



भाकृअनुप-राष्ट्रीय प्राकृतिक रेशा अभियांत्रिकी एवं प्रौद्योगिकी संस्थान
12, रीजेंट पार्क, कोलकाता – 700 040, (आईएसओ 9001: 2015)

ICAR-National Institute of Natural Fibre Engineering & Technology
12, Regent Park, Kolkata - 700 040, (An ISO 9001: 2015 Certified Institute)



PROFILE

1. Full Name : **Dr. Nageshkumar, T.,**
2. Educational Qualification: **Ph.D**
3. Designation: **Scientist**
4. ARS Discipline: **Farm Machinery and Power**
5. Date of joining in ICAR: **07.01.2020**
6. Date of Joining in ICAR-NINFET : **04.04.2020**
7. Working experiences (in years)
 - a. Research: 04
 - b. Teaching
 - c. Industry
8. Area of work (Five areas only)
 - a. **Artificial intelligence based grading instruments**
 - b. **Automation in Fibre extraction machineries**
 - c. **Biomass conversion and waste management**
9. Contact details
 - a. Mobile No : 9845429409
 - b. Email (Including ICAR email) : **nageshkumar.t@icar.gov.in**
10. Number of project completed (As PI)
 - a. ...
 - b.
11. Professional Achievements (Awards / Best Papers/Appreciation)
 - a. Awarded a University grant commissions national fellowship for professional
 - b. Awarded a Rajiv Gandhi National fellowship (UGC) for Ph.d Programme
12. List of publication (Numbers only)
 - a. Research papers in National journal (NAAS rated): 12
 - b. Research papers in International journal (NAAS rated): 04
 - c. Popular articles: **04**
 - d. Book Chapter: **02**
 - e. Books Edited: **Nil**
 - f. Seminar Papers: **02**



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- g. Bulletin: **01**
13. Seminar presentation (numbers only)
- Invited papers
 - Research papers : **04**
14. Patents Applied (Numbers only): 02 (Design Registration)
15. Patents Granted (Details)
- ...
 - ...
16. Technology Commercialised (five with details)
-
 -
17. List the five major achievements in the career
- Portable Bundle strength tester
 - Portable colour meter
 - Power operated Gender Friendly Ribboner
 - Multi-Fibre Decorticator
18. List the 10 best research publications in the whole career (Details)
- **Nageshkumar, T.**, Prateek Shrivastava, Biplab Saha, A. Subeesh, D. B. Shakyawar, Gunasindhu Sardar, and Jayanta Mandal. "Defects identification in raw jute fibre using convolutional neural network models." The Journal of The Textile Institute (2023): 1-9.
 - Saha, Biplab, **T. Nageshkumar**, S. C. Saha, Gautam Roy, Amitava Sarkar, Gunasindhu Sardar, and Jayanta Mondal. "Development and evaluation of handy jute fibre bundle strength tester." Journal of Scientific & Industrial Research 81, no. 02 (2022): 113-117.
 - **Nagesh Kumar, T.**, M. Anantachar, M. Veerangouda, K. V. Prakash, S. Nadagouda, B. G. Koppalkar, Sushilendra Advi Rao, M. Murali, and V. Raghavendra. "Development and evaluation of a tractor-operated automatic gun sprayer for cotton crops." African Entomology 30 (2022): 1-5.
 - Jagadale, Manisha, Sandip Gangil, Mahesh Jadhav, V. K. Bhargav, Prateek Shrivastava, **T. Nageshkumar**, and Niranjana Kumar. "Valorization of Jute sticks (*Corchorus olitorius*) by torrefaction process: optimization and



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characterization of torrefied biomass as upgraded fuel." Biomass Conversion and Biorefinery (2023): 1-15.

- Shrivastava, P., **Nageshkumar, T**, Jagadale, M., Shambhu, V.B. and Nayak, L.K., 2023. Design and Simulation of Banana Pseudo-stem Fibre Extracting Raspador (Cylinder) Using FEA Technique. Journal of Natural Fibers, 20(2), p.2200986.
- Shambhu, V. B., Shrivastava, P., **Nageshkumar, T**, Jagadale, M., Nayak, L. K., & Shakyawar, D. B. (2023). Development of Gender-Friendly Power Ribboner for Extraction of Green Ribbon/Bast from Jute Plants. Journal of Natural Fibers, 20(2), 2250076.
- Pavan, M., Mahajan, S., Lakshmanan, A., **Nageshkumar, T.**, Midha, V., Manjunatha, B. S., & Grewal, S. (2024). Optimization of an alkali modification protocol on Crotalaria juncea fibre and its characterization for technical textile applications. *Industrial Crops and Products*, 211, 118275.
- Abhyankar, Shrinath P., M. Anantachar, **T. Nageshkumar**, K. V. Prakash, and Sushilendra Advani Rao. "Development of a Power Tiller-Operated Inter-Row Planter for Cowpea in Cotton Strips." *Agricultural Research* 12, no. 3 (2023): 308-318.

19. Training program attended : **05**

20. Training program organized : **06**

21. Professional Affiliations (Details)

- a. **Life member of Indian Society of Agricultural Engineers (LM-12208)**
- b. **Life member of The Indian society of natural fibres**