

MINUTES OF 65TH RESEARCH COUNCIL MEETING HELD ON 22.03.2021 AND 23.03.2021 AT CSRTI-MYSURU

65th meeting of Research Council was convened on 22nd and 23rd March 2021 at CSRTI Mysuru to review the progress of Research and Developmental programmes of the Institute achieved during the period of November 2020 to February 2021 under the chairmanship of Dr. Babulal, Director Incharge. The list of the participants is appended at **Annexure - I**.

Dr. N. Balachandran, Scientist-D and Head, PMCE welcomed Chairperson, all the scientists, JRFs, SRFs, RAs of the main Institute and nested units who participated in the meeting. After welcoming of all the participants of the meeting by Chairman, he in his opening remarks apprised that RC meeting is a base for formulating research projects to undertake, research ideas which will emerge as preliminary concepts & after thread bare discussions and fine tuning, full projects are prepared. He requested all the participants to contribute in the discussions based on their expertise for arriving at fruitful decisions. Thereafter, meeting started as per agenda items:

I. Confirmation of the minutes of the 64th meeting held on 28.10.2020 and 29.10.2020

The minutes of the 64th meeting of RC were circulated to all the members. Since no comments were received from any of the members, the minutes were confirmed.

II. Review of follow up action taken on decisions of last meeting held on 28.10.2020 and 29.10.2020

The follow up action taken on the decisions was discussed at length in the meeting and further decisions adopted are as under.

A. Decisions of previous RC meeting

1. Studies on long term persistence of pesticides sprayed to pre-mulberry, its impacts on silkworm and development of bioremediation strategies

Decision: As per CO suggestion, before under taking further studies, a pilot study should be conducted. The committee advised to submit a pilot study proposal.

(Action: Dr. E. Bhuvaneshwari, Sc-C, SW Physiology)

2. Non Destructive Testing Instrument for identification of silk content in the fabric.

Decision: The committee observed that IIT Kanpur is not responding for consultation and submission of the project is being delayed. There is provision to consult other two concernrd viz., CSTRI Bengaluru and NIE Mysuru. So advised to consult the above two and prepare the project. However, IIT Kanpur may also be communicated again.

(Action: Shri. S.M. Hukkeri Sci-D,SED)

3. Design and Development of 3-D fabric based mountages suitable for silk worm rearing.

Decision: The committee advised that a pilot study proposal be prepared and submitted within a fortnight.

(Action: Shri. S.M. Hukkeri Sci-D, SED)

4. Studies on chemical-free and water-less disinfestation for room/equipments of CRC/Late age rearing for sustainable Sericulture

Decision: The committee suggested to submit the revised proposal for pilot study with revised budget within a fortnight for implementation.

(Action: Shri. S.M. Hukkeri Sci-D, SED)

5. Primary Yield Evaluation of short-listed hybrids for development of disease resistant productive genotypes with special reference to root diseases under assured water and input conditions.

Decision: The committee suggested PMCE to obtain the referee comments and send for CO approval.

(Action: Sci-D, PMCE)

6. Identification and development of β -sheet rich bivoltine silkworm breeds/hybrids by inducers.

Decision: As per CO advice brainstorming session on silkworm breeding was to be organized at CSRTI Mysuru and on the basis of the outcome of brainstorming session, projects was to be formulated. However, brainstorming session is yet to be conducted. We may request C.O. Bengaluru to refix the date for organizing the said brainstorming workshop.

(Action: Dr. S.M. Moorthy, Sci-D, BBL)

7. Development of Project Management Database of CSRTI, Mysuru

Decision: The committee advised to initiate the pilot study as per CO suggestion.

(Action: Dr. Amit Saha Sci-B, SEEM)

8. Publication of Success stories:

Head, SEEM Division has been requested to incorporate the success stories of subordinate units, RECs may send success stories for publication in Indian Silk also.

(Action: Sci- D, SEEM)

9. Irrigation water requirement for mulberry crop to amend previous recommendation/Weather based crop coefficient approach:

Decision: The committee observed that no action has been reported on the matter. Accordingly, concerned scientist is advised to take necessary action as per previous meeting decision.

(Action: Dr. Rajaram, Sci-D incharge REC Samaynallur)

10. Identification of consistent poor sericulture performers *vis a vis* best performers to find out the reasons for failure and remedial measures to improve economy.

Decision: Head, SEEM Division was advised to submit a comprehensive proposal in RMIS-02 format to find out the reasons and suggestions for remedial measures.

