



CoPPICoM

IP Management Tool for Leveraging Technology Transfer & Commercialization

Dr B K Sahu, NRDC India

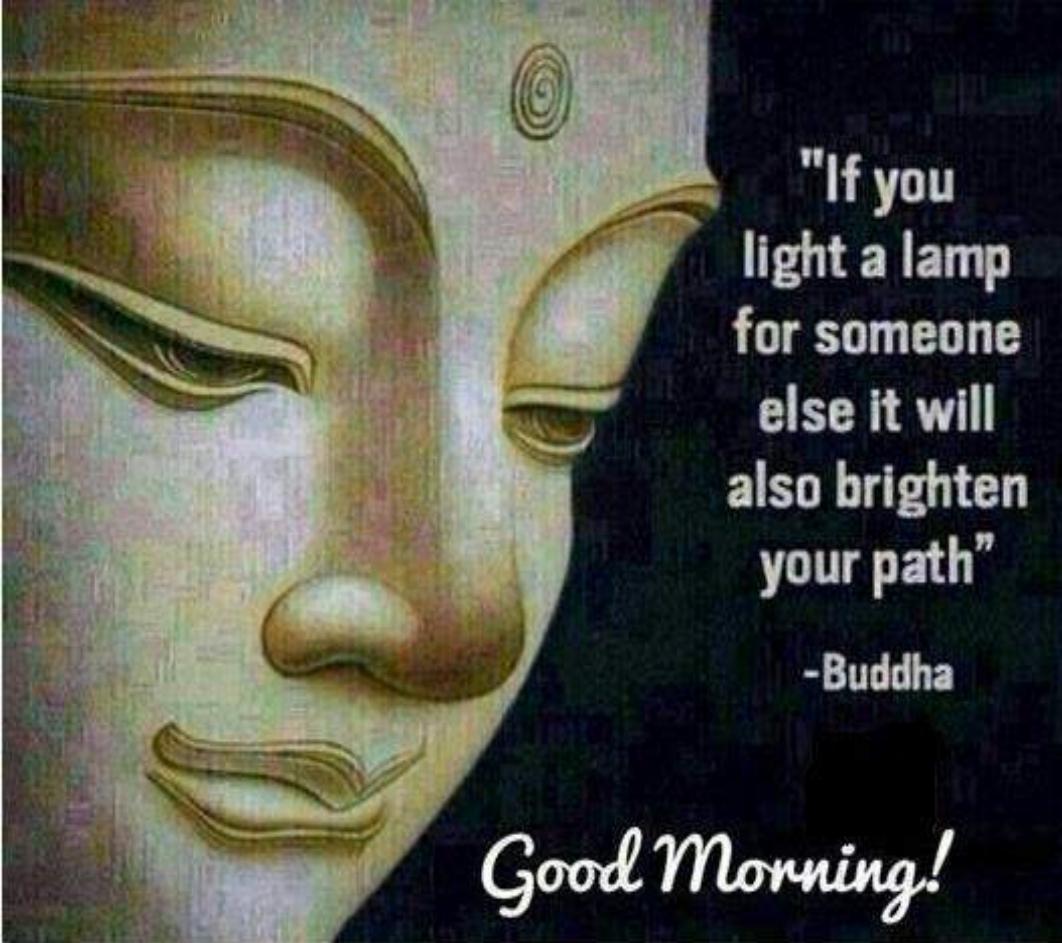
A CoPPICoM conta com apoio do Danida Fellowship Centre e do Ministério das Relações Exteriores da Dinamarca. O financiamento foi concedido por meio do Danida Fellows Networkers Grant 2025.

Apoio:



Financiamento:





**"If you
light a lamp
for someone
else it will
also brighten
your path"**

-Buddha

Good Morning!

Celebrating 16th JAN, 2025
NATIONAL STARTUP DAY

**“India becoming an
Innovation hub’ is a
symbol of the fact
that we are not going
to stop”**

~ An Excerpt from Mann Ki Baat

Shri Narendra Modi
Hon’ble Prime Minister



“Education Disseminates Known Knowledge, Research Converts Money into Knowledge, Innovation Converts Knowledge into Money;- Dr R A Mashelkar, Former DG CSIR & Secretary DSIR, Govt of India

“The illiterate of the 21st century are not those who cannot read and write, but those who cannot learn, relearn, co-learn and unlearn”- Alvin Toffler

EXPRESS OPINION

BECAUSE THE TRUTH INVOLVES US ALL

EDITORIALS

COLUMNS

How India can become the world's leading startup ecosystem

Favourable policies, a thriving culture of innovation, and collaborative efforts across sectors provide the foundation for scaling startups into global enterprises.

