

WELCOME



30th IQAC Regular Meeting

Wednesday, 28th June 2023

30th IQAC meeting, 28th June 2023. V R Siddhartha Engineering College

WELCOME

A) Action taken report on the proposals of 29th IQAC meeting

1) **EPICS.** The projects should confine to societal problems with innovative solutions and reach targeted users.

Agenda

- 2) Industry / Institute (IITs / NITs) Collaborative joint venture projects. Their execution in all departments.
- **3) Refresher Training program on OBE** (Focusing on higher order knowledge levels, defining appropriate COs & setting higher PO attainment levels).

Agenda

B) Issues open for discussion

- **1)** Attention on improving **Granting of Patents** in proportion to publishing.
- 2) Implementation of Academic Bank of Credits.
- 3) Any other item with the permission of Chairperson.

30th IQAC meeting, 28th June 2023. V R Siddhartha Engineering College

A) Action taken report on the proposals of 29th IQAC meeting
1) EPICS. The projects should confine to societal problems with innovative solutions and reach targeted users.

Suggested the following for improvement

- 1. Directing the students & guides to strictly follow EPICS design Process
- 2. Conducting brainstorming sessions on EPICS to students & faculty
- 3. Appointing separate EPICS Committee at department level for meticulous examination on the progress of the project at every assessment level.
- 4. Promoting the students to reach their innovations to the targeted community.
- 5. Promoting the students to exhibit their Innovations on prominent platforms.

1) EPICS. The projects should confine to societal problems with innovative solutions and reach targeted users.

EPICS – Recommended to implement

- Selection of the best EPICS project at department level.....and appreciation to students & faculty
- Selection of the best EPICS project at Institute level out of the best projects of departments and appreciation to students & faculty.
- Telecast the selected the best project in intended regional media channels Every dept. at least one per year.
- Telecast the selected the best project among the depts. in National Channels, one at Institute level per year.
- Technical Publications through papers / Patents
- Exhibition / Presentation of EPICS Projects on Prominent platforms IITs / NITs / Govt. Organisations / etc.

30th IQAC meeting, 28th June 2023. V R Siddhartha Engineering College

EPICS

1) EPICS. The projects should confine to societal problems with innovative solutions and reach targeted users.

Innovative EPICS Projects selected by departments in 2022-23

Dept | Title of the Project

- **CSE** > Battery Monitoring System in Electric Vehicles for the User's Safety
 - Smart Rain Protection cover using IoT
 - Smart Reader for visually impaired
 - An AI based mental health support Chabot for Cyber bullied Victims
- ME > Development of Safety Helmet using Rice Straw/ Bagasse hybrid composite material
 - Smart Trash Bin
- **EEE** > Child rescue system from open bore wells using Robotic Module.
 - Design and Implementation of smart electric two-wheeler considering real-time operating conditions.

Note: EPICS projects should useful to community (People/schools/local governments), but not for profit organizations.

30th IQAC meeting,28th June 2023. V R Siddhartha Engineering College

EPICS

1) EPICS. The projects should confine to societal problems with innovative solutions and reach targeted users.

Innovative EPICS Projects selected by departments in 2022-23

Dept | Title of the Project

IT

CE

- Cataract detection using Mobile Application
 - > Change detection Algorithm for Vegetation Mapping using Multispectral Image Processing
- ECE ➤ AI Powered Continuous Glucose Monitoring and Controlling System: Pumping Module and Sensing Module
- **EIE** > An Integrated Wireless Aquaculture Monitoring and Feed Management System
 - Design and development of 6-axis robotic arm for industrial applications
 - Identification of Accidents using Sensors
 - Traffic Management at Level Crossing
 - Development of mitigation strategies for sustainable development of coastal zone

A) Action taken report on the proposals of 29th IQAC meeting

2) Industry / Institute (IITs / NITs) collaborative joint venture projects. Their execution in all depts.

Recommended to implement

- Building relations with nearby NITs / IITs through......
 Inviting experts from IITs/ NITs for training programs (summer schools, etc.),
 Exchange programs for UG, PG students and faculty,
 organizing the conferences, workshops and FDPs in collaboration with IITs/NITs,
 Centers of Excellence in collaboration with IITs/ NITs,
 MoUs / Linkages with such Institutions, etc.
- Taking the above events as an opportunity to fulfill our requirement.

30th IQAC meeting, 28th June 2023. V R Siddhartha Engineering College

Institute Collaborative joint venture projects

A) Action taken report on the proposals of 29th IQAC meeting

2) Industry / Institute (IITs / NITs) collaborative joint venture projects. Their execution in all depts.