(Action: Sci-D and Head SEEM, Dr. T.V.S. Srinivasa Rao Sci-D, REC Eluru, Sci-D and Head RSRs, Kodathi and Mulugu)

Any other point:

The website of CSRTI, Mysuru has to include the works of nested units like RSRs, SSBS-Coonor and P4-BSF Hassan in brief.

Decision : The committee advised the heads of RSRs, P4 Hassan & SSBS, Coonor to send the required inputs regarding their work to upload in the institute website.

(Action: Heads of RSRs, Sci-D, P4 Hassan, Sci-S, SSBS, Coonor)

All the PIs are advised to take necessary follow up action on the decisions of the RAC and submit ATR before next meeting.

(Action: All Scientists)

A. Decisions of previous RAC meeting

PRE 01005 CN: Demonstration and popularization of pheromone trap against silkworm uzi fly *Exorista bombycis*

Decision: Regarding Commercialization of the uzi lure the committee suggested to popularize the technology through DoS by circulating the pamphlets and publishing the article in popular journals.

(Action: Dr.S. Mahiba Helen, Sci-D, PML)

AIT 3593: Transcriptome analysis of silkworm for identification of molecular markers for improvement of silk quality

Decision: Dr. Kusuma, Scientist C informed that she will complete the work on preparation of manuscripts and will submit to peer reviewed journal during April 2021.

(Action: Dr. Kusuma L, Sci-C, BBL)

III. Review of new concepts/projects proposals.

The concerned PIs presented the concept notes and the project wise decisions taken by the committee are as follows:

1. Combined Impact of Adoption of INM, IPM, IDM and IDM2S at farmers level in mulberry Sericulture

Decision: The committee approved the concept note, with a suggestion to change the title as “Impact of combined adoption of IPM, IDM and IDM2S at farmers level in mulberry Sericulture”, minimise the first objective and also to reduce the budget.

(Action: Dr. A.Mahima Santhi, Sc-D,REC, Samayanallur)

2. Study on drip-fertigation on mulberry leaf quality and yield :

Decision: The committee approved the concept note and advised to take up the experiment in the existing plots to save time. Further, instructed to include the installation cost of drip irrigation in the proposal.

(Action: Dr. Divya Singh, Sc-B, Mul Physiology)

3. Amelioration of Chlorantraniliprole toxicity to silkworm, *Bombyx mori*.

Decision: After thorough discussions, the committee approved the concept note with a suggestion to include similar works done after reviewing the literature at National and International level.

(Action: Dr.Satish. L, Sc-C, BBL)

4. Improvement of silkworm growth through identification of novel *endophytes* against mulberry foliar diseases.

Decision: The committee approved the concept note with a suggestion to change the title as per objectives by removing the word novel and silkworm as the study focus on mulberry foliar diseases.

(Action: Dr.Satish. L, Sci-C, BBL)

5. Impact utilization of mechanization in sericulture of south India

Decision: The committee approved the concept note with a suggestion to revise the objectives, methodology and expected outcome precisely.

(Action:Dr.N G Selvaraju, Sci-D, SEEM)

6. Artificial diet formulation for rearing mulberry silkworm *Bombyx mori* for promoting research in sericulture

Decision: The committee did not approve the concept note as there is no field relevance.

(Action: Dr. E. Bhuvaneshwari, Sci-C, SW Physiology)

7. Collection of scale/moth dust generated during the silkworm grainage operation to address the health issues of workers and also utilizing the dust for extraction of Chitin

Decision: The committee approved the concept note with a suggestion to restrict the study for the development of a device for dust collection and change the title accordingly.

(Action: Shri.S.M. Hukkeri, Sci-D, SED)

8. Development and performance evaluation of Mulberry waste-polymer composite based mulching mats.

Decision: The committee did not approve the concept note pointing the negative effects of introduction of a synthetic polymer into the ecosystem.

(Action: Shri.S.M. Hukkeri, Sci-D, SED)

9. End to end logistic support from seed to cocoon marketing in sericulture industry.

Decision: The committee did not approve the concept note as it does not have any contribution to the sericulture industry.

(Action: Shri. M.N.Chandra Shekar, Sci-D, Reeling)

10. Android Based Classification of Cocoons & Quality Assessment using Machine Learning for Mobile Application

Decision: The committee approved the concept note and asked the scientist to re-submit the concept by revising the methodology.