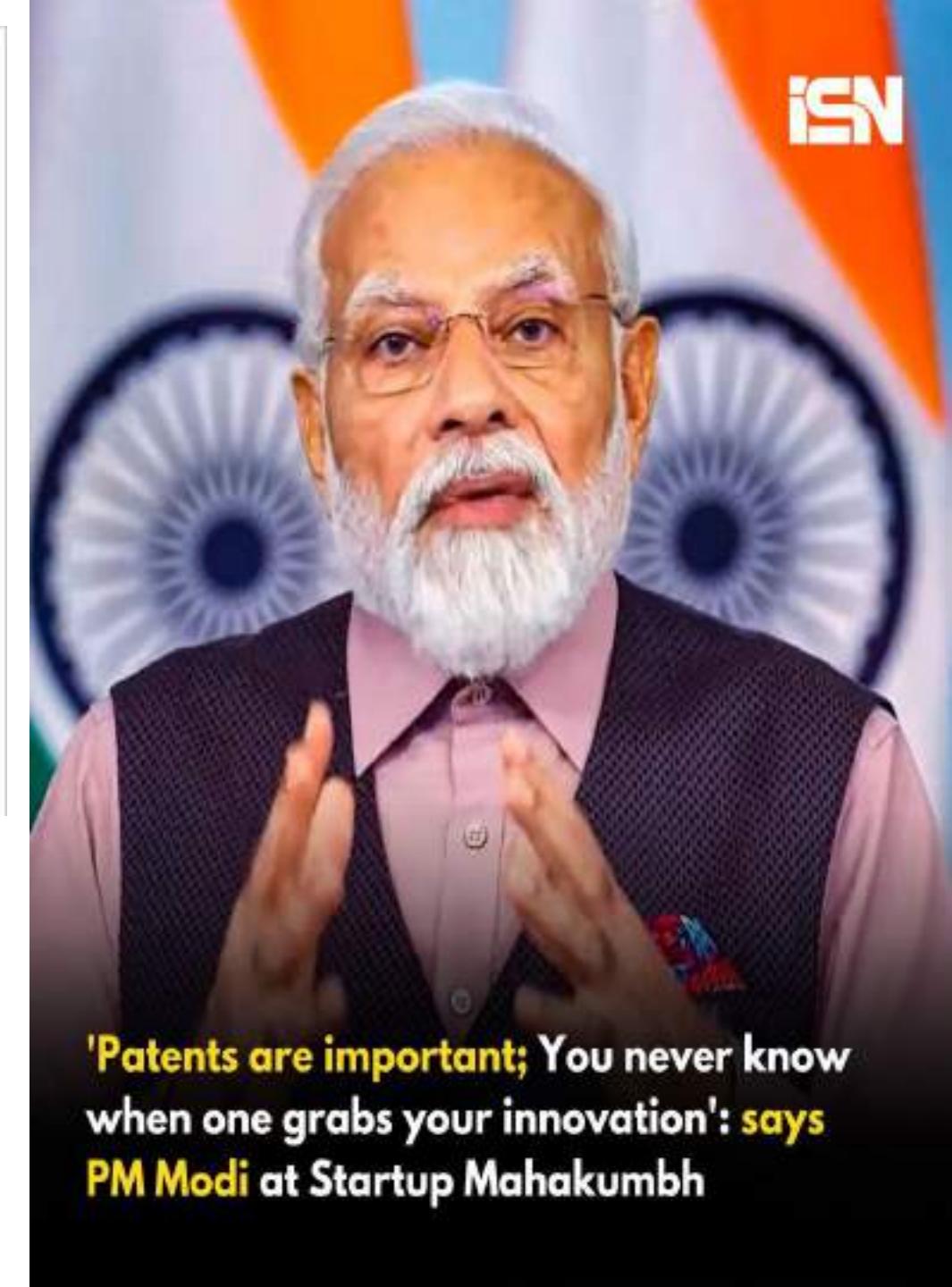
PREMIUM


**STARTUP
AND GO**

AMITABH KANT



Driving Innovation Through IP India produces approximately 24,000 PhD graduates annually, driving advancements in science and engineering with more than 15 lakh engineering graduate. However, the country paid **\$14.3 billion in IPR royalties in 2024**, while earning only **\$1.5 billion**, highlighting a significant gap.



'Patents are important; You never know when one grabs your innovation': says PM Modi at Startup Mahakumbh

Innovation – *the true definition*



More
from Less
for More

Gandhian Innovation



Dr. RA Mashelkar





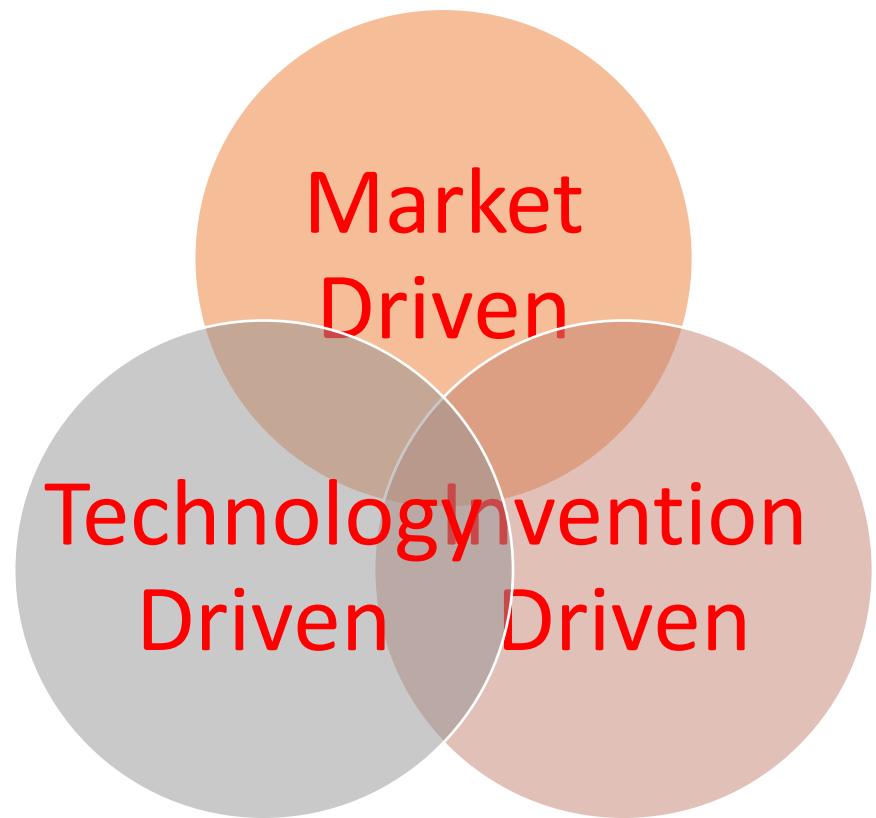
Ritesh Agarwal Journey CEO Of India's Biggest Hotel Chain OYO

- First Asian to win “20 Under 20” awarded Thiel Fellowship, 2013.
 - Top 50 Entrepreneur (TATA First Dot Awards, 2013)
 - 8 Hottest Teenage Start-Up Founders (Business Insider, 2013)
 - Youngest CEO at 17 (acknowledged at 16)
 - TiE-Lumis Entrepreneurial Excellence Award (2014)
 - Forbes "30 Under 30" (Consumer Tech)
 - Business World Young Entrepreneur Award

Technology Transfer and Commercialisation of ‘HSP Subunit Vaccine in Adjuvant (DDA) against *Mycobacterium Tuberculosis*’ – the Next Gen TB Vaccine : *Innovation for Nation Building*



Innovation



NAVRAKSHAK-PPE Technology – Innovation Translation for Mitigating Pandemic

More than 12 MSMEs & start-ups for commercial production user-friendly PPE named **NavRakshak** begin. Developed by a **Dr. Arnab Ghosh** at Indian Navy. The PPE fabric does not require lamination with polymer or plastic. This makes the PPE permeate heat and moisture from the skin of the user

The technology know-how transferred to *M/s Greenfield Vintrade Private Limited (Kolkata), Vaishnavi Global Private Limited (Mumbai), Bharat Silks (Bengaluru), Sure Safety (India) Limited (Vadodara) and Swaps Couture (Mumbai)* and others . They are produce more than 10 million PPEs per annum.