Action taken by the departments

| Dept. | Action taken | | | | | | |
|-------|---|--|--|--|--|--|--|
| CSE | ISRO, Rs.43,14,920 | | | | | | |
| IT | NRSC-ISRO, Rs.54,07,520 | | | | | | |
| ECE | Efftronics & Aventel-Rs.21.50 Lakhs (11+10.5) | | | | | | |
| CE | MoUCSIR National Institute of Oceanography (NIO), Dona Paula, Goa | | | | | | |
| EIE | MoUMicrogrid Technologies, Visakhapatnam | | | | | | |
| EEE | | | | | | | |
| ME | | | | | | | |

Directed the departments to continue the process for getting Joint Venture Projects

30th IQAC meeting, 28th June 2023. V R Siddhartha Engineering College

Institute Collaborative joint venture projects

A) Action taken report on the proposal of 29th IQAC meeting

3) Refresher Training program on OBE (Focusing on Higher order knowledge levels, defining appropriate COs & setting higher PO attainment targets).

Proposed with an intention of updating skills and knowledge to a changed standard and further refinement in OBE practice in the Institution

The IT department took the charge to organize the program

Topic: Outcome Based Education

- Focusing on Higher order knowledge levels,
- Defining appropriate COs in new courses &
- Setting higher PO attainment levels in existing programs.

Resource Persons: NITTTR, Chennai

Tentative Schedule of the program: July 2023

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Refresher Training program on OBE



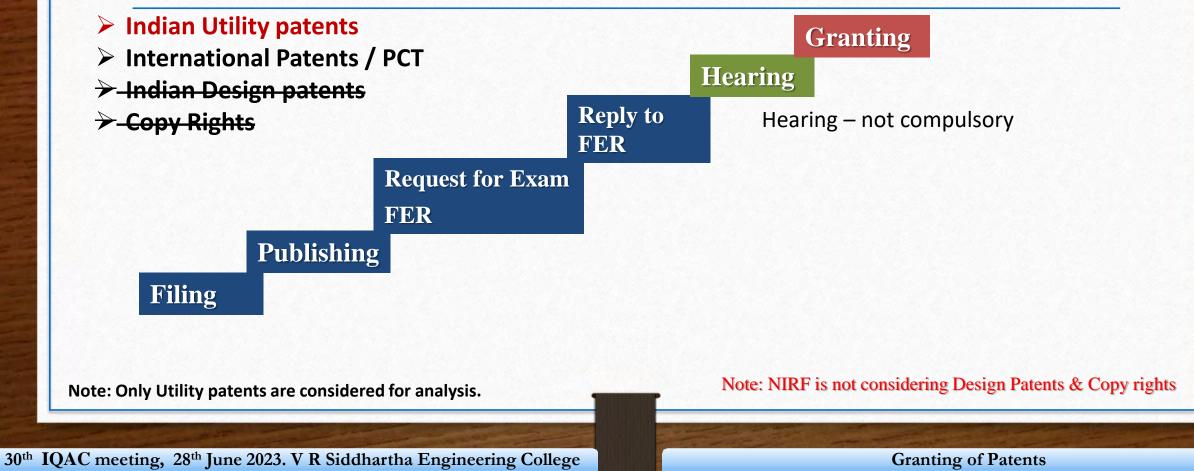
B) Issues open for discussion in 30th meeting

- 1) Attention on improving Granting of Patents in proportion to publishing.
- 2) Implementation of Academic Bank of Credits.
- 3) Any other item with the permission of Chairperson.

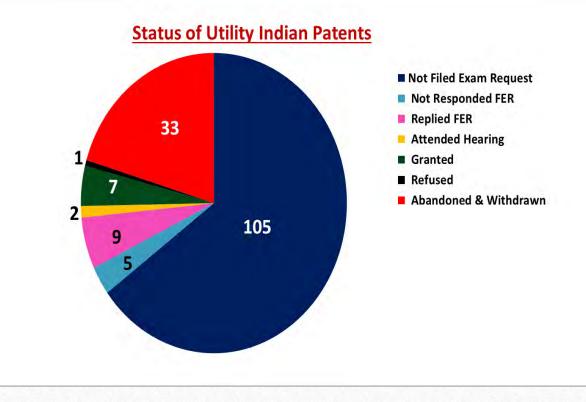
Agenda

1) Attention on improving 'Granting of Patents' then commercialization

PATENTS:



1) Attention on improving 'Granting of Patents' then commercialization



- Most contributed depts are CSE & IT
- No granting of patents from ME & EEE in Engineering;
 - MBA, MCA, Maths, Physics, Chemistry & Eng in non-engineering depts.
- Granted: Published = 7 : 162 => 1 : 23 or
- \blacktriangleright % of granting = 4.3%
- Weightage in NIRF:
 Published : Granting = 25:75
- No patent commercialised so far.

