

Tele : 011-2300 7322

Fax : 011-2301 4085

E-mail : dnrdoff@hqr.drdo.in

NRB/4003/MAT/PG/454

DRDO HQ

Naval Research Board

Room No. 322, 3rd Floor

DRDO Bhawan, Rajaji Marg

New Delhi – 110 011

29 Jul 2019

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B. K. BIRLA COLLEGE

The Principal

B. K. Birla College of Arts, Science and Commerce

Gauripada, Kalyan, Maharashtra-421304

Dr. Sandesh Jaybhaye
Mr. Jangir KP
pl. speak
up
24/9/19

SANCTION OF PROJECT UNDER NAVAL RESEARCH BOARD (NRB)

Under the powers vested in the NRB vide Government of India, Ministry of Defence, letter No.DNRD/0100/NRB/4179/D (R&D) dated 20 Aug 96, amended from time to time and in terms of Sl. No. 3.1 of GOI, MoD letter No.DRDO/DFMM/PL/83226/M/01/1174/D(R&D) dated 28 Jun 2018, I am directed to convey the sanction of the CFA i.e DG(TM) for the following project:-

Title : "Synthesis of carbon nano fibers, composites and its microwave absorption"

Project No. : NRB-454/MAT/19-20

PI : Dr. Sandesh V. Jaybhaye, Assistant Professor
Department of Chemistry
B. K. Birla College of Arts, Science and Commerce
Gauripada, Kalyan, Maharashtra-421304

Co PI : Dr. Dattatray E, Kshirsagar, Assistant Professor,
B. K. Birla College of Arts, Science and Commerce.

Lab Collaborator : Dr. Alips Shrivastava, Sc- 'D', NMRL

2. **Cost and duration of the project:** - Total budget for the project is **Rs. 28,54,000/-** (Rupees **Twenty eight lakhs fifty four thousand** only) for **03 years duration**. The breakup of fund for various activities of the project is as given below: -

Head	1 st Year	2 nd Year	3 rd Year	Total
Research Staff	3,72,000/-	3,72,000/-	4,20,000/-	11,64,000/-
Specific Equipment	6,30,000/-	-	-	6,30,000/-
Consumable Stores	1,50,000/-	80,000/-	40,000/-	2,70,000/-
Contingencies	30,000/-	30,000/-	30,000/-	90,000/-
Travel (TA/DA)	50,000/-	40,000/-	30,000/-	1,20,000/-
Others(Testing)	80,000/-	70,000/-	30,000/-	1,80,000/-
Institute Over heads	2,00,000/-	1,00,000/-	1,00,000/-	4,00,000/-
Grand Total	15,12,000/-	6,92,000/-	6,50,000/-	28,54,000/-

Contd.....2/-

3. **Aim:** Synthesis of carbon nano fibers, composites and its microwave absorption.
4. **Objectives:** This project has the following key objectives:-
 - (a) Synthesis of CNFs from various precursors.
 - (b) Optimization of CNFs synthesis parameters to get below 80 nm diameters and having uniform shape.
 - (c) Purification and chemical activation of CNFs to improve porosity and surface area.
 - (d) Preparation of nanocomposite nanofiber and its microwave absorbers property in the range of 2-18 GHz.
 - (e) Optimization of CNFs composite formulation to get maximum Microwave absorption.
 - (f) Analysis of Microwave absorption (MA) properties is to be done at NMRL, Laboratories at Ambernath or Shivaji University, Kolhapur.
 - (g) To explore the microwave absorption characteristics of the synthesized CNFs for naval applications.
5. **Deliverables:** - CNFs based microwave absorbing materials.