IPR: Bridge between Academia & Industry



"IPR"



Act as Catalyst



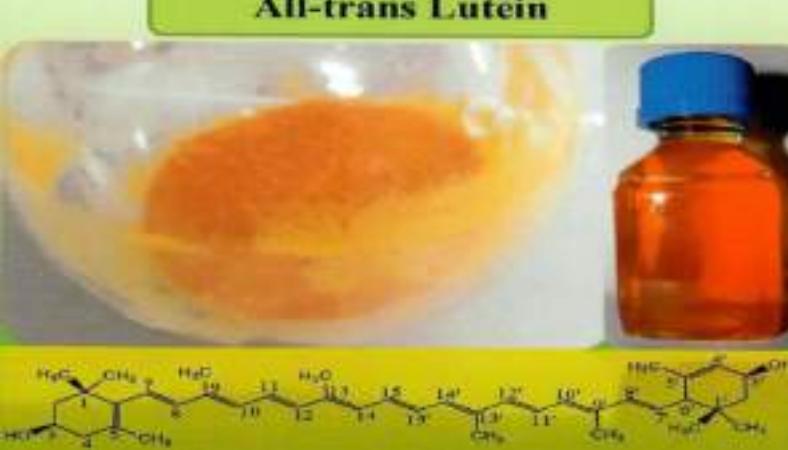
IP Issues in Technology Transfer

Patent App (IN) 201641017567A EP- 3246311A1

Lutein from Marine Cholorophycean Algae

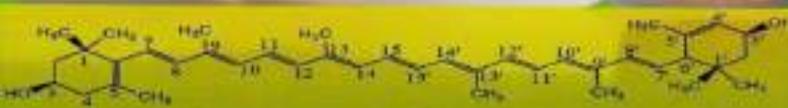


All-trans Lutein



Confidence + Loyalty+ Trust

IP: Creating Value & Extracting Value





Exchange of Technology Licensing Agreement between
Ms Clean-chart Tech Private Limited - NRDC & CSIR-IMMT on
Potash Enriched Biochar from Waste Biomass

Date - 12.08.2025



ANWESHA ROUT
DIRECTOR



REENA BEHERA
DIRECTOR



PURAVI SATPATHY
DIRECTOR



President, CSIR



One-Day Awareness Program
(Under MSME INNOVATIVE SCHEME)
INTELLECTUAL PROPERTY RIGHTS

Jointly Organized by

MSME Development Facilitation Office
(MSME-DFO), Bhubaneswar

CSIR-Institute of Minerals & Materials Technology
(CSIR-IMMT), Bhubaneswar

2018, 10 AM onwards

25th

CSIR-IMMT, Bhubaneswar

www.csir-immt.res.in

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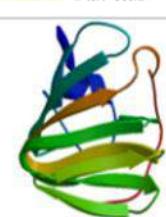
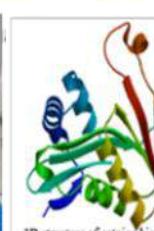
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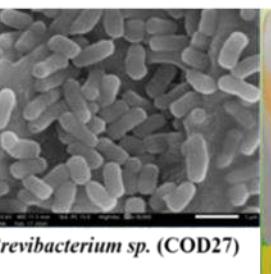
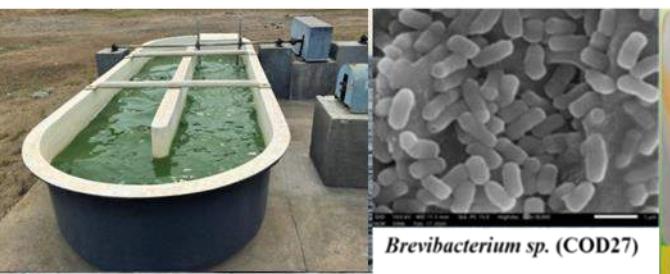
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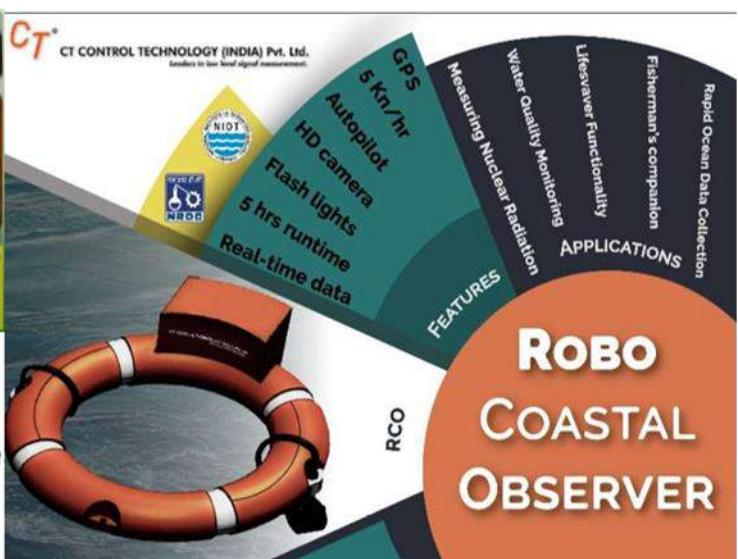
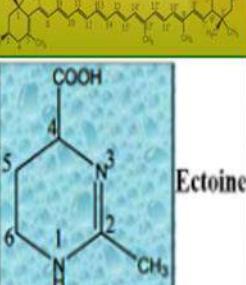
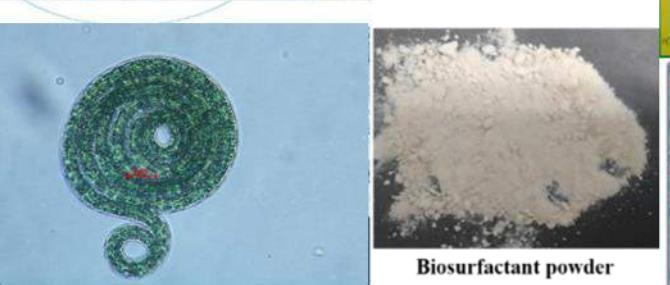


RP-HPLC chromatogram Analysis

NRDC-SUCCESS STORIES OF GREEN TECHNOLOGIES TOT



CT
CT CONTROL TECHNOLOGY (INDIA) Pvt. Ltd.
Leaders in live bird signal measurement.



**ROBO
COASTAL
OBSERVER**

Support Startup under TDVC : M/s Adiuvo Diagnostics Pvt. Ltd.



The funding was utilized to advance an integrative wound assessment multispectral imaging device, combining tissue oxygenation for AI-Based integrative assessment of diabetic foot ulcers and wounds. This innovation enables a comprehensive wound monitoring mechanism, marking a significant step forward in healthcare technology.



The Balance !

Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

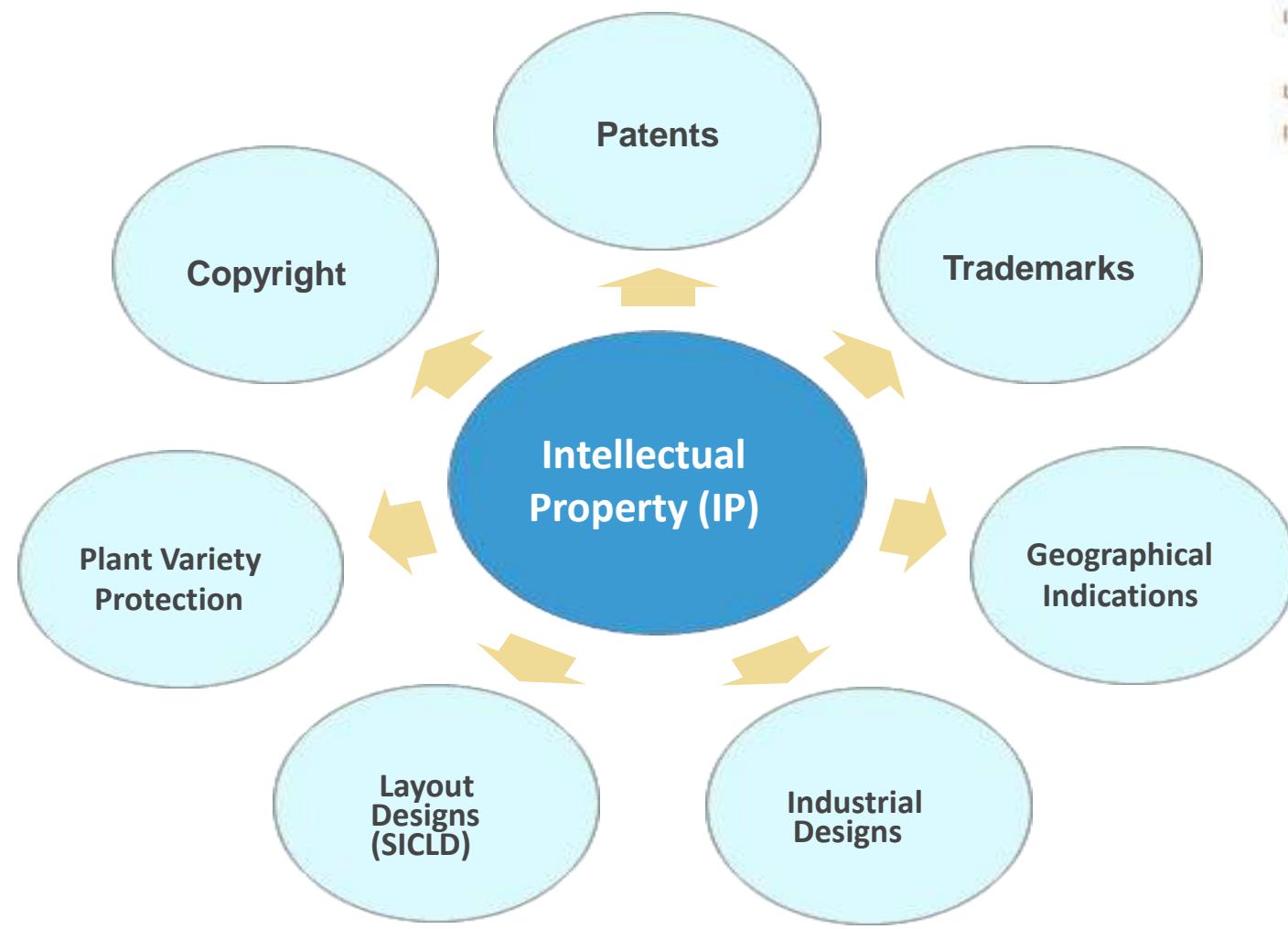
and

Everyone has the right to share in scientific advancement and its benefits.

Article 27

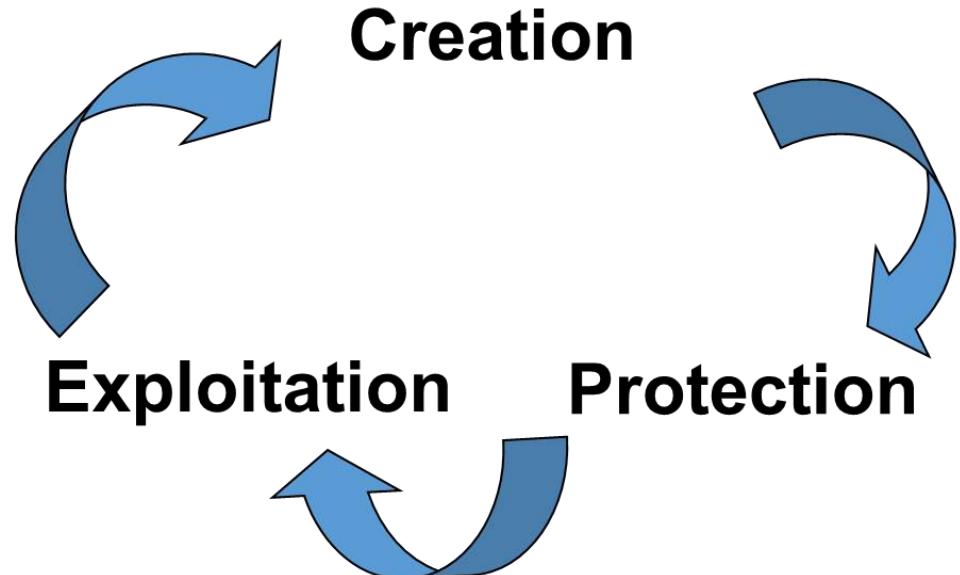
(Universal Declaration of Human Rights, 1948)

INTELLECTUAL PROPERTY



Intellectual Property Rights give

- Legal rights to the creation of mind
- Art and Inventions
- Regulates existence of ownership and transmission of rights
- Ensure Incentives
- Guarantees credit and recognition



IP & Value Creation

Why to Promote & Protect IP?

Commercial Commodity?
Commercialization?

Valuable Business Asset?

