

# **Warrior HEART Hub**

National Institute of Technology Karnataka Surathkal NITK Campus Post Srinivasnagar Surathkal-575025

# Advertisement for the selection of Postdoctoral Fellow

Under

# Warrior HEART Hub (WHH)

Ref. No: NITK/WHH/PDF-2024-25 Date: 10/03/2025

**Applications are invited for Postdoctoral** Fellowship (WHH-PDF) under Warrior HEART Hub, National Institute of Technology Karnataka Surathkal

Applications are invited from interested meritorious candidates under, Warrior HEART Hub for CSR funded research project

### **Objective:**

The Warrior HEART Hub, National Institute of Technology Karnataka Surathkal aimed to identify motivated young researchers and provide them support for doing research in frontier areas of AI ML Application for Sustainable Management of Resources at NITK. The fellow will work under the Group pf Faculty members from NITK, and it is expected that this training will provide them with a platform to develop as an independent researcher. The beneficiaries of this fellowship in the future can support the planners and policy-makers of local governments in strengthening their capacity to manage problems related to waste and access to clean water as well as energy. Further, they can also create employment opportunities, which will help in social upliftment and promote social integration as well as social inclusion.

The availability of the fellowships for **WHH-PDF** will be for a period of six months. Interested candidates should fill in their academic and personal details in the prescribed application format and send the same along with attested copies of relevant certificates within 10 days from the date of advertisement to the contact person. Only the shortlisted candidates will be informed by post/E-mail/Phone/ Website: www.nitk.ac.in.

Shortlisted candidates should report to the contact person for certificate verification, followed by a test and technical interview. The interview is most likely to be held during the last week of March 2025. Any change in the date of the interview will be intimated through email. Selection will be based on qualification, experience, test performance, and interview. TA/DA will not be paid for attending the written test and interview. NITK, Surathkal reserves the right to reject any or all the applications without assigning any reasons thereof. Selected candidates will be required to join immediately.

| Source of Fund                                    | Warrior HEART Hub Research, Scholarships for Sustainability  |  |  |  |
|---|--|--|--|--|
| Title project                                     | AI ML Application for Sustainable Management of<br>Resources at NITK Campus  |  |  |  |
| Sponsoring Company                                | Warrior HEART Hub, National Institute of Technology<br>Karnataka Surathkal   |  |  |  |
| Monthly Fellowships /Research grants available    | Refer table 01 in P. No. 04  |  |  |  |
| Number of Post-Doctoral<br>Fellowships Available  | 01 (ONE)   |  |  |  |
| Faculty/Mentors Associated from Department/Centre | Department of Mechanical Engineering/Information<br>Technology/Civil Engineering/Computer Science and<br>Engineering   |  |  |  |
| Tenure of availability of Scholarships            | Currently for six months extendable based on the availability of funding and performance of the candidate.   |  |  |  |
| Qualification and Experience                      | Ph.D. in the research areas related to Mechanical Engineering/ Chemical Engineering / Thermal Engineering/Energy Engineering/Renewable Energy/Computer Science and Engineering/Information Technology  Desirable: Application AI ML for Water Management and Waste Management (Anaerobic Digestion, Gasification, Pyrolysis) Application AI ML for Optimizing water distribution based on real-time data, Improving waste management through intelligent sorting systems, Technologies. Effective communication skills to interact with diverse stakeholders   |  |  |  |
| Desirable qualities                               | The candidate must be able to work independently and flexibly and having the following qualities will be desirable.  1. Basic knowledge about laboratory/bench scale work with a technical focus on the basic fundamentals to understand and optimize the process  2. Implementation: Pilot/demonstration scale or the field application projects  3. Sustainability aspects: Financial, social, environmental aspects, models and simulations, theoretical evaluation, potential analysis, decision support tools  4. Excellent analytical and writing skills |  |  |  |

| Additional information               | May be obtained by contacting the Head/ CSR Project Coordinator, WHH Project Coordinator directly through email. |
|--------------------------------------|--|
| Last date for receipt of application | 24/03/2025   |

Interested candidates may apply in the prescribed format along with CV, photo copies of relevant certificates, grade/mark sheets, publications etc., and should reach NITK on or before 24/03/2025 by post/email (scanned documents) at the prescribed address below:

Sd/

Dr. Vasudeva Madav Project Coordinator

## **Warrior HEART Hub**

National Institute of Technology Karnataka Surathkal

Email 1: vasu@nitk.edu.in

Tel: +91-824-2473670, M: +91-9008889796

Faculty Associated from various Departments/Centre's NITK

| <b>Dr. Navin Karanth P.</b> Associate Professor Department of Mechanical Engineering | Dr. Saumya Hegde Assistant Professor Department of Computer Science & Engineering | <b>Dr. Dinesh Naik</b> Assistant Professor Department of Information Technology |  |
|--|---|---|--|
| <b>Dr Saikat Dutta</b> Associate Professor Department of Chemistry                   | <b>Prof. Arun Kumar Thalla.</b> Professor Department of Civil Engineering         | Prof. Shrikanth S Rao Professor Department of Mechanical Engineering            |  |

### **Eligibility:**

- The applicant should be an Indian citizen
- The applicant must have obtained Ph.D degree from a recognized University. Those who have submitted their PhD thesis and are awaiting award of the degree are also eligible to apply. However, such candidates, if selected, will be offered a lower fellowship amount till they qualify for the eligible degree. They must be able to provide a provisional degree certificate from the degree-awarding institute.

#### **Nature & Duration of Support:**

- The fellowship is tenable only in India and will be implemented at NITK, Surathkal. The WHH, NITK, Surathkal, and the respective department will provide necessary administrative and infrastructural support.
- The fellowship is purely a temporary assignment and is tenable for six months. Extendable based on the availability of funding and performance of the candidate.
- The fellows will be entitled to receive the grants as given in table 1 below:

Table 01: Fellowship and Research Grants

| Sl | . No. | Budget Head    | Amount   |
|----|-------|----------------|--|
|    | 1     | lHellowshin    | Rs.75,000/- per month (consolidated) for candidates who have been awarded a Ph.D. degree |
|    | 2     | Research Grant | Rs.50,000/- for six  |

- Research grant can be used for minor equipment, consumables, contingencies, and domestic travel. There is no provision for providing manpower support under this scheme. The Fellow is expected to undertake the research objectives by himself/herself during the entire duration of the fellowship.
- The fellows are not eligible to receive any other fellowship from any Government or Non-Governmental source during the tenure of the fellowship.
- The fellows must seek the consent of Faculty Mentor/Project Coordinator/ Dean R&C if he/she intends to be away from NITK (except for fieldwork related to the project) continuously for a period of more than eight weeks.

#### **Selection & Mode of Application**

The call for applications for WHH-PDF under **Warrior HEART Hub**, **NITK** will be notified through the website www.nitk.ac.in

- The application form along with a research proposal highlighting the objectives of the research work to be undertaken should be submitted online through the email
- The selection will be based on the recommendations of an Expert Committee that will be constituted by the **Warrior HEART HUB, NITK**, Surathkal and as per the procedure laid down by NITK, Surathkal
- Final Selection will be made as per the procedure laid down by NITK, Surathkal.
- If required, the applicants may be called for the personal interview.

#### How to apply:

#### For successful submission of the application the following points may be noted:

- Applicants should fill the form, which includes Bio-data, Photo, Institute, Address, etc.
- Details including Project Title (max 500 characters), Project summary (max 3000 characters), Keywords (max 6), Objectives of the project (max 1500 characters), Expected output, and outcome of the proposal (max 1500 characters) should be provided at the time of submission of the application.
- Work Methodology and Research Plan must be submitted in a single PDF file, not more than 3 pages (max 10 MB).

#### Documents required (in PDF) should be in prescribed format:

- Duly Filled Application
- Bio-data
- Age Proof Certificate
- Qualification Certificate
- Category Certificate (in case of Age Relaxation)
- Undertaking Certificate by the applicant (as per the attachment)
- Plagiarism undertaking

### **Termination of the Fellowship**

- If any fellow wishes to terminate the fellowship, he/she shall inform the WHH, NITK, Surathkal, through the mentor immediately with one month notice.
- WHH, NITK, Surathkal reserves the right to terminate the Fellowship at any stage if it is convinced that appropriate progress is not being made or the grant has not been utilized properly.

#### **Leave**

WHH- PDFs are entitled to leave as per the rules of NITK. Participation in scientific workshops held in India or abroad will be treated as on duty. As per the Govt. of India instructions issued from time to time, maternity leave would be available to female candidates in all categories.