Release of Funds and Accounting

6. Contingent bill duly completed, stamped and signed by the competent/ Executive Authority of the institution will be forwarded to Member Secy. NRB, for countersignature and onward transmission to PCDA (R&D), New Delhi for fund release. Duly filled in ECS Performa for direct crediting of amount through the PCDA (R&D) may also be forwarded to NRB, if not already submitted.
7. Six monthly progress will be submitted by the PI to NRB. Audited Statement of Accounts and Utilization Certificate duly certified by the executive financial authority of the institute for each financial year are required to be submitted by 30 Jun of the ensuing financial year. Excess expenditure, beyond the yearly sanction, unless authorized by NRB in writing, shall be the responsibility of the grantee institution.
8. The date of receipt of the first installment of the grant would be reckoned as the date of commencement of the project (unless otherwise specified), which has to be intimated to the Member Secy. NRB, without any ambiguity.
9. As per GFR 2017 Rule 230(8) all interests or other earnings against grants in aid or advances (others than reimbursement) released to Grantee Institution should be mandatorily remitted to the consolidated Fund of India immediately after finalization of the accounts. Such advances should not be allowed to be adjusted against future releases. The accrued interest to be refunded to NRB in form of DD/Cheque addressed to PCDA (R&D), New Delhi along with contingent bill for the release of next year grant. On completion of the project, the grantee institution should send the unspent money to Member Secy. NRB through a Cheque/Draft in favour of PCDA (R&D), New Delhi.

10. A list of inventory of equipment purchased out of NRB grant shall be intimated year-wise, along with its cost and source of procurement, to Member Secy. NRB. On completion of the project, the grantee institution would forward the consolidated list with request, if any, for retention of any equipment for another project or for in-house R&D.

Review of the Project


11. The progress review of the project will be carried out periodically by the Materials Panel every six months during the panel meetings chaired by the Panel Head and/or as deemed fit by NRB.

12. **Ownership of Intellectual Properties.** As far as intellectual properties generated by this project are concerned, following conditions will apply: -

- a) All foreground information and foreground intellectual property created during the performance of the project, whether or not legally protected, shall be owned jointly by DRDO and Grantee institution. DRDO and grantee institution shall be deemed to have a royalty-free license to use such joint information and foreground intellectual property for their own R&D Purposes.
- b) Grantee Institute shall promptly report to DRDO about any Intellectual Property generated during the performance of the Project. DRDO and Grantee Institution shall confer and consult each other regarding preparation, filing, prosecution, maintenance of Intellectual Property Rights application including patent application covering foreground information, generated during the performance of the project. DRDO shall be responsible for filing, prosecution, grant and maintenance of such Intellectual Property applications including patent application and Grantee Institute shall render all possible help to DRDO regarding the same. DRDO shall also bear all expenses related to filing, prosecution, grant and maintenance of such Intellectual Property Application including patent applications.
- c) Grantee Institution may commercially exploit any foreground information and foreground Intellectual Property, generated during the course of the Project, whether or not legally protected, for purpose other than Government Application only after conclusion of separate agreements to be negotiated between Grantee Institution and DRDO. Grantee Institution shall maintain an account of its incomes arising out of such commercial use and any royalty income shall be shared equally between DRDO and Grantee Institution.
- d) DRDO shall not be responsible and shall not accept any liability for infringement, innocent or otherwise, by PI or the Grantee Institute of the intellectual Property Rights of third parties.
- e) The term of the above provisions shall survive the term of the project.
- f) The Grantee institution shall maintain an account of its incomes arising out of commercial use and any royalty income shall be shared equally between DRDO and grantee institution.

13. **Publication of Technical Papers.** Grantee Institution shall not publish any research paper covering foreground information generated during the performance of the project before seeking written consent from DRDO to ensure that no proprietary information is released and no legal rights covering foreground information are jeopardized. Normally such decision for publication shall be provided by DRDO within 30 days of receipt of such request from Grantee Institution.