Benefit Sharing &
Sustainability

IP- Instills Stakeholders

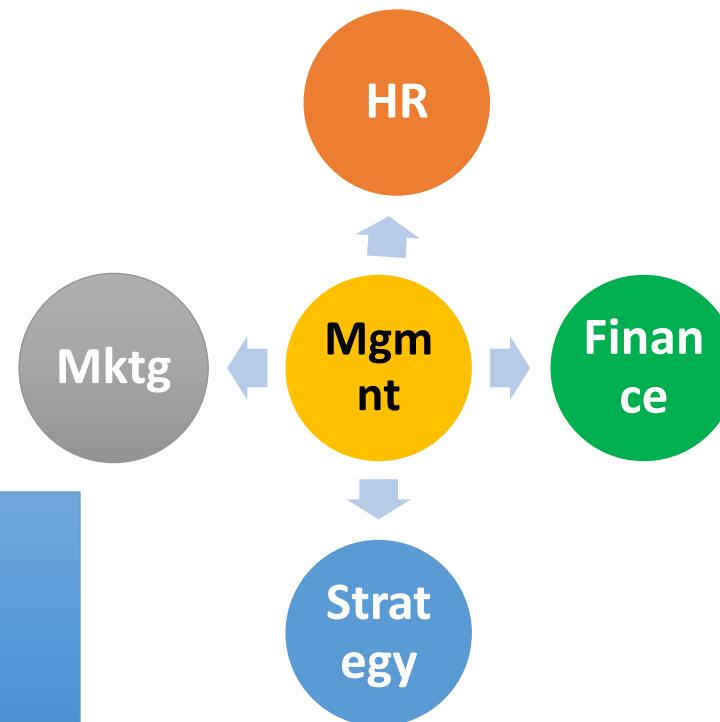
Confidence

Loyalty

Trust

Integrating IP into Institutions

- Brand Building
- Use of goodwill in business
- Brand positioning



- In competitive advantages
 - Building patent portfolio
 - For mergers & acquisitions

- Capacity Building
- Training in IP

- IP Valuation in balance sheet
- IP Securitization
- IP Monitization

Innovation Commitment: Role of Leadership

“For 2024, we have a lot more exciting initiatives and socially relevant projects that would greatly benefit the nation. We are looking at closing this financial year (31st March 2024) with 366 patents. We will try our best to see one patent a day. It is a matter of great pride at IIT Madras that we do a lot more of innovation. We are also looking at starting 100 start-ups in 2024”



Prof. V. Kamakoti
Director, IIT Madras

Benefiting Society and the Economy

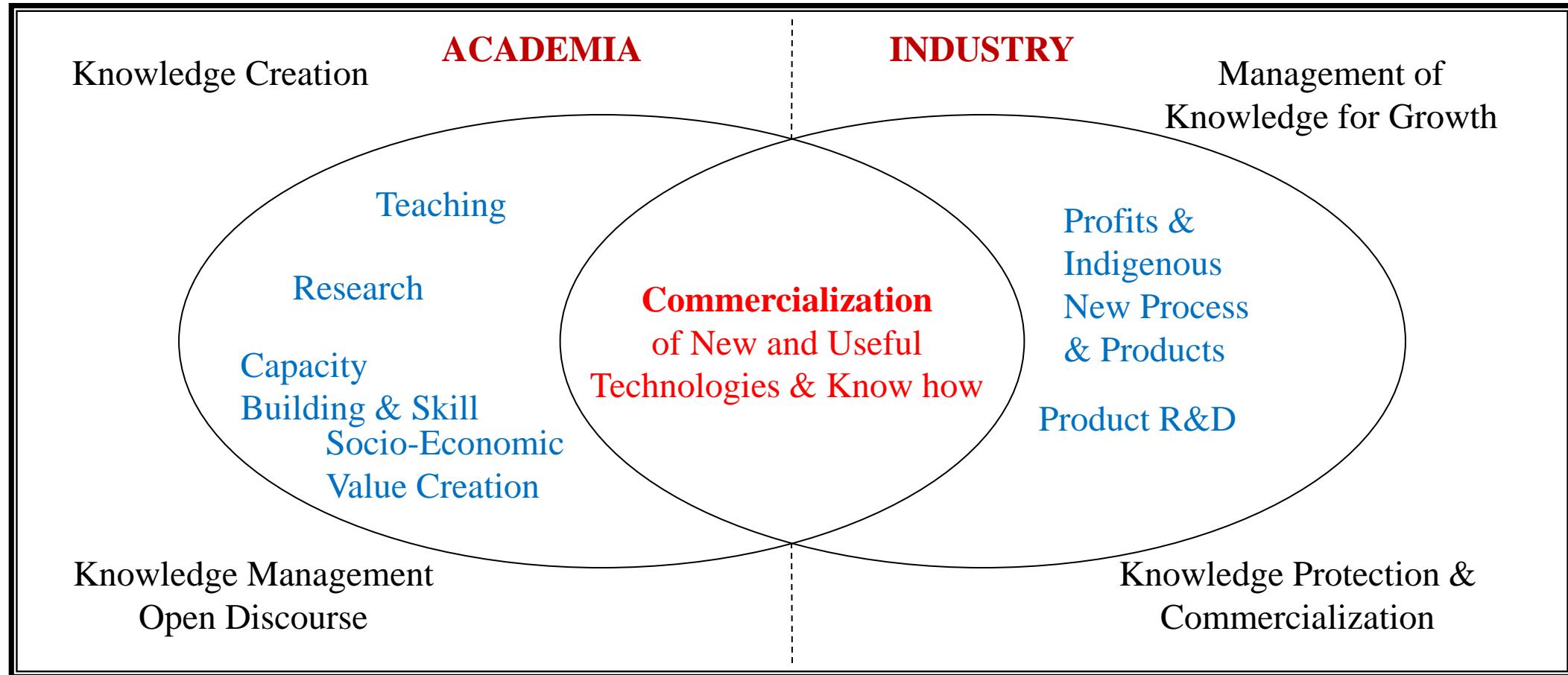
Academic Technology Transfer For 2021



University R&D Interaction with Industry

- *Sponsored / collaborative research* - long term, in basic and applied areas
- *Consultancy* - to solve immediate problems / needs
- *R&D Partnership* - to build capability in emerging areas
- *Technology Transfer / Incubation* - commercialisation of innovations

Academia & Industries Collaboration: Common Goal & Objectives under Self Reliant India



Institutional Policy for Intellectual Property Management in Academia & R&D Institutes

- Ownership
- Encouraging Entrepreneurship and Start-ups
- Transfer of ownership
- Rights and obligations of faculty & researchers
- Rights and obligations of the Institute
- Social & ethical value
- Royalty sharing or Benefit Sharing
- IP Waivers

(MODEL GUIDELINES ON IMPLEMENTATION OF IPR POLICY FOR ACADEMIC INSTITUTIONS (DPIIT, Govt of India)

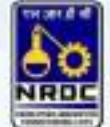
Research, IP & Innovation in University Ecosystem



University Interaction with Industry

- *Sponsored / collaborative research, grant in aid & sponsored* - long term, in basic and applied areas
- *Consultancy* - to solve immediate problems / needs
- *R&D Partnership* - to build capability in emerging areas
- *Technology Transfer / Incubation* - commercialisation of innovations





Department of Scientific and
Industrial Research
Ministry of Science & Technology
Govt of India

Proud partner of
WIPO GREEN

TECHNOLOGIES AVAILABLE FOR TRANSFER AND COMMERCIALIZATION

PROMOTING WOMEN LED TECHNO-ENTREPRENEURSHIP THROUGH INNOVATIVE TECHNOLOGIES

“ नारी तू नारायणी ”

Compiled and Edited by



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Ms. Srisudha Senath,
Shri Abinash Kumar
Shri Sunil Swain

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Scan for Technology Details



NATIONAL RESEARCH DEVELOPMENT CORPORATION
[An Enterprise of DSIR, Min. of Science & Technology, Govt of India]

(PROMOTING INNOVATION TRANSFORMING LIVES)



NRDC exchanging MoU with OASME in the august presence of Hon'ble Governor of Odisha, Shri Raghuram Das, Minister of Industries, Skill and Minister of MSME, Govt. of Odisha respectively, Principal Secretary Industry& MSMEs, CMO, NSIC and other distinguished dignitaries and industries leaders during OASME Annual Summit at Bhubaneswar.

