kind in



Kerala, will accelerate the State's transition to sustainable transportation and promote indigenisation of Electric Vehicle (EV) subsystems and components in the State. This aligns with the Government of Kerala's





target to achieve carbon neutrality by 2050 and develop an EV ecosystem in the State.

The first one-day conclave of the series titled "LTO Batteries and its Battery Management System (LTO-BMS)" took place on 5th April 2023 at Hycinth Hotels, Thiruvananthapuram. The conclave was inaugurated by



LTO-BMS developed by C-DAC and the unveiling of Battery Material Research Centre (BMRC) established





Dr. S. A. Illangovan, Deputy Director (PCM), VSSC in the presence of Dr. P. V. Unnikrishnan, Member Secretary, K-DISC, Shri. N. Narayanamoorthy, CMD, KELTRON, Shri. George Ninan, MD, TTPL, Dr. Koshy P. Vaidyan, CEO, TrEST Research Park and Shri. V. Chandrasekar, Senior Director, PEG, C-DAC. The conclave saw the launch of the white paper on indigenous



at TTPL with the funding of K-DISC. The conclave brought together experts from industry, R&D centres, and academia across the country to discuss various technological aspects and the indigenous technology developments in lithium ion battery & e-mobility.



KERALA KNOWLEDGE ECONOMY MISSION (KKEM)

1. IEC MATERIAL PREPARATION WORKSHOP

DATE: 3rd and 4th APRIL 2023

VENUE: STATE HEALTH SYSTEMS RESOURCE CENTRE - KERALA



One of the key priorities of Kerala Knowledge Economy Mission (KKEM) is integrating gender concerns into employment creation which can contribute to more effective boosting of productivity and economic growth, human resources development. sustainable development and reducing poverty. The mission of the project is to create 20 lakh knowledge job opportunities by 2026 for the educated youth in Kerala by directly engaging themselves in opportunities from anywhere in the world. There is a huge gap between educated

women and their contribution to the knowledge job sector, apart from the invisibility of the marginalised communities also alarming the trends which stand against the principles of social justice and equality. It is essential to consider separate projects aimed at bringing knowledge jobs to marginalised communities. Marginalised communities often face barriers to accessing education, employment, and economic opportunities. By creating targeted programs and initiatives, organisations can help to address these barriers and provide opportunities for individuals in these communities to access knowledge jobs.

In this scenario, Kerala Knowledge Economy mission has decided to start multiple projects for the upliftment of marginalised communities in Kerala. Material Preparation workshop was organised during April 3-4, 2023 for the training of volunteers of these novel projects of Kerala Knowledge Economy Mission for the marginalised community of Kerala which are planning to be inaugurated during May-June 2023. Dr. P. V. UnniKrishnan, Member Secretary, K-DISC inaugurated the two-day Material Preparation Workshop. Dr. P. S. Sreekala, Director, Kerala Knowledge Economy Mission delivered the keynote address.



1. THOZHIL THEERAM

This is a special programme designed with the support of the Fisheries Department, Govt. of Kerala to assist educated youth from the fisher folk sector to provide them with knowledge-based jobs through skilling and mentoring programmes.



2. PRIDE

This is a special programme designed for educated transgender individuals with the support of the Social Justice Department to provide knowledge-based jobs through skilling and mentoring programmes.

3. PANCHAMI

This is a special programme designed for educated individuals from the Scheduled Caste Community with the support of the SC development department to provide knowledge-based jobs through skilling and mentoring programmes.

This is a special programme designed for educated individuals from the Scheduled Tribes Community with the support of the ST development department to provide knowledge-based jobs through skilling and mentoring programmes.

Community Volunteers, Community
Resource Persons, District Program
Managers of KKEM participated in this
workshop. The participants were
divided into four groups for the
preparation of IEC material for the
Volunteer Training for the above
mentioned projects and the groups
discussed about the scope & expecta-

tion for different projects, and the plan for implementation and execution of these projects. The workshop was divided into specific sessions for the step by step analysis and preparation of plan and documentation of IEC Material for the Volunteer Training for different projects. Community Mobilization Plan, Q&A Session, Training Module Preparation, Connecting Outreach workers to KKEM, Activity List Preparation and FAQ were the different sessions organised by Kerala Knowledge Economy Mission for the IEC Material Preparation for four projects - PRIDE, PANCHAMI, OPPARA AND THOZHIL THEERAM.