(Action: Shri. M.N.Chandra Shekar, Sci-D, Reeling)

The committee advised to incorporate the suggestions of the internal screening committee for submission of revised concept notes for forwarding to CO for clearance.

(Action: All the concerned PIs)

IV. Review of concluded projects

1.PRE01005 CN-Demonstration and popularization of pheromone trap against silkworm uzi fly *Exorista bombycis*

Decision: Dr.S. Mahiba Helen, presented the concluded project. Committee advised the PI to write letter to DoSs regarding popularization of pheromone trap developed by this Institute along with pamphlet and availability details of trap and also to publish an article in Indian silk.

(Action: Dr.S. Mahiba Helen, Sci-D, PML)

V. Review of ongoing projects

1. PIN 3563. Evaluation of improved mulberry genotypes for yield potential, nutrient uptake and use efficiency under varied cultivation practices.

Decision: Dr. Dhaneshwar Padhan presented the progress of the project and committee noted the progress and advised to complete the work as per milestones. The committee noted that budget utilization is below 50% and advised to increase utilization.

(Action: Dr. Dhaneshwar Padhan, Sci-B, Agronomy)

2. PPA 01016SI: Development of an agronomical package for tree mulberry cultivation for wide acceptance among the seri-farmers of Southern India.

Decision: Dr. Dhaneshwar Padhan presented the progress of the project and committee noted the progress and advised to complete the work as per milestones. Committee also suggested to submit the revised methodology of the project as suggested by CO.

(Action: Dr. Dhaneshwar Padhan, Sci-B, Agronomy)

3.PIC 3620:Engineering photosynthesis in mulberry for resilience to climate change: A C4 approach.

Decision: Dr.Tanmoy Sarkar presented the progress of the project and committee noted the progress and advised to submit proposal for extension and to complete the formalities of RCGM immediately.

(Action: Dr.Tanmoy Sarkar, Sci-C, MBG)

4.PIB 3631: Primary Yield Evaluation for identification of superior mulberry hybrids with drought adaptive traits under sub-optimal irrigated condition

Decision: Dr.Tanmoy Sarkar presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr.Tanmoy Sarkar, Sci-C, MBG)

5.PIB 3632-Evaluation of superior triploid genotypes for yield and adaptability under varied agro-climatic conditions of south India

Decision: Dr.S. Gandhi Doss presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr.S. Gandhi Doss, Sci-D, MBG)

6. AICEM Phase-IV: All India Coordinated Experimental Trial in Mulberry Phase-IV

Decision: Dr. S. Gandhi Doss presented the progress of the project and informed that as per CO suggestion the bio-data of the investigators has been submitted to CO for coding and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr.S. Gandhi Doss, Sci-D, MBG)

7. PIC 01007 SI: Development of protocol for production of medically fit silk (cocoon, sericin and fibroin) for clinical purposes

Decision: Dr.Ravindra presented the progress of the project and committee noted the progress and advised to complete the work as per milestones. Also advised to speed up the installation of poly house and accessories for hydroponics experiment. The committee advised to submit the revised project to CO with revised budget.

(Action: Dr. Ravindra, Sci-C, SSC)

8. PIB 3633-Development of highly productive and widely adapted mulberry hybrids using exotic and wild germplasm

Decision: Dr. G. S. Arunakumar presented the progress of the project and committee noted the progress and advised to complete the work as per milestones. Also advised to follow up with stores section for the delay in purchase of green shade net.

(Action: Dr.G. S. Arunakumar, Sci-C, Mol. Boil)

9.PIC-3615- Mapping QTLs for alkalinity tolerance in Mulberry (*Morus spp.*)

Decision: Smt. Bhavya, M. R presented the progress of the project and committee noted the progress and advised to complete the work as per milestones. Further, the committee observed that the budget utilization is very low and advised to utilize the proposed budget by the end of the project.