14. **Workshop.** Towards the end of the project, a workshop may be organised by the PI in consultation with the Panel Head and the Member Secy. NRB for dissemination of work done in the project.
15. **Closure Report.** A Closure Report, along with soft & hard copies of detailed technical report, a certificate that objectives of the project have been achieved, executive summary & unspent amount if any, will be submitted by the PI within 02 months of completion of the project.
16. PCDA (R&D), New Delhi will make disbursement of money as sanctioned.
17. The expenditure is debatable to Defence Services Estimate Major Head 2080-Defence Services-R&D, Minor Head 004-Research/Research & Development, Code Head 852/03(Technical Activities).
18. The Sanction Code for the project is **DGTM/NRB/GIA/19-20/0121** dated 26/07/2019.
19. This sanction has the concurrence of IFA (R&D), New Delhi vide their **UO.No. IFA/R&D/0031/NRB/2019/Vol-I/0561** dated 24/07/2019.


(Shobha Verma)
Scientist-G &
Member Secy. NRB

Copy Ink signed:

The PCDA (R&D)
DRDO HQ Cell, West Block-5, Sector-1
RK Puram, New Delhi – 66

Dr. Sandesh V. Jaybhaye, Assistant Professor
Department of Chemistry
B. K. Birla College of Arts, Science and Commerce
Gauripada, Kalyan, Maharashtra-421304

Copy to:-

DGADS 'L' Block,
New Delhi - 110001

IFA (R&D)
DRDO Bhawan, New Delhi

The Director
NPOL, Thrikkakara, Kochi – 682021

The Director
NMRL, Ambernath – 421506

The Director
NSTL, Visakhapatnam - 530027

The Director
Directorate of ER&IPR
3rd Floor, DRDO Bhawan, Rajaji Marg
New Delhi- 110 011

The Secretary, AR&DB
3rd Floor, DRDO Bhawan, Rajaji Marg
New Delhi- 110 011

The Secretary, ARMREB
3th Floor, DRDO Bhawan, Rajaji Marg
New Delhi- 110 011

The Secretary, LSRB
3rd Floor, DRDO Bhawan
New Delhi- 110 011

Dr. B. K. Dhindaw
(Panel Chairman – Materials Panel / NRB)
MGM Chair Professor, School of Minerals
Indian Institute of Technology, Bhubaneswar
SIF Building, Argul campus, Jatni
Khordha-752050

To,

Ms. Ashwini Suyog Kulkarni

M/s Khet Aadhaar Pvt Ltd

RL 136, Mayuresh, Milap Nagar,

Midc, Dombivali East, 421201

Maharashtra, India

Subject: In-principle sanction of Grant-in-Aid for DA&FW 'Pre-Seed Stage Funding' under Innovation & Agri-Entrepreneurship Program, RKVY-RAFTAAR, DA&FW, MoA&FW by the **National Institute of Agricultural Extension Management – Centre for Innovation and Agripreneurship (MANAGE-CIA)**, Rajendra Nagar, Hyderabad.

Ref: 12-3/2020-RKVY Sanction letter from DA&FW, MoA&FW; dated December 7, 2022

Dear Ms. Ashwini Suyog Kulkarni,

As an approved Startup - **M/s Khet Aadhaar Pvt Ltd** under the Innovation & Agri-Entrepreneurship Program, Rashtriya Krishi Vikas Yojana – Remunerative Approaches for Agriculture and Allied Sectors Rejuvenation (RKVY-RAFTAAR), Department of Agriculture and Farmers Welfare (DA&FW), Ministry of Agriculture & Farmers' Welfare (MoA&FW) at **National Institute of Agricultural Extension Management – Centre for Innovation and Agripreneurship (MANAGE-CIA)**, further to your presentation to the RKVY-RAFTAAR Selection & Monitoring Committee (RC), dated **April 20-21, 2022 and June 8, 2022** at **MANAGE-CIA**, in accordance of the guidelines of the program, we are pleased to inform you that your startup **Khet Aadhaar Pvt Ltd.** is selected for a Grant-in-Aid funding support of **₹5.00 Lakh (Rupees Five Lakh only).**