# **Application for Warrior HEART Hub Post Doctoral fellowship**

| For Office Us                     | se:              |        |                      |                      |                |                    |
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|                                   |                  |        |                      |                      |                | your recent        |
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| Eligible for W                    | ritten exa       | m/Inte | rview: Yes / No      |                      |                |                    |
| Verified the C                    | ertificates      | :      |                      |                      |                |                    |
| 1. Name:                          |                  |        |                      |                      | 1              |                    |
| 2. Father's N                     | ame:             |        |                      |                      |                |                    |
| 3(a). Date of                     | Birth:           |        |                      | 3(b). Nationality:   |                |                    |
| . Contact infor                   | mation:          |        |                      |                      |                |                    |
| (i) Address for communicati       |                  |        |                      |                      |                |                    |
| (ii) Mobile No                    | <b>D:</b>        |        |                      |                      |                |                    |
| (iii) Email ID                    | ):               |        |                      |                      |                |                    |
| . Educational (                   | )ualificati      | ons*   |                      |                      |                |                    |
| Class                             | Subjec<br>Stream |        | Board/<br>University | Name of<br>Institute | Marks/<br>CGPA | Year of<br>Passing |
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| X                                 |                  |        |                      |                      |                |                    |
| X XII                             |                  |        |                      |                      |                |                    |
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| XII                               |                  |        |                      |                      |                |                    |
| XII<br>UG Degree                  |                  |        |                      |                      |                |                    |
| XII UG Degree PG Degree           |                  |        |                      |                      |                |                    |
| XII UG Degree PG Degree MPhil     | Exam             | Qu     | nalified             | Marks / Rank         |                | Year               |
| XII UG Degree PG Degree MPhil PhD |                  |        | nalified             | Marks / Rank         |                | Year               |

| Organizat     |             | any (in years)  Designation | Duration                 | Responsibilities                   |
|---------------|-------------|-----------------------------|--------------------------|------------------------------------|
| 3             |             |                             |                          | *                                  |
|               |             |                             |                          |                                    |
|               |             |                             |                          |                                    |
| 7. Number o   | f Publicati | ons: (Attach a separate     | list of publications wit | h full details)                    |
| National      |             | <u> </u>                    | <del>-</del>             | nternational                       |
|               |             |                             |                          |                                    |
|               |             |                             |                          |                                    |
| 3. Workshop   | /Training   | programs attended*:         |                          |                                    |
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|               |             |                             |                          |                                    |
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| *Attach sepa  | rate sheet  | (if required)               |                          |                                    |
| ). Technical  | Skills      |                             |                          |                                    |
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| O. Other Ach  | nevements   | **                          | D-4-2L-                  |                                    |
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|               |             |                             |                          |                                    |
| *Attach sepa  | rate sheet  | (if required)               |                          |                                    |
|               |             |                             |                          |                                    |
| 1. Declaratio | n: All the  | above information provi     | ded by me is accurate to | o the best of my knowledge and 1   |
|               |             |                             |                          | ne interview/test or terminated at |
| nystage.      |             |                             |                          |                                    |
|               |             |                             |                          |                                    |
| Date:         |             |                             |                          |                                    |
| Place:        |             |                             |                          |                                    |
|               |             |                             | S                        | Signature of the Candidate         |
|               |             |                             |                          |                                    |
|               |             |                             |                          |                                    |

**Note:** Attach the list of enclosures along with the application.

# <u>Undertaking by the Fellow</u>

| i, , Son/Daughter/wife of s   | Snri.                          | , resident of       |
|---|--------------------------------|---------------------|
| agree to und  |                                |                     |
| PDF   | _                              |                     |
| 1. I shall abide by the rules and regulations of NITK du                | ring the entire tenure of the  | fellowship.         |
| 2. I shall also abide by the rules, discipline of the institu           | tion                           |                     |
| 3. I shall devote full time to research work during the to              | enure of the fellowship        |                     |
| 4. I shall prepare the progress report on the 25 <sup>th</sup> day of e | every month and communication  | ate the same to     |
| Warrior HEART Hub through the mentor and Project C                      | Coordinators                   |                     |
| 5. I shall send two copies of the consolidated progress r               | eport at the end of the fellow | vship period.       |
| 6. I further state that I shall have no claim whatsoever for            | or regular/permanent absorp    | otion on the expiry |
| of the fellowship.  |                                |                     |
|   |                                |                     |
|   |                                |                     |
| Date:   | Signa                          | ature               |



# Plagiarism undertaking by the Fellow

To

| Sir<br>hereb                     | I                           | certify                             | that                                    | the                              | research   | report            | titled                             |  |   |
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| I als<br>years                   | o de<br>. If                | eclare that<br>the fundi            | at there<br>ng agei                     | ncy not                          | tices any pl   | agiarism          | or any c                           | ed or pending against me<br>her discrepancies in the abo<br>by NITK, as deemed necess  | ove proposal of   |
|                                  |                             |                                     |   |                                  |  |                   |                                    |  |   |

Signature of Fellow with date Name