(Action: Smt.Bhavya, M. R , Sci-C, Mol. Boil)

10.PIE 01014 SI - Development of Distinctiveness, Uniformity and Stability (DUS) Descriptors for Mulberry (*Morus spp*) and their Validation - Phase III

Decision: Smt. Bhavya, M. R presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Smt.Bhavya, M. R , Sci-C, Mol. Boil)

11.PRP 01015 SI : Identification, evaluation and inclusion of potential antagonistic microbes in Integrated Root Rot Disease Management in Mulberry

Decision: Dr.G. S. Arunakumar presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr.G. S. Arunakumar, Sci-C, Mol. Boil)

12.1.NW2a- Validation of a high density SNP genotyping for QTL discovery by association mapping and biparental analysis in mulberry

Decision: Dr.B.N. Gnanesh presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr.B.N. Gnanesh, Ramanujan Fellow, Mol. Boil)

12.2.PIC01003CN(NW2b)-Discovery of QTL to drought adaptive traits by association mapping in Mulberry

Decision: Dr.Gayathri T presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr.Gayathri T, Sci-C, Mul Physiology)

12.3.PIC01003CN (NW2c) Identification of QTLs for yield associated traits in mulberry

Decision: Dr.Bhavya, M. R presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr.Bhavya, M. R,Sci-C, Mul Physiology)

12.4.PIC01003CN (NW2d) Identification of QTLs for Nutrient Use Efficiency

Decision: Dr.Sobhana V presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr.Sobhana V, Sci-C, SSC)

12.5.PIC01003CN (NW2e) Sustaining Mulberry Yield: Identification of QTLs Conferring Resistance to Root Rot Disease by Linkage Mapping and Trait Introgression

Decision: Dr.Arunakumar G. S presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr.Arunakumar G. S, Sci-C, Mol. biol)

12.6.PIC01003CN (NW3b) Development of New Generation Transgenic Mulberry for Drought Stress Tolerance and Characterization of Existing Transgenic Mulberry for Confined Field Trials

Decision: Dr.Tanmoy Sarkar presented the progress of the project and committee noted the progress and advised to complete the work as per milestones. Further, committee suggested to improve the data presentation.

(Action: Dr.Tanmoy Sarkar, Sci-C, MBG)

12.7. PIC01003CN (NW4a) Comparative quantitative and qualitative analysis of secondary metabolites for identification of biomarkers responsible for feed quality in mulberry

Decision: Dr.Gayathri T presented the progress of the project and committee noted the progress and advised to complete the work as per milestones. Further, suggested to improve the data presentation.

(Action: Dr.Gayathri T, Sci-C, Mul physiology)

13. AIT-3628:Assessment of SNP Variation in Silkworm (*Bombyx mori* L) by Genotyping Sequencing and genome-wide association mapping of important commercial traits". (Funded by DBT)- Collaborative project with RVCE, Bangalore

Decision: Dr. S. Manthira Moorthy presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr.S.M. Moorthy, Sci-D, BBL)

14.AIB 01 009 MI: Evaluation of new bivoltine silkworm double hybrid TT21 X TT56 at farmers level for authorization and commercial exploitation

Decision: Dr. S. Manthira Moorthy presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr.S. M. Moorthy, Sci-D, BBL)

15.PIC 01008 SI: Isolation and characterization of chitin/chitosan from silkworm pupal exuviae/spent pupae and its commercial exploitation

Decision: Dr. K. N. Madhusudhan presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr. K. N. Madhusudhan , Sci-D, BBL)

16.AIB 01004MI :Development of multivoltine breeds with improved silk quality utilizing indigenous and exotic bivoltine breeds

Decision: Dr. K. B. Chandrashekar presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr. K. B. Chandrashekar , Sc-D, MBL)

17.AIB 01011 SI : Development of Multivoltine foundation crosses for productivity and high silk percentage

Decision: Smt.Soudaminy. P.V presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Smt. Soudaminy. P.V, Sc-D, MBL)

18.AIP 01006 SI : Identification of probiotic consortium to improve the productivity in mulberry silkworm, *Bombyx mori*

Decision: Dr.Y.Thirupathaiah presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr.Y.Thirupathaiah, Sci-D, SW. Physiology)

19.BPS 01013 CN: Utilization and diversification of silkworm pupae products for human & animal consumption and composting

Decision: Dr.Y.Thirupathaiah presented the progress of the project and committee noted the progress and advised to complete the work as per milestones. Further, advised to find out the reasons for increase in inorganic elements in spent pupae compared to fresh pupae.