This sanction is made based on following understanding:

1. Grant-in-aid under the RKVY-RAFTAAR program will be released to **Khet Aadhaar Pvt Ltd** towards developing the prototype/product/service on **"Precision Farming Technologies with Nutrition Management and Yield growth"** as approved in RKVY-RAFTAAR Selection & Monitoring Committee (RC) meeting.
2. The Grant-in-Aid will be released to **Khet Aadhaar Pvt Ltd** represented by **Ms. Ashwini Suyog Kulkarni**, and the startup shall be responsible for the effective utilisation of the approved grant-in-aid and continue to undertake all such implementation of milestones approved by the committee.
3. The terms and conditions governing the Grant-in-Aid should be as per MoA to be executed between **Khet Aadhaar Pvt Ltd & MANAGE-CIA.**

राष्ट्रीय कृषि विस्तार प्रबंध संस्थान (मैनेज)

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(कृषि एवं किसान कल्याण मंत्रालय, भारत सरकार का संगठन, राजेन्द्रनगर, हैदराबाद - 500 030. टी.एस. भारत)

NATIONAL INSTITUTE OF AGRICULTURAL EXTENSION MANAGEMENT (MANAGE)

(An organization of Ministry of Agriculture and Farmers Welfare, Government of India)

Rajendranagar, Hyderabad – 500 030, Telangana, INDIA

Ph. : +91-40-24016693, Mobile : +91-8465007799

saravanan.raj@manage.gov.in / saravananraj@hotmail.com

www.manage.gov.in



4. **Khet Aadhaar Pvt Ltd** should receive the Grant-in-Aid support installment as per the guidelines and framework of the scheme amounting to

Installment 1 (60% of Grant-in-Aid)	₹3.00 Lakh (Rupees Three Lakh only)
Installment 2 (40% of Grant-in-Aid)	₹2.00 Lakh (Rupees Two Lakh only)
TOTAL	₹5.00 Lakh (Rupees Five Lakh only)

5. Release of funds is subjected to following conditions:
- The startup should submit the fund utilization report to MANAGE-CIA on monthly basis for the utilisation of grant-in-aid released.
 - The startup should submit the physical and financial performance reports, audited financial statements, audited utilisation certificate towards the end of utilization of each installment of the Grant-in-Aid.
 - The first installment of 60% of the sanctioned project should be released to the startup as per the agreement between **MANAGE-CIA** and **Khet Aadhaar Pvt Ltd**.
 - The second and final installment of 40% should be released to the **Khet Aadhaar Pvt Ltd** after the recommendation of **Centre of Excellence Incubation Committee (CIC)** based on the performance and achievement of milestones as well as utilisation of 80% of the previously released first installment amount and receipt of audited utilisation certificate of 80% of already released fund from an Authorized Chartered Accountant.
 - A minimum of 10% contribution from **Khet Aadhaar Pvt Ltd** should be brought in for the execution of the project for achieving milestones with each installment released.

Detailed schedule of tranche disbursements and milestones attached to the installments and other details will be included in the MoA.

6. **Khet Aadhaar Pvt Ltd** should utilise the entire funds allocated by March 2024, as per the proposed timelines and term of the scheme, whichever is earlier, as per the sanction order and proposed detailed document. In case of any delay in the timelines, the agreement will be further extended based on mutual consent.
7. All activities and expenditure shall be conducted with an intent to nurture innovative business ideas (new/ingenious technology, processes, products, procedures, service etc.) and shall be incurred towards the scope-of-work defined and approved by the RC in the meeting held on **April 20-21, 2022 and June 8, 2022** at **MANAGE-CIA**. Details of all such milestones and expenditure will be added in the MoA between **Khet Aadhaar Pvt Ltd & MANAGE-CIA**.



