

India's Translational Research Capacity and Efficiency Enhancement Initiative

TRC Guidelines and Metrices

Inputs

- Robust TRL3-4 pipeline
- Support Internal & external projects

ITRI TRC

MO

- Service model
- Operational excellence
- Industry engagement
- **National capacity** building mandate

TRC Mandate

- Be state of the art and globally competitive in infra and personnel
- Have a rich pipeline of TRL4 technologies—internal and external
- Be accessible beyond the hosting institution to the wider ecosystem
- Work closely with industry

Outcomes

- IP licensing
- Services revenue
- Spin-offs

TRC Metrices

- Num. of TRL advancements
- Num. Internal projects
- Num. industry projects
- Staff caliber, strength
- Revenue generated
- Business Dev. team
- Outreach and promotion
- IP filing
- Equipment up-time
- Number of clients served/ samples processed
- Startups and MSMEs supported

Establish diverse governing board with a mandate and authority to ensure aforementioned outcomes

ITRI TRCs

Materials and Components			
Meta materials	Polymers	Magnets	
2D Materials	Textiles	Nanopores	
High Entropy Mat.	Ceramics	Optics	
Biomaterials	Catalysts	Sensors	
Nanomaterials	Aerogels	Microfluidics	
Processes and Technologies			

Processes and Technologies				
Metallurgy	Cement Decarb.	E Beam Applications		
Ind. Metal working	Adv. Separatn. Tech.	Corr. & coating tech		
Mold Creation	Adv. Reactors	Cryogenics		
Add. manufacturing	Adsorption Center	Superconductors		
Low Carbon Steel	Supercritical proc.	Membranes		

Biologics		
RNA Therapeutics	Tissue Engr.	
CGT	Syn. Bio	
Lipid Nano.	Vaccines	
Stem Cells	Omics	
Regen. Medicine	Longevity	

Testing and Piloting		
Steel Testing	Bioenergy Testing	
Agri Equip. Testing	Wind Tunnel Testing	
Agri. Input testing	Battery testing	
Solar Mod. Testing	Electrolyzer Testing	
Biotech Piloting	Biopharma piloting	

TRC Name

 Pick the name of the TRC from the slide above or propose one

TRC Vision

- What is the vision for this TRC?
- Why is it needed?
- Who will it serve?
- How will it contribute to socioeconomic impact creation?
- How will it contribute to national capacity building?

Infrastructure

- What is the space required?
- List the equipment required with quantity and tentative price
 - Eg, CVD machine X2
 ~\$100,000 ea.
 - AMC/other costs

Personnel

- What is the qualification of the technical personnel needed?
- Administrative personnel required

Operations

- What is the operating model of this TRC?
- How will the operating expenses be paid?
- What is the revenue model?
- Beyond ITRI funding what is the long-term sustainable plan for this TRC?

Financials

 Please share the 3-year financial model for the TRC. (Our team can assist you in preparing this)

End Users

- Who will be the users of this TRC?
- How do you ensure open and fair access?
- What would be the user/project selection criteria?
- How will this TRC serve academia, startups, incubators, MSME and large industry?
- What will be the outreach steps taken to engage the stakeholders

Governance

- What are the governance policies?
- How do we ensure fair representation from relevant stakeholders in the governance?
- How do we ensure collective and collaborative decision making?

Relevant entities

- What are some complementary and/or competing entities to this TRC in India and globally?
- How does this facility compare to those?

Growth

- What is the growth path for this?
- Is space available and provisioned for future expansion?

Other

- Other funder interest: has anyone else indicated interest in funding this initiative? If so, what is the status of the same
- What is the minimum funding required to get this initiative off the ground?
- Policy Transparency
- What is the reporting frequency and structure
- What are the relevant success metrics?
- Why is your institution best positioned to host this TRC vis-àvis other institutions in India?

ITRI team can assist you in drafting this proposal. Please feel free to reach out to us with your queries ceo@itri.org.in

TRC Review Process

- Is this proposal aligned with the vision and mission of ITRI?
- Is the proposed TRC state-of-the-art and globally competitive? If not, what are the shortfalls
- Is this institution best positioned to host this TRC?
- Are the stakeholders adequately identified?
- Does it adequately include stakeholders and beneficiaries beyond the host institution? And satisfy
 the Ecosystem and nation-building aspects of ITRI?
- Have the stakeholders been approached in constructing this proposal?
- How will it sustain itself over the long term?
- How will it set its policies and governance to achieve its mission?

Review committee

- 1. Domain experts from industry
- 2. From incubators
- 3. From academia

TRC Prioritization Criteria

Breadth of impact (Industry Demand/Uptake):

- Does this TRC impact a broad swathe of industries? Does India have a mature industry that can utilize this tech? or an upcoming ecosystem. What are the techno-economic tailwinds for this TRC?
- A) broad, B) moderate C) niche
- Examples: Metals = A. RNA therapeutics = C

Ease and speed of development (fast-tracked development):

- Does it require significant scientific research over many years and much investment or can be developed relatively quickly using engineering methods? A) Simple and fast, B) moderate C) slow and complex.
- Examples: Cell Gene Therapy = C. Heating and cooling = A

• Economic Impact:

• Does having this technology significantly reduce the import burden? Or give the Indian industry an export advantage? Or create significant employment opportunities? Other economic impact

Social Impact:

 Does it improve health accessibility and affordability? Does it substantially impact the environmental metrics? Child health? Maternal health? Reduction in disease burden? Other

Funders Appetite:

Does it have funder interest?