(Action: Dr.Y.Thirupathaiah, Sci-D, SW. Physiology)

20.ARP 01012SI: Development of a knowledge base on the silkworm diseases and pests and their management

Decision: Dr.A. V. Mary Josepha Shery presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr. A. V. Mary Josepha Shery, Sci-D, SW. Pathology)

21. AIT 01019 SI: Screening of drugs/Inhibitors to inhibit the PI3K-Akt pathway in *Bombyx mori* for controlling Nuclear Polyhedrosis Virus infection

Decision: Dr.Mallikarjuna G presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr.Mallikarjuna G, Sci-C, SW. Pathology)

22. PRE 01010 SI: Development of Integrated Pest Management (IPM) module for leaf roller *Diaphania pulverulentalis* (Lepidoptera: Pyralidae) in mulberry

Decision: Dr.Mahiba Helen presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr.Mahiba Helen, Sci-D, PML)

23.PPF01017SI :Economics of Mulberry Sericulture in South India

Decision: Dr. Amit Saha presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr.Amit Saha, Sci-B, SEEM)

24.PIN 01018 SI:Effect of potassium mobilising bacteria *Frateuria aurentia* on growth and development of mulberry

Decision: Dr. N. Dhahira Beevi presented the progress of the project and committee noted the progress and advised to complete the work as per milestones.

(Action: Dr. N. Dhahira Beevi, Sci-D, RSRS,Salem)

VI. Trial of Technologies: On Station Trials (OST) and On Farm Trials (OFT). The Scientists (PI) presented the progress made for the following OSTs and OFTs .

On Station Trials

- 1.Validation of M-LAMP technology- Dr. Mallikarjun G.
- 2.Validation of chawki feed supplement formulation (CFSF) in RSRS/REC of Andhra Pradesh, Karnataka and Tamil Nadu- Dr. E.Bhuvanewari
- 3.On station trials of newly developed multi-viral tolerant bivoltine hybrids-Dr. Satish L.
- 4.Evaluation of newly developed silkworm double hybrids-Dr. R.Meenal

On Farm Trials

- 1.Evaluation of improved PM - 4 in the seed area farms of Department of Sericulture, Govt of Karnataka and its cross breed (PM x CSR2) with the farmers- Dr. K.B. Chandrashekar
- 2.Evaluation of new productive bivoltine hybrid at farmer's level- Dr. S Manthiramoorthy
- 3.Evaluation of NPV tolerant bivoltine hybrid at farmer's level- Dr. S. Manthiramoorthy
- 4.Popularization of double hybrid - G11 x G19 - Dr. K.N.Madhusudhan

Decision: The committee noted the progress presented by individual PIs and advised all PIs to continue the OFT/OST during 2021-2022 and also submit OSTs/OFTs in project format as per Action plan meeting held on 4th and 5th February 2021 at CO Bengaluru.

(Action: All the concerned PIs)

VII. & VII. Extension (ECP) and Training (CBT) other programmes

Decision: Director appreciated and congratulated the teams of SEEM and Training for achieving the targets 90% and 100% for the year 2020-21 respectively.

VIII. Review of progress of pilot studies

The Scientists (PI) presented the progress made for the following pilot studies.

1. Design, development and fabrication of horizontal cocoon harvesting machine for plastic collapsible mountages - Shri. S. M. Hukkeri.
2. Design, development of Motor/ Hand operated portable deflossing machines suitable for laboratory use - Shri.S.M.Hukkeri.
3. Studies on fecundity enhancement by application of natural stimulants during oviposition in silk moth *B. Mori* L- Dr.R. Bhagya.
4. Standardization of extraction and characterization of Phytol, a bioactive compound in the excrement and quantification of phytol from different silkworm breeds/ hybrids of *Bombyx mori* .L for the possible exploitation in biomedical application - Dr.E. Bhuvanewari.
5. Identification of candidate gene markers for the development of silkworm hybrid with longevity associated with stress tolerance and productive traits - Dr.Ranjini M.S

Decision: The committee noted the progress presented by individual PIs and advised all PIs to submit a detailed completion report highlighting the outcome of the pilot study and its utility report. Regarding extension for Phytol study, PI may submit the request letter indicating the reasons.

(Action: All the concerned PIs)

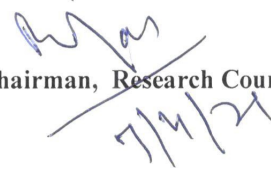
General:

- Director advised PMCE to speed up the publication of Annual Report 2019-20 as inordinate delay has been observed.
(Action: Sci-D, PMCE)
- Setting up of Incubation centre to be initiated and required budget proposal may be included in the revised Action plan 2021-22. The chairman of the committee constituted for the purpose, Dr. S.M. Moorthy, Sci-D, BBL may initiate the action on the matter.
(Action: SC-D, BBL)
- Director suggested to submit all the reports in time even if there is no progress to the authorities.

