

TAMIL NADU AGRICULTURAL UNIVERSITY

Office of the Dean
Agricultural College & Research Institute
Madurai – 625 104

No. Dean, AC & RI, MDU / DB / TNAU – SFIR / Engagement of Post - Doctoral Fellows /
2026 dt. 23.09.2026

CIRCULAR

- Sub :** Dean, AC&RI, Madurai – Dept. of Biotechnology – Call for Post Doctoral Fellowships – Applications called for – Regarding
- Ref :**
1. No. DR / P3 / DPB, AC & RI, MDU / TNAU Funding / Special Fund for Innovative Research CoE – I / Revised ASO / 2026 dated 30.03.2026
 2. Notefile Numbered 004440 approved by the acting Vice-Chancellor on 25.03.2026
 3. Proceedings No. R1 / 002895 / 2026 of the O / o The Registrar, TNAU, Coimbatore dated 04.03.2026
 4. Proceedings No. R1 / 014997 / 2026 of the O / o The Registrar, TNAU, Coimbatore dated 17.09.2026

Applications are invited for **two (2) Post-Doctoral Fellowships (PDFs)** in the field of Agricultural Sciences under the specified thematic areas (refer **Annexure I**). These positions are purely temporary and carry a consolidated fellowship of **₹65,000 / - per month**.

Selected candidates will be placed at the **Centre of Excellence in Innovations (CoE-I), Department of Biotechnology, Agricultural College & Research Institute, Madurai**, under the control of **Tamil Nadu Agricultural University (TNAU)**. The CoE-I is equipped with state-of-the-art facilities for conducting cutting-edge research in the areas of **Genomics, Proteomics, and Metabolomics**. This post-doctoral opportunity will provide significant exposure to advanced research methodologies and high-end instrumentation.

Eligible candidates are requested to submit a soft copy of their **detailed research proposal** (as per **Annexure III**), aligned with the identified thematic areas (**Annexure I**) and leads obtained so far (**Annexure II**), along with a **brief curriculum vitae (CV)** including a list of publications in impact factor journals (Clarivate™ indexed). The research proposal may be **novel (in any of the major or minor millets) or based on the leads obtained**.

The prescribed application form for the Post-Doctoral Fellowship can be obtained (after paying a nominal fee) from:

- Office of the Dean (Students' Welfare), TNAU, Coimbatore, or
- Office of the Dean, Agricultural College & Research Institute, Madurai

The **hard copy** of the application along with all the relevant attachments viz., Publications in impact factor journals (Clarivate™ indexed), Copies of Ph.D. degree / provisional certificate, Academic transcripts, NET / SLET qualification proof, Certificates of awards, trainings, and conferences, Experience certificates etc., as per the guidelines given in **Annexure III**) must reach this office on or before **08.10.2026 (05:00 p.m.)**, whereas the **soft copy** of the application must be sent via e-mail to **deanagrimdu@tnau.ac.in** on or before **08.10.2026 (11:59 p.m.)**. Applications received after the deadline will not be considered. **Recommendation letters (2 Nos)** must be sent directly by referees (Chairperson of the Doctoral Advisory Committee and / or previous Principal Investigator) to the same e-mail address on or before **08.10.2026 (11:59 p.m.)**.

Softcopies of the application as well as corresponding hardcopies received after the prescribed deadline will not be entertained.

The envelope should be clearly superscribed as: **"Application for TNAU – SFIR Post-Doctoral Fellowship."** Candidates must produce all original certificates in support of their qualifications, experience, and publications at the time of the **proposal presentation / interview**. The University reserves the right to **fill or not fill** the advertised positions. Shortlisted candidates will be informed via e-mail to attend the **proposal presentation and interview**, scheduled on **27.10.2026**. **No TA / DA will be provided.**


Dean

Enclosure :

1. Identified theme areas (Annexure I)
2. Leads obtained (Annexure II)
3. Guidelines (Annexure III)
4. Proforma for Research Proposal (Annexure IV)

To

- All the University Officers / Heads of Departments / Research Stations / KVKs of TNAU with request for wide circulation.