4. OPPARA

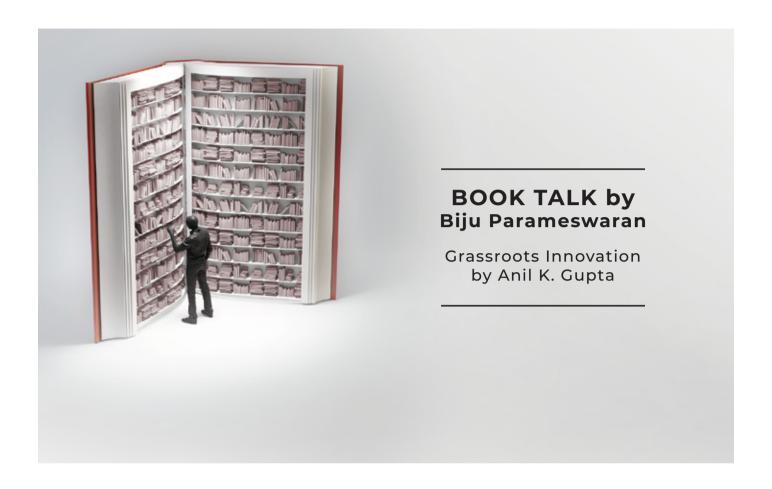


Kerala Knowledge Economy Mission conducted a review meeting of Thozhilarangathekku Phase 1 @State Health Systems Resource Centre - Kerala, Thycaud on 5/4/2023. KKEM Programme Director Dr. P. S. Sreekala presided over the meeting. KKEM Programme Managing Unit members attended the meeting and intimated the progress of the project in various districts of Kerala. District Program Managers presented the updates of Thozhilarangathekku Job fair which was conducted all over Kerala during February-March 2023.

2. THOZHILARANGATHEKKU – DPM REVIEW MEETING & ACTION PLAN 2023-24 PRESENTATION

DATE:05/04/2023 VENUE: STATE HEALTH SYSTEMS RESOURCE CENTRE-KERALA

> Action Plan of Kerala Knowledge Economy Mission for the year 2023-24 was presented by KKEM Director Dr. P. S. Sreekala. KKEM Program Manager Mr. Nidheesh presented the activity plan for the first quarter April 1-June 30,2023 for Thozhilarangathekku Phase 2.



The motto of K-DISC's Young Innovators Programme is Democratisation of Innovation or providing as many students as possible the experience of a complete innovation lifecycle. Therefore, the book under review aroused curiosity with its blurb proclaiming that it is the narrative of how the author, an iconic innovation leader, set about realising his dream of democratisation of innovation. The book is subtitled 'Minds on the Margin are not Marginal Minds.' This reviewer heard about this book from Smt. V. Vigneswari IAS who spoke about it while inaugurating the State-wide Departmental Workshops for Problem Statement generation as part of YIP in February this year.

A CSIR-Bhatnagar Fellow who taught for four years at IIM Ahmedabad, Prof. Anil K. Gupta was invited by the Bangladeshi government to help restructure their agricultural on-farm research sector in 1985. Experiencing firsthand the plight of knowledgeable but marginalised farmers being poorly paid, he set out on a journey that changed his life and touched the lives of thousands. He set out to ensure recognition for children and creative communities at the grassroots levels besides unleashing the potential for innovation at all levels for social good. He founded a social and ethical movement called the Honey Bee Network for bringing together thousands of grassroots innovators after seeing farmers and the scientists engaged in a two-way movement of

both communication and power.
Honeybees collect nectar from
flowers, and while doing so, they also
cross-pollinate. Here, he says, the
flowers do not feel cheated. Interpretations and analyses should reach
back to the contributors.

