



**RKDF**  
**UNIVERSITY**  
— *BHOPAL* —



**INTEGRATED**  
**INTER-DISCIPLINARY**  
**RESEARCH (IIR) CENTER**



**PROJECTS SANCTIONED BY GOVT. OF INDIA TO TO RKDF  
UNIVERSITY IN 2018-19**

□ **PROJECT I : Carbon Capture Project ( vide letter dated 6-2-2019)**

- **Sponsored by Ministry of Power, CPRI (Central Power Research Institute)**
- **CPRI Grant Amount- - Rs. 38.5 Lacs**
- **Project Outlay - - Rs. 53.50 Lacs**

□ **PROJECT II : Solar Thermal Project 40 kW (vide letter dated 29-3-2019)**

**Project Outlay : - Rs. 81.50 Lacs**

- **Sponsored by: Ministry of New & Renewable Energy (MNRE), Government of India**
- **MNRE Grant Amount - - Rs. 39.00 Lacs**

**In Both the Project collaborating organization is RPI, NY, USA**

# A view of the Solar Thermal Plant



[video](#)

# Asia's first and World's third Solar Integrated Carbon Capture Plant at RKDF University



# Enlys / RKDF / RPI / MNRE CSP Project



- Store heat from solar-powered Scheffler Dish steam generation system (at  $\sim 200$  °C)
- Discharge the stored heat at night to continue generating steam



# TARGETS FOR 2022-23

- **Carbon Capture Plant on 500 MW Unit at Singrauli Thermal Projects.... 13.00 Cr. Project submitted to MoEF (Green Climate Fund through NITI Aayog)**
- **Technology Incubation Center Project submitted to ATAL COMMUNITY INNOVATION CENTER (ACIC)... 2.5 Cr.**
- **EOI for Thermal Energy Storage (TES) Plant of 5MWth (1.25 MWe)Capacity using concentrated Solar Plant ...25 Cr. (Jt. Venture with SKIPL)**

## Development of carbon capture and sequestration technology on MW size Unit of a Thermal power plant

The table top pilot plant shall be installed before the Chimney as shown below on the flue gas duct. About 6 Tons per day for 16 Hours operation will be tapped-off from the chimney.



# TaylorMade / Enlys / RKDF / RPI / MNRE CSP Project Phase II @RKDF University (2019-21)



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## WINNERS OF IIGP 2.0 UNIVERSITY CHALLENGE 2018

### SOCIAL SECTOR

- Thapar Institute of Engineering and Technology
- RKDF University
- IIT Madras
- Datta Meghe Institute of Medical Sciences
- Institute of Chemical Technology
- IIT Kharagpur
- IIT Madras



## India Innovation Growth Programme (IIGP) 2.0

Pay RKDF University or bearer

Rupees Ten Lac only

**₹ 10,00,000**

# India Innovation Growth Award- 2018 (DST & TATA TRUST)





**RKDF University is committed to use Renewable Energy Technologies through deployment of Solar PV plants and Innovative R&D Projects in Solar Thermal in Collaboration with Rensselaer Polytechnic Institute (RPI), USA**