**NRDC and
OASME join
forces to support
MSMEs,
industries, and
start-ups at
OASME Summit
2024**

12

It is a landmark event for the micro, small, and medium enterprises (MSME) sector, the National Research Development Corporation (NRDC) and the Odisha Assembly of

Small and Medium Enterprises (OASME) have signed a MoU for the support of MSMEs, industries, and start-ups in the domain of intellectual property (IP) and technology transfer. The MoU was exchanged in the presence of Hon'ble Governor of Odisha, Shri Raghuram Das, during the OASME Summit 2024 held at Bhubaneswar.

The summit, which took place on 12 August, was inaugurated by Governor Shri Raghuram Das. The event saw the participation of key figures including the Minister of State (Independent Charge) for Industries, Skill Development, and Technical

Technological Innovation: Key Players

Academia-Industries-Government

An Overview



Inventor



IPO



Commercial Entities



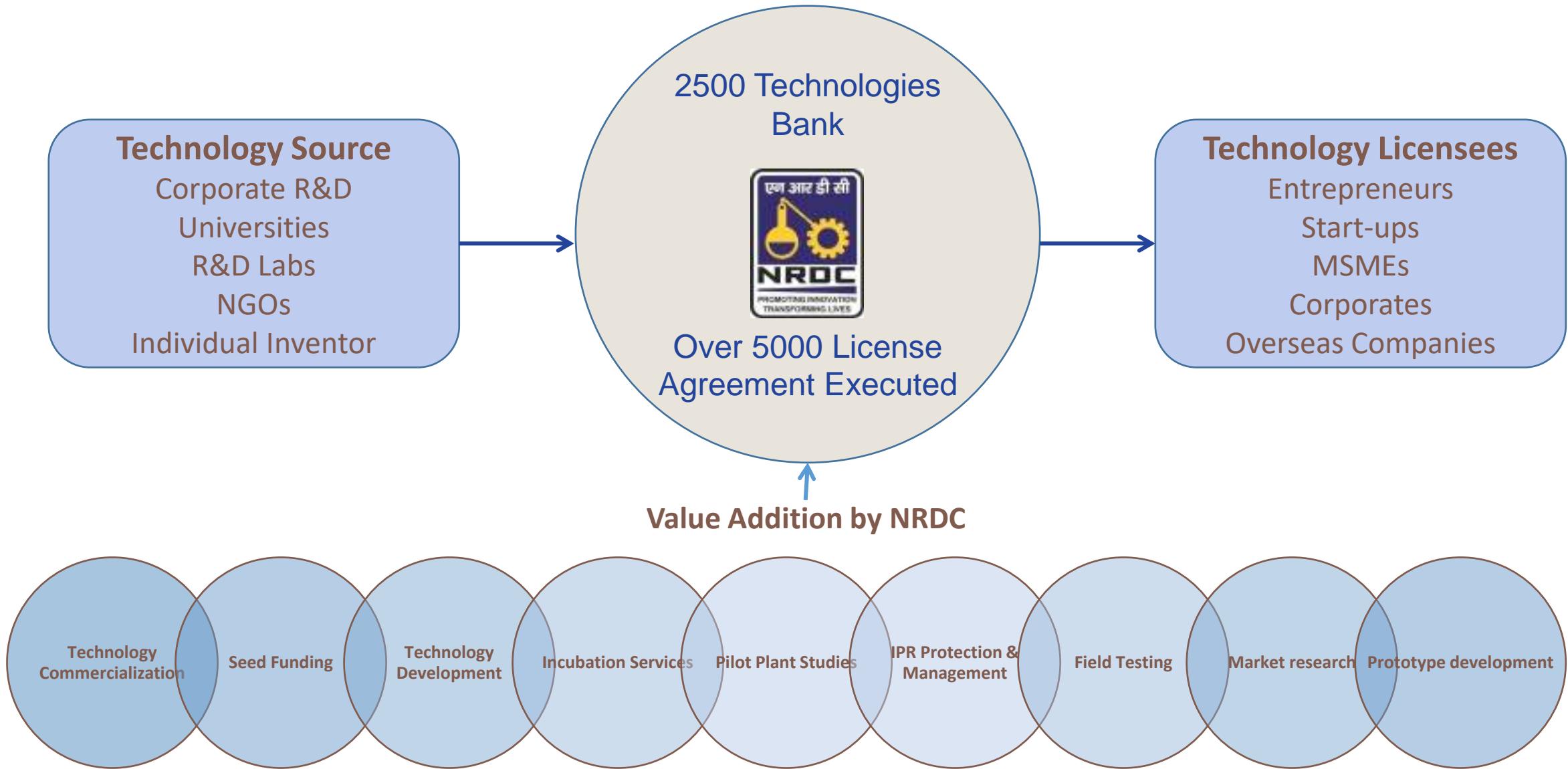
NRDC

*Net royalty income/equity
Invention disclosure & assignment of
rights*

Issued patent *Patent application*

*Royalties/equity
License agreement*

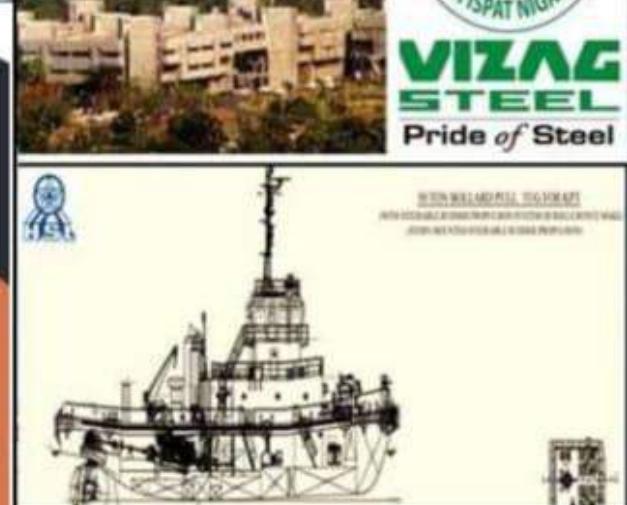
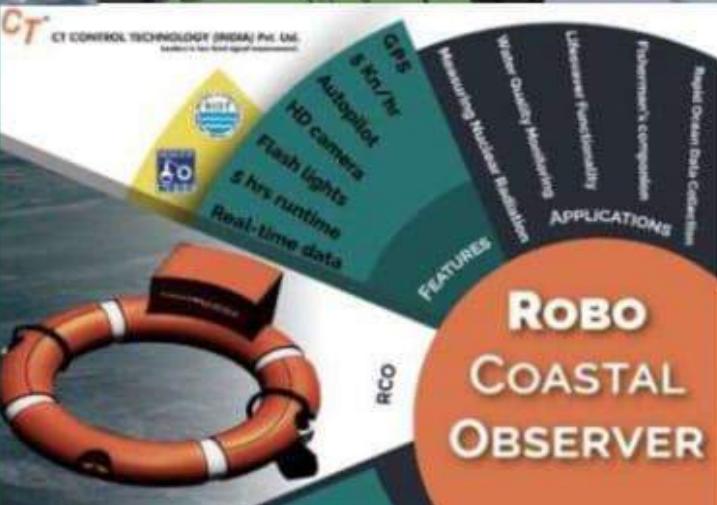
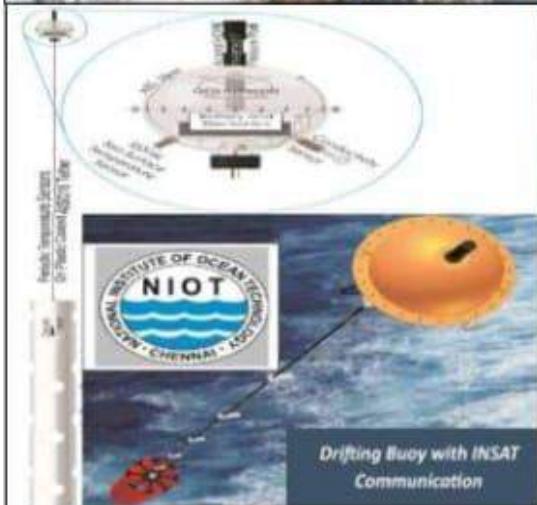
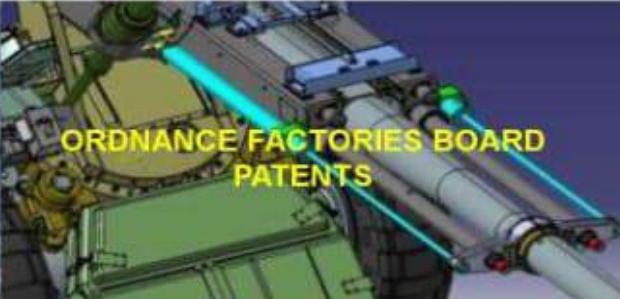
NRDC: Bridging the GAP – Academia-Industries





NATIONAL RESEARCH DEVELOPMENT CORPORATION

Role & Impact of IPR & Technology Transfer & Commercialization for Self Reliance



NRDC'S ROLE IN THE LANDSCAPE OF EMERGING TECHNOLOGIES

Technology Readiness Level Assessment



National Research Development Corporation

TRL Assessment Report

Process for Manufacturing of Graphene from Waste Plastic



December 2023

Department of Scientific & Industrial Research (DSIR)
Ministry of Science and Technology

CERTIFICATE OF TECHNOLOGY READINESS LEVEL

This is to certify that the "Title of the Technology" being developed by "Name of the Organisation/ Start-Up/ Inventor" is presently at a Technology Readiness Level of "Level 1-9".

The Organisation/ Start-Up/ Inventor is working in the "Name of the Sector" as self-certified by them.

Certificate No.: NRDC/TRLN/Sector/0000/2023
Issued on: Valid upto:

Details:
DSIR, National Institute of Science Communication & Policy Research
Chairman & Managing Director
National Research Development Corporation

21/12/2023 RDN-1403126/2023-APC



सीएसआईआर
CSIR

भारत का नवाचार इंजिन