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8. **Khet Aadhaar Pvt Ltd** should submit audited CA certified 'Utilisation Certificate' to the RKVY Division, DA&FW through **MANAGE-CIA** duly signed and certified by the authorized signatory of the startup, for each installment received and at the close of that financial year.
9. In case of Mis-utilisation or diversion of Grant-in-aid sanctioned under the scheme, the incubatee - **Khet Aadhaar Pvt Ltd** shall refund to the MANAGE, the whole or part amount of the Grant-in-aid with interest of 10% per annum thereon.
10. All the funds should be transferred to the 'Current Account' of the startup, and should only be used for intended purposes predefined as per the milestones.

In case, there is 'Interest earned' on such Grant-in-Aid deposits through fixed deposits or through other money market instruments, only, in the process of operations by **Khet Aadhaar Pvt Ltd** details of such interest earned shall be reported to **MANAGE-CIA**. All such interest earned should be treated as credit to the organization, which should further be treated as part of future release of Grant-in-Aid sanctioned for business

11. RKVY Division, DA&FW reserve sole right on the asset created out the sanctioned Grant-in-Aid. Assets acquired wholly and substantially out of the sanctioned funds, unless obsolete and unserviceable, shall not be disposed of without prior approval of RKVY Division, DA&FW. **Khet Aadhaar Pvt Ltd** should preserve all assets that are no longer required should be transferred to the nodal department, RKVY-RAFTAAR for its use and redeployment, when possible.
12. The expenditure incurred by the **Khet Aadhaar Pvt Ltd** shall be open to inspection by the sanctioning authority/Comptroller and Auditor General of India(C&AG)/Chief Controller of Account (CCA)/**MANAGE/MoA&FW**.
13. **The book of accounts of the Khet Aadhaar Pvt Ltd shall be open to inspection by the sanctioned authority and audit (both by C&AG of India and Internal Audit by the Principal Account Office of the Ministry or Department)/MANAGE whenever the organization is called upon to do so.**
14. **Ms. Ashwini Suyog Kulkarni certify that M/s Khet Aadhaar Pvt Ltd has not obtained Grant-in-Aid for the same purpose or activities from any State or Central Government as on date of receiving this sanction order.**

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15. It is understood that **Khet Aadhaar Pvt Ltd** should work towards commercialization of prototype/product/service/technology as per the milestones and timeline mentioned in the agreement. In case of any exigency, or unforeseen which can hamper the startup's ability to perform its work/assignments in a continuous form, all such situation should be reported to **MANAGE-CIA** with a valid justification for time-line extension with supporting documents, through a physical-mail request or digitally-email, for extension of time limit.
16. **Khet Aadhaar Pvt Ltd** should submit monthly Progress Report of the Business to **MANAGE-CIA**, as per the prescribed format in the MoA. The startup should share consolidated report on the final outcome of such incubation along with the report of mentor/guide about the quality of the work done, its cost effectiveness, tangible gains (quantitative) likely to be achieved, etc., is also to be submitted within three months of the completion of the work.
17. This sanction issue in the exercise of the delegate power in consultation with the sanction order no. 12-3/2020-RKVY dated December 07, 2022 issued by RKVY-RAFTAAR, DA&FW, MoA&FW, Government of India, Krishi Bhawan, New Delhi.

We wish **Khet Aadhaar Pvt Ltd** all the best.



Dr. Saravan Raj
(Saravanan Raj)

Director (Agricultural Extension), MANAGE &
CEO, Centre for Innovation and Agripreneurship
National Institute of Agricultural Extension Management

Dr. Saravanan Raj
Chief Executive Officer
Centre for Innovation and Agripreneurship
National Institute of Agricultural Extension Management
(MANAGE)
Rajendranagar, Hyderabad-500 030.

Sanction Order Acceptance

I/We, _____, Founder/Director/Partner of _____ agree to the terms and conditions in the sanction order _____ regarding the Grant-in-Aid under RKVY-RAFTAAR scheme operation at MANAGE, Hyderabad.

Authorized Signatory