Total Utility patents: 162

The ultimate aim of patent filing is Granting & Commercialization

Note: NIRF is not considering Design Patents & Copy rights

| 1) Attention on improving 'Granting of Patents' then commercialization | | | | | | | | | | |
|--|-----------------|-----|---------|----------|---------|---------|-------------|--|--|--|
| | Not Filed | | Replied | Attended | Granted | Refused | Abandoned | No granting of | | |
| Dept | Exam Request | FER | FER | Hearing | | | & Withdrawn | patents in ME, EEE in Engineering; | | |
| CSE | 23 | 2 | 4 | 1 | 2 | 1 | 5+2 | MBA, MCA, Maths, Physics, Chemistry & Eng in non- engineering depts. No patent | | |
| IT | 20 | 2 | | | 1 | | 2 | | | |
| CSE&IT | 9 | | | | | | 7 | | | |
| ECE | 11 | | 1 | | 1 | | 4+1 | | | |
| EIE | 8 | | | | 1 | | 3+1 | | | |
| CE | 2 | | 3 | 1 | 2 | | | commercialization so | | |
| ME | 5 | | 1 | | | | 3+2 | far. | | |
| EEE | 6 | 1 | | | | | 2+1 | Granted: Published | | |
| MCA | 11 | | | | | | | = 7 : 162 => 1:23 | | |
| MBA | 3 | | | | | | | or > % of granting = 4% | | |
| Maths | 3 | | | | | | | | | |
| Phy | 1 | | | | | | | Weightage in NIRF: | | |
| Che | 3 | | | | | | | Published : Granting | | |
| Total | 105 | 5 | 9 | 2 | 7 | 1 | 26+7 | = 25:75 | | |

Note: Data 2014-15 to till date; verified in official site https://ipindiated

based on the data received from the depts

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1) Attention on improving 'Granting of Patents' then commercialization

Observations on personal interaction with Patent claimants

- Most of the patents (32) published belongs to one person in CSE & IT
- > No / little interest in the faculty for follow up after publication for their FER
- Difficulty / quality of work may be the reason for not facing FER & granting compared to publishing.
- Several patents are as first / second / third claimants from outside Institutions.
- Few faculty having Patents, left the Institution.

The ultimate aim of patent filing is Granting & Commercialization

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1) Attention on improving 'Granting of Patents' then commercialization

Status of utility patents after their publication

- Not Requested For Exam : 105
- Not filed Responses for FER : 5
- Abandoned & withdrawn: 33
- Refused after FER : 1
- FER Replied & waiting for Result : 9
- Hearing Completed & Waiting for Result : 2

Recommendations

- Case to case review at dept level under the guidance of HoD at regular intervals.
- Filing max patents by our faculty as first claimant.
- Appointing patent expert / advisor for guidance to the claimants till the Granting / Commercialization.
- Inviting suggestions from Heads & challenges facing by claimants, for improvement.
- Monitoring of patents on regular basis in Depts.

30th IQAC meeting, 28th June 2023. V R Siddhartha Engineering College

B) Issues open for discussion 2) Academic Bank of Credits - Implementation

Academic Bank of Credit (ABC) – NEP 2020

"An Academic Bank of Credits (ABC) would digitally store the academic credits earned by students in various recognized HEIs so that the degrees from an HEI can be awarded taking into account credits earned"

AICTE has established the Academic Bank of Credits (ABC) portal on the lines of the National Academic Depository (NAD).

Academic Bank of Credits Platform

- Academic Bank of Credits website: <u>www.abc.gov.in</u>.
- HEIs & Students can open their ABC accounts
- Account holders get a unique ID & access
- Credits valid for seven years
- used, or redeemed Credits earned by a student cannot be re-used

> VRSEC ID - **NAD041763**

30th IQAC meeting, 28th June 2023. V R Siddhartha Engineering College

Academic Bank of Credits

2) Academic Bank of Credits - implementation

Student Registration & Credit Transfer on ABC

1. Registration:

- Student registers with their mobile number through Digi Locker.
- A unique ABC ID is allotted
- Institute ID can be shared to all the student enrolled

2. Login

- Student logs in with an OTP from registered mobile number.
- Student access ABC dashboard
- Credits mapped to ABC ID are displayed on the Dashboard.

3. Transfer Initiation

- Student selects credits of his / her choice
- Initiates transfer by selecting the beneficiary Instt.
- Provides additional details necessary for transfer

5. Request Status

- Student can check the request status
- Gets notified of the credit transfer
- All credit trails are maintained and reflected in student's account

4. Credit Transfer Process

- Academic Institution (AI) checks the eligibility of the transfer request based on the UGC Guidelines
- The AI approves / rejects credit transfer request partially or fully based on the course structure
- Provides reason for approval / rejection in the remarks column

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Academic Bank of Credits

2) Academic Bank of Credits - implementation

APSCHE - Call for Action to HEIs and Timelines

- Registration on ABC (<u>www.abc.gov.in</u>)26th June 2023
- Formation of ABC Cell in HEI30th June 2023
- Appoint ABC 'Nodal Officer' and share his Phone Number & Official email on institution's website.
- Create a hyperlink of <u>www.abc.gov.in</u> on your institution's website.
- Conduct of awareness programs to students and creating ABC ID for all Students......15th July 2023 for 2nd & 3rd Year students. Be an ongoing event for new batches of students.
- Conduct of awareness programs to admitted students and creating ABC ID for all30th July.
- Upload the mark sheets records with ABC ID for all the students who have appeared for the exams since 2021....30th Sept. 2023

Academic Bank of Credits

Any other item with the permission of Chairman

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Any other item



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Thank you