Copy to:

- The Registrar, TNAU, CBE
- The Dean, Students Welfare, TNAU, CBE for favour of kind information and request to circulate
- The Professor and Head, Department of Physical Sciences and Information Technology, AEC & RI, Coimbatore with a request to host in TNAU website for wider circulation

ANNEXURE I
IDENTIFIED THEME AREAS OF RESEARCH FOR POST-DOCTORAL FELLOWS

S. No	Thematic Areas of Research
1.	Understanding the molecular basis for the accumulation of micronutrients in millets and exploiting the process of value addition for better human nutrition and healthcare
2.	Combining the classical and molecular tools of plant breeding to understand the genetic diversity of small millets to speed-up the process of evolving superior millet genotypes for farmers' cultivation. Development of high Fe, Zn rich millet varieties suitable for the food industries
3.	Understanding the physiological and phenological basis associated with biotic / abiotic stress tolerance in millets and evolve suitable technologies to overcome the biotic / abiotic stress tolerance in millets. Identification mechanisms of resistance in the crops for various abiotic stress to develop abiotic stress resistance varieties for the southern agro-climatic zones
4.	Development of economic and ecological millet-based cropping system and sustainable rural livelihood for cropping system stability, food security alleviation
5.	Development of novel food preparations and packing methods of various traditional foods using the millets grown in the southern districts of Tamil Nadu
6.	Development of methodology to take up interdisciplinary research work on the host plant resistance mechanisms in millets

ANNEXURE II

LEADS OBTAINED

Two complementary research projects on barnyard millet were carried out under the TNAU-SFIR programme (2024–2026) at the Centre of Excellence in Innovations (CoE-I), Department of Biotechnology, Agricultural College and Research Institute, Madurai, with emphasis on micronutrient biofortification and salinity stress tolerance. A total of over 200 germplasm lines were evaluated across seasons, leading to the identification of genotypes with contrasting iron and zinc content. Standardization of XRF-based rapid, non-destructive phenotyping, supported by ICP-OES calibration, enabled efficient screening for micronutrient density. Metabolomic profiling using GC-MS and UHPLC methods facilitated the identification of key metabolites associated with iron and zinc accumulation, while hydroponic experiments validated genotype performance under nutrient stress.

In parallel, extensive screening for salinity tolerance resulted in the identification of highly tolerant and susceptible genotypes, supported by standardized hydroponic and saline irrigation protocols. Transcriptomic analyses and qRT-PCR validation enabled the identification of candidate genes associated with salinity response. The integration of metabolomics and transcriptomics provides valuable insights into the molecular basis of stress tolerance and nutrient accumulation. Collectively, these studies establish a robust platform for developing nutrient-rich and stress-resilient barnyard millet varieties.

ANNEXURE III

GUIDELINES FOR POST DOCTORAL FELLOWSHIP

It is a **temporary, part-time research position (renewed once in 6 months)** for those who seek to choose research as a profession. Candidate with a PhD degree in appropriate disciplines and with consistently good academic record and research potential can apply. The proposal should be innovative.

1. Eligibility

- 1.1. A detailed research proposal has to be submitted along with the application. Proof of concept by way of preliminary work done is essential requirement for the applicants, which will be measured through their publications made in Clarivate™ indexed journals.
- 1.2. At least two letters of recommendation / reference from previous Principal Investigator / Chairman in case of freshers regarding the research capabilities and other attributes of the applicant must be submitted to the Dean, AC & RI, Madurai directly by the referee in confidential letter or by e-mail.
- 1.3. All the **TNAU terms and conditions in vogue** for the recruitment shall apply. Kindly refer to the current terms and conditions (Reference 3rd and 4th cited). Still, the conditions are listed below:
 - 1.3.1. **Education:** Ph. D., with four year bachelor's degree from SAU with NET
 - 1.3.2. **Work experience:** If any, is desirable, but not essential.
 - 1.3.3. **Publications:** Minimum three (3) publications in more than 6.0 NAAS rating / Impact factor journals.