(Action: All Scientists)

The meeting ended with vote of thanks.

Director (I/C) and Chairman, Research Council


7/4/21

Annexure-I

List of participants attended the Research Council meeting held on 22nd and 23rd March 2021 at
CSRTI Mysore

#	Name & Designation	#	
1	Dr. Babulal Director (I/C) and Chairman, RC	47	Azad Goll, SFA, CSRTI Mysore
2	N. Balachandran Scientist-D CSRTI, Mysore	48	Gnanesh B. N. Ramjn. Fellow CSRTI, Mysore
3	P. Sudhakar Scientist-D RSRS Ananthapur	49	G. K.Churendra CP CSRTI Mysore
4	N. G. Selvaraju Scientist-D CSRTI, Mysore	50	Karthik H.P. PA CSRTI Mysore
5	Gandhi Doss S. Sci-D CSRTI, Mysore	51	Rajesh.S JRF, CSRTI Mysore
6	Shivakumar Hukkeri Sci-D CSRTI, Mysore	52	P Sowbhagya SRF, CSRTI Mysore
7	M.N. Chandrashekar Sci - D, CSRTI Mysore	53	Harshitha M.M PA CSRTI Mysore
8	Thirupathaiah Y. Sci-C CSRTI, Mysore	54	Sweta Sharma JRF, CSRTI Mysore
9	Mallikarjuna G. Sci-C CSRTI, Mysore	55	Lalith Kumari F PA CSRTI Mysore
10	Manthira Moorthy S Sci-D CSRTI, Mysore	56	Chaitra S PA CSRTI Mysore
11	Somaprakash, D.S. Scientist-D, RSRS, ChamaraJanagar	57	Shruthi R PA CSRTI Mysore
12	Arunakumar G. S. Sci-C CSRTI, Mysore	58	Abhilash H.K JRF, CSRTI Mysore
13	Ravindra Scientist-C CSRTI, Mysore	59	Ravindra K.N, SRF, CSRTI Mysore
14	Dhaneswar padhan Scientist-B CSRTI, Mysore	60	Bharath Gowda R.N ,SRF, CSRTI Mysore
15	Amit Saha Scientist B CSRTI, Mysore	61	Manoj Kumar . RA CSRTI Mysore
16	Satish L Scientist-C CSRTI, Mysore		
17	K.N. Madhusudhan Sci -C CSRTI, Mysore		
18	R.Bhagya, Sci-D CSRTI Mysore		
19	Mary Josepha A.V. Sci-D CSRTI, Mysore		
20	M. Muthulakshmi Sci-D CSRTI, Mysore		
21	N. Dhahira Beevi Scientist-D RSRS Salem		
22	V.Nishitha Naik Scientist-D P4BSF, Hassan		
23	Mahima Shanthi Scientist-D REC,Samayanallur		
24	R. Meenal Scientist-D CSRTI, Mysore		
25	Santha P. C. Scientist-D CSRTI, Mysore		
26	Gayatri .T, Sci-D CSRTI Mysore		
27	V.Sobhana Sci-C CSRTI Mysore		
28	S. Mahiba Helen Scientist-D CSRTI Mysore		
29	Bhuvaneshwar , E. Sci-C CSRTI, Mysore		
30	Kusuma L. Scientist-C CSRTI, Mysore		
31	Ranjani M.S. Sci-C CSRTI, Mysore		
32	Divya Singh Scientist B CSRTI, Mysore		
33	Purushotham S. Sci-D CSRTI, Mysore		
34	H.M.Munikrishnappa AD,CSRTI, Mysore		
35	Anuradha H.Jingade Sci-D CSRTI, Mysore		
36	Soudaminy P. V. Sci-D CSRTI Mysore		
37	Chnadrashekar K. B Sci-D CSRTI Mysore		
38	C.M.Babu Sci -D CSRTI, Mysore		
39	Y. N. Sanath Kumar Sci-C CSRTI, Mysore		
40	Rekha M DD,CSRTI, Mysore		
41	B. Mohan Scientist-D SSBS, Coonoor		
42	Bhavya M. R. Scientist B CSRTI, Mysore		
43	Tanmoy Sarkar. Sci-C CSRTI, Mysore		
44	Geetha G.S. Scientist C CSRTI, Mysore		
45	Ashwini N, JRF CSRTI Mysore		
46	K. B. Chandrashekar Sci-D CSRTI, Mysore		