For over two decades, Professor Gupta has travelled through rural lands unearthing innovations by ordinary folk. He was convinced that the essence of grassroots innovation is in learning from those ordinary people who have been able to provide simple solutions to the problems in their lives. They usually do not know that they have an invention on their hands, or that they have stumbled upon a creative solution to a problem.

Gupta undertook walking research

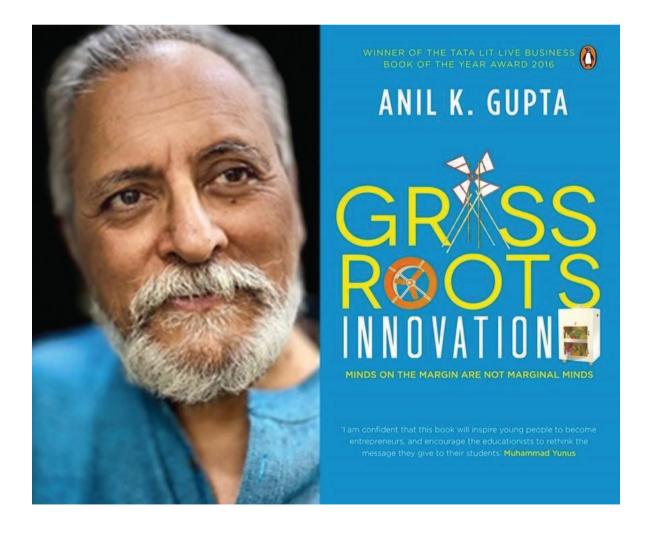


trips through remote villages with farmers, artisans, mechanics, students and scholars to observe, learn and share innovations and build on his knowledge bank. Ela Bhatt hails these trips for triggering an authentic dialogue between the formal and informal sectors in our country. The book abounds with examples of how grassroots innovators overcome inertia during design, failure at various stages, or delivery

everyday by persisting, pushing through different problems, and coming up with a solution.

The book tries to examine questions like how do we make open-source, democratic, frugal and simple knowledge widespread so as to increase the self-reliance, sustainability and circularity of outcomes. The author outlines some of the experiments that Honey Bee

Network attempted in this regard. Some of the 'lessons for learners' summarised in the final chapter include the need to kick the hack mindset, empty oneself for deeper learning and be authentic to make breakthroughs. Institutions should encourage deviant research to promote innovation. And finally, innovation is a process, not an event.





K-DISC IN THE NEWS





Travancore Titanium to manufacture EV batteries

EXPRESS NEWS SERVICE @TPuram

IN A major step towards creat-IN A major step towards creat-ing an e-vehicle ecosystem in the state, the Travancore Tita-nium Products Limited (TTPL) and Vikram Sarabhai Space Centre (VSSC) have joined to-gether to produce batteries suitable for electric vehicles. VSSC deputy director S A Il-angovan inaugurated the Bat-tery Material Research Centre

tery Material Research Centre at an EV Conclave organised by Kerala Development and Inno-vation Strategic Council on Wednesday. He said it was a key initiative by the government to reduce the carbon footprint. A whitepaper on Lithium titanate was also released at the function.

function.

George Ninan, managing director of TTPL said the company's foray into lithium titanate is part of diversification,
which will help in the manufacturing of batteries at a lower
cost. Kerala State Electronics facturing of batteries at a lower cost. Kerala State Electronics Development Corporation CMD N Narayana Murthy said the corporation would start a supercapacitor production facili-ty in Kannur by June -July.