The Innovation Engine of India



DSIR

DEPARTMENT OF SCIENTIFIC AND
INDUSTRIAL RESEARCH



MSME
MICRO, SMALL & MEDIUM ENTERPRISES
BUREAU, GOVT. OF INDIA, NEW DELHI

Proud Moment for DSIR!

**The Ministry of Micro, Small and Medium Enterprises (MSME)
Sanctions Grant-in-Aid for Technology Transfer Facilitation Centres (TTFCs)**

**We are delighted to share that 4 out of 6 TTFCs
have been awarded to DSIR institutions:**



NRDC



CSIR-CIMFR



CSIR-IMMT



CSIR-IICT



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NRDC exchanges tech transfer agreements on wave power, millet flakes

27/05/2023

BIB BureauVisakhapatnam

National Research Development Corporation (NRDC), an enterprise under Department of Scientific and Industrial Research (DSIR), has exchanged the technology transfer agreement on Wave Power Navigation Buoy and Protein Fortified Millet Flakes and handed over the licences to NextEng Enviro Private Limited, Ahmedabad and Davangere & Chitradurga Districts Regional Cooperative Organic Farmers Associations Federation Ltd (RCo), Davangere, respectively. The agreements were exchanged at an international technology transfer symposium held in New Delhi recently in collaboration with United States Patent and Trademark Office (USPTO) and Indian Patent Office (IPO).

Discussions were held to understand the best practices followed in the field of technology transfer and to devise new strategies to strengthen the ecosystem of technology transfer collaboration opportunities. The symposium brought more than 135 key stakeholders of the innovation ecosystem on one platform to share their experiences and exchange views about the present challenges faced by them in the transfer of technologies, according to NRDC regional manager B K Sahu.

The inaugural session was graced by Prof Linmat Pandit, Controller General of Patent, Design, Trademark (CGPDTM), Surinder Pal Singh, Joint Secretary, DSIR, Gopal John Cabeca, United States IP Counselor to South Asia, USPTO, H G Lakshminarayanan, Chief, NRDC, Subodh Chawla, Chief, NRDC, B K Sahu and other officials from DIPAT, DBT, DSIR, CSIR, Office of the PSA and various R&D Institutes and universities. Dr N Katalasehni, Director General & Secretary, CSIR & DSIR in her inaugural address emphasised the role of science, technology and innovation for driving the development of society that has led to the economic progress of the society.