2. Duration

- 2.1. The duration of the fellowship will be for a period of **2 years**
- 2.2. The fellowship is extendable to one additional year based on review of progress.

3. Financial Assistance

- 3.1. The Post Doctoral Fellow will be paid with consolidated fellowship of **Rs.65,000 / - per month**.
- 3.2. Contingencies to the tune of **Rs. 1.5 lakhs** per person per year shall be provided.

4. Leave

- 4.1. Leave for a maximum period of 12 days in a year in addition to public holidays may be taken by the Post-Doctoral Fellow with the approval of the Project Director, Centre of Excellence in Innovations (CoE-I), AC & RI, TNAU, Madurai.

5. Procedure for Approval

- 5.1. The applications received will be scrutinized by the fixed screening committee. Later, the short-listed candidates will be called to present the project proposal before the selection committee, constituted by University.
- 5.2. No TA / DA will be paid for appearing in the interview.
- 5.3. The decision of the Committee will be final.

6. Procedure for monitoring the Progress of the work

- 6.1. The Post-Doctoral Fellow shall submit, through the mentor and coordinating faculty with whom he / she is working and the head of the department / university, a half-yearly report on the progress of his / her research work.
- 6.2. Research articles (minimum two) along with review paper should be published in journals with high impact factor (Clarivate™ indexed) which is mandatory for submission of completion report.
- 6.3. Annual progress report of the research work done by the fellow may be examined by the research committee constituted by the university / institute and recommendations / comments of the committee may be sent to the Director of Research, TNAU, Coimbatore for approval.
- 6.4. In case the progress of the work is found unsatisfactory, the fellowship may be terminated by the committee at any time during the tenure of the award. The decision of the committee in this regard will be final.
- 6.5. The fellow shall not accept or hold any appointment, paid or otherwise, or receive any emoluments, salary, stipend, etc. from any other source during the tenure of the award. However, no extension is permissible beyond the total period of two years. Any claim / reference to this effect will be illegal.
- 6.6. **If the fellow wishes to leave the fellowship before the end of the tenure, it should be done with prior approval of the committee and refunding the total fellowship obtained.** The decision of the University will be final in this regard.

7. Cancellation of Award

- 7.1. Fellowship is liable to cancellation in case of:
 - 7.1.1. Misconduct
 - 7.1.2. Unsatisfactory progress of research work.
 - 7.1.3. Candidate if later found ineligible as per the eligibility stipulated in the advertisement.
 - 7.1.4. Candidate is already availing scholarship / fellowship from any other sources.

8. Required Documents

- 8.1. Application form (to be obtained from the Dean, Student's Welfare, TNAU, Coimbatore)
- 8.2. Research Proposal (as per Annexure IV)
- 8.3. Publications in Clarivate™ indexed journals in the relevant theme area
- 8.4. Two letters of recommendation (to be sent by the referee directly to the Dean, AC & RI, Madurai)

ANNEXURE IV
PROFORMA FOR RESEARCH PROJECT PROPOSAL
(Not exceeding 3 pages)

1.	Theme area chosen	:	
2.	Previous work done by the applicant	:	
3.	Title of the research project	:	
4.	Origin of the proposal	:	
5.	Rationale	:	
6.	Research Gaps Identified	:	
7.	Research questions	:	
8.	Hypothesis	:	
9.	Objectives	:	
10.	Key questions to be addressed in the identified theme area	:	
11.	Broad outline of work / methodology – indicating the activities in GANTT chart.	:	
12.	Brief methodology	:	
13.	Expected output	:	
14.	Expected outcome	:	

Signature of the Candidate

Place :

Date :