പ്രൈസ് പലാതി: ළග්මේග പരിശിലന പരിപാടിക്ക് ഉന്ന് തുടക്കം

agalamaarbax anaalralag തി വകുപ്പിന്റെ സാമുഹ്യത്തി തി വകുപ്പിന്റെ സഹകരണ തോടെ കേരള തോളജ് ഇ കോണതി തിഷൻ വിവിധ ക പ്യേത്തിറ്റി അധിഷ്ഠിത സൗല ട്രേഷർ കരുപത്തിര് സൗല പ്പുണ്ടും അധിഷാത്ത സംഘ ടനകൾ, കമ്മ്യൂണിറ്റി ലീഡേഴ് സ്, പിയർ കൗൺസിലർ, വോ ഉണ്ടിയഴ്സ്, എന്നിവർക്കായി ളങ്ങയുടെസ്, എന്നിവർക്കായി നടത്തുന്ന ത്രിദിന പരിശീലന പരിപാടിക്ക് ഇന്ന് തുടക്കമാ കും, അഭ്യസ്തരിദ്യക്കാ ട്രാൻ സ് ജെർഡർ സമുഹത്തിന്റെ ജീവിത ഗുത്താരിലേയാര വർദ്ദ്ദ് വീക്കുമ്പതിരുത്തി പ്പിക്കുന്നതിനായി നടത്തുന്ന പ്രത്യേക വൈജ്ഞാനിക തോ ഴിൽ പദ്ധതിയായ പ്രൈഡ് പ ഴിൽ ചുമതിയായ പൈഡ് പ യതിയിൽ ജനപങ്കാളിതായ റ റപ്പുവരുത്തുകയാണ് പരിയില ന പരിപാടിയുടെ ലക്ഷ്യം. കൈറോട് കേള സ്റ്റേറ്റ് ഇൻ സ്പ്രൂപ്പ് ഓഫ് ഹോര്ത്ത് ആൻ ഡ് ഫാമിലി വേര്ഹേയാറിൽ ഉ പ്രപ്രേത്തിൽ വേര്ദ്രം ഡ് ഫാഗിലി വേദിഫോഗറിൽ ഉ ച്ചയ് കട്ട് ഒണ്ടുടണിക്ക് ആരാ ദിക്കുന്ന പരിപാരിയാടുഹൃതി തി വകുറ്റ് മുത്തി ഡോ.ആർ ബ് തു ഉറ്റ്ഘാടനാ ചെയ്യും. കൈ ഉ നോളഷ് ഇരംഗതാടി രിഷത് ധോ.പി എന്ന് ശ്രീ ഡോ.പി എന്ന് ശ്രീ wer anniversa circlesia

3-year free service, and 3-year 9847869202

State EV Consortium Conclave Series 2023

launched As part of the EV Consortium, K-DISC with its consortium partners Travancore Titanium Protects Ltd (TTPL),
Vikram Sarabhai Space
Centre (VSSC), Centre for Development of Advanced Computing. (C-DAC), and Trivandrum Science & (C-DAC), and Trivandrum Ingineering Science & Inchnology (TrEST) Research Park), has launched an EV Conclave series, the first of its kind in the State to accelerate the transition to sustainable transportation and promote indigenisation of Electric Vehicle (EV) subsystems and components in the State. The first one-day conclave of the series titled "LTO Batteries and its Battery Management and its Battery Management

System (LTO-BMS)" held on April 5 at Hycinth Hotels. It was inaugurated by S.A. Illangovan, Deputy Director (PCM), VSSC, in Director (PCM), VSSC, in presence of P.V, Unnikrishnan, Member Secretary, K-DISC; N. Narayanamoorthy, N. Narayanamoorthy, N. Narayanamoorthy, CMD, KELTRON; George Ninan, MD, TTPL, Koshy P. Vaidyan, CEO, TrEST Research Park, and V. Chandrasekar, Senior Director, PEG, C-DAC. The launch of the white paper on indigenous LTO-BMS developed by C-DAC and the unveiling of Battery Material Research Centre (BMRC), established at TTPL with the established at TIPL with the funding of K-DISC, were some of the highlights of the conclave, said a press release.



KERALA KNOWLEDGE ECONOMY MISSION (KKEM)

Digital Workforce Management System (DWMS) targets to become the 'World Largest Talent Hub'. The three different components of the DWMS platform are Job Seekers, Job Providers and Skilling. The Kerala Knowledge Economy Mission is a digital platform-based strategic program launched by the Government of Kerala to transform the state into a knowledge economy.



20 LAKH JOBS BY 2026

Vacancies Compiled	5,04,486
Total Hired	15088
Live Vacancies	57,732
Total hired along with partners	33,358
Data as on 30 Apr 2023	



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