Commodore Amit Rastogi (Retd), CMD, NRDC in his address stressed the need for developing a strong and robust technology transfer system with TRL (technology readiness level) assessment and IP valorisation. Surinder Pal Singh, Joint Secretary, DSIR emphasised the need of practice, which affects growth of startups or MSMEs or entrepreneurs is the effective technology transfer from labs to land.



TECHNOLOGIES AVAILABLE FOR TRANSFER AND COMMERCIALIZATION

PROMOTING INNOVATION TRANSFORMING LIVES



NATIONAL RESEARCH DEVELOPMENT CORPORATION

INDIA's Premier Technology Transfer Organization

(An Enterprise of DSIR, Min. of Science & Technology, Govt of India)

20-22, Zamroodpur Community Centre:
Kailash Colony Extension, New Delhi 110048 India
Phone: +91 11 2924 1212
Email: cmdnrdc@nrdc.in; inarayan@nrdc.in

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International Symposium

on

Technology Transfer - Commercializing Intellectual Property
for a Sustainable Future

Academic &
Event Partner



State Government
S&T Ecosystem Partner



UNITED STATES
PATENT AND
TRADEMARK OFFICE



International Symposium

**"Technology Transfer - Commercializing
Intellectual Property for a Sustainable Future"**

Date: 14th March 2024, 9:00 AM (IST)

Venue: Cambridge Institute of Technology, KR Puram, Bengaluru, India



NRDC @ Global Multilateral Forum- WIPO Geneva



Technology Symposium of WIPO Green and Advisory Board Meeting
with a focus to Identify Opportunities for Collaboration for Green Technologies

NRDC Efforts in Connecting the dots for Innovation Achievement



NRDC represented India in the recent WIPO Asian Regional Conference in Support of Accelerated Life Sciences Innovation- Skills Development and Capacity Building at Manila, Philippines from 11th – 15th September 2023

The National IP Award for NRDC-TISC for Year 2020 & 2023 in Innovation Translation



National Research Development Corporation, Visakhapatnam

India's 3rd Technology Innovation Support Centre (TISC) has been set up in NRDC under the aegis of WIPO of United Nations through CIPAM, DPIIT, Ministry of Commerce & Industry, Govt. of India. NRDC/TISC is providing services to innovators, academia, industry, MSMEs and startups like Filing of Patents, Designs, Trademarks and Copyrights, Training & Capacity Building & IP technology Scan Reports and further facilitates IP commercialization, technology transfer & licensing.



MSMEs, startups get a fillip

WIPO opens its third centre in Visakhapatnam

SANTOSH PATNAIK
VISAKHAPATNAM

The opening of India's third United Nation-World Intellectual Property Organisation (WIPO) Technology and Innovation Support Centre here will provide a big boost to MSMEs, startups and academics from Andhra Pradesh, Telangana, Odisha and other nearby States in getting guidance in trade-marking, patenting and technology transfer.

The WIPO has centres in Chennai and Chandigarh and the unit opened here at Sunrise Incubation Hub is the third one in the country.

"Though there were several applicants for WIPO centre, the Centre decided to open it here in recognition of efforts to strengthen the ecosystem for innovation," National Research Development Corporation Chairman and Managing Director H. Purushotham told *The Hindu* on Saturday.

MoUs for cooperation

He said over past three months, they had signed MoUs for cooperation with Kalam Institute of Health Technology, AP MedTech Zone and seven educational institutions.

The WIPO centre has so far filed patent applications for one in research in Telan-



United Nation-WIPO Technology Innovation Support Centre in-charge officer Bijaya Kumar Sahu explaining the objectives of the centre, in Visakhapatnam on Saturday. • K.R. DEEPAK

gana, five in A.P. and one in Odisha. The centre has sought trademark recognition for five innovations.

After due diligence, 15 patent applications were evaluated, some of them in digital protection of forests, automatic water level controlling, security system for communication terminal and portable automatic emergency braking system.

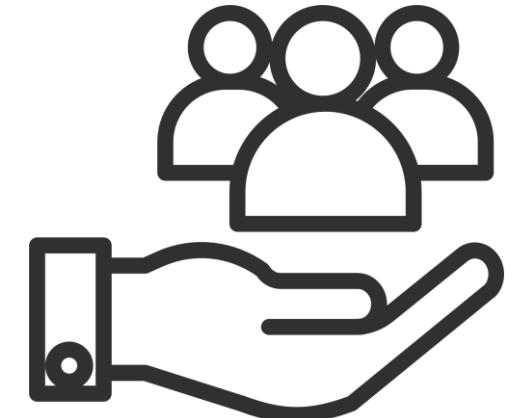
The centre is funded by Department of Industrial Policy and Promotion, Ministry of Commerce and Industry after India became a member-country of International IPR regime harmonisation agreement in 1997. WIPO headquartered in Geneva oversees enforcement of IPR regime. Bijaya Kumar Sahu, officer in-charge of

WIPO centre, Visakhapatnam, Sahu said the main objective of the technology innovation support centre was to provide innovators and entrepreneurs in the country with access to locally based, high quality technology information and related services and helping them exploit their potential and create, protect and manage Indications of Good (GI) for an effective IPR system.

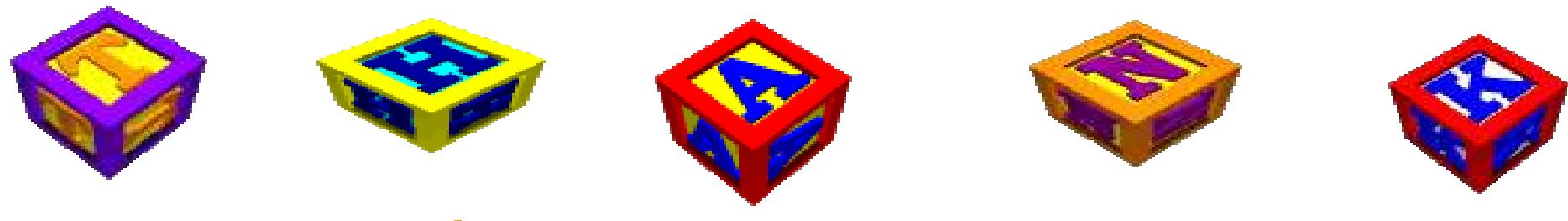
He said a successful IPR system would foster creativity and innovation to promote entrepreneurship. Mr. Sahu can be reached on email bksahu@nrdc.in or at office located at Sunrise Incubation Hub, AP Innovation Society, Hill No. 3, Madhurawada, Visakhapatnam.

Actionable Takeaways

- *Start early — even provisional filings build credibility*
- *Align IP with your business, product, or research strategy*
- *Leverage support from IP experts, institutional IP cells, or NRDC*
- *Treat IP as a strategic investment, not just a legal expense*



PROTECT → Manage → Monetize → Multiply



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