



NHEP



Centre of Excellence for Digital Farming Solutions for Enhancing Productivity by
Robots, Drones and AGVs (DFSRDA)
Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani

Online Training Programme on
**“Power of Digital Manufacturing (3D printing)
for New Product Development”**

25th June, 2020 at 11.00 am



Vasantrao Naik Marathwada Krishi Vidyapeeth
Parbhani - 431402 (MS)

About us

Centre of excellence for Digital Farming solutions for Enhancing Productivity by Robots, Drones and AGV's (**DFSRDA**), VNMKV, Parbhani is organizing a "Power of Digital Manufacturing (3D Printing) for New Product Development **on 25th June, 2020 at 11.00AM.**"The Centre for Advanced Agricultural Science and Technology (CAAST) for Digital Farming solutions by Enhancing Productivity by Robots, Drones and AGV's (DFSRDA)" is being implemented in Vasantao Naik Marathwada Krishi Vidyapeeth, Parbhani, and Maharashtra Sponsored by ICAR, New Delhi & World Bank Since 2019. One of the main objectives of this center is the capacity building among the PG/Ph.D students and faculties of VNMKV and other Universities about recent advances in agricultural science and technology.

Aim

The aim of organizing this training is to expose the participants to introduce power of digital manufacturing solutions for new product development and their applications in agriculture. Digital manufacturing is fastest and easiest way to transform concept in to reality .Main 3 Keys of digital manufacturing are

- i) Additive manufacturing – is often called as 3D printing, consisting fabricating an object one layer after another.
- ii) Laser cutting- It consist in cutting or engraving material by means of laser.
- iii) Computer numerical control (CNC)-It is subtractive manufacturing process, where computer controls cutting and shaping of parts.

This training is designed for participants to acquaint with the various processes in volved in acquiring, analysis and interpreting digital data used for various farm machinery equipment's. This training will also help to give understanding of applications of 3D printing in solving the research problems.

Background

Advanced manufacturing tools and Precision Agriculture Mechanization is a very important input to agriculture sector for performing timely farm operations, reducing the cost of operations, reducing the utilization of costly inputs. Hence the farm machine should be designed properly by considering soil environment and material properties with their effects on each other during the operations. Additionally, it develops and markets engineering simulation software for use across the product life cycle. Hence this platform will help to design efficient farm machinery and test it with different R&D aspects virtually.

Target Audience

PG/Ph.D. Students, Faculties, Scientists of Vasantao Naik Marathwada Krishi Vidyapeeth, Parbhani and other Universities, allied fields in agriculture are eligible to register and are requested to take advantage of the online training course during this COVID-19 lock down period.

Course Content

- Additive Manufacturing and the industry
- What, Why, and How?
- Additive Manufacturing Technologies and their Possibilities.
- SLA, FDM, Polyjet, SLS, PBF
- Applications of 3D printing technology in agriculture
- Domain areas and success stories.
- How Additive Manufacturing can help designers to make quicker decisions.
- Why dimensional accuracy and turnaround time is important for prototyping.
- How functional parts can be printed efficiently.
- Thermoplastic materials and their applications.
- Maker Bot Additive Manufacturing solutions.

Q&A

Registration

No registration for all participants. The list of selected candidates will be displayed on the website <https://nahep.vnmkv.org.in/>. The link for online FREE registration

https://docs.google.com/forms/d/e/1FAIpQLSdkCAT9V9NJMROPBDXg1davpa9ZITSRbRlPvkMZcaiPAYIYA/viewform?usp=sf_link

Registration link open up to 25th June, 2020 till 7am

Registration QR Code



Communication about the Selection

The selected candidates will be informed through WhatsApp group regarding the Programme updates, and all the communications regarding the programme will be posted on the WhatsApp group. Alternatively, candidates please keep watching the CAAST - VNMKV website (<https://nahep.vnmkv.org.in/>) Selected candidates will be displayed; preferable on the day before the start of the training Programme, and the same will be intimated by WhatsApp group.

Instructions to the Participants

- Participants need to register by clicking on the link above and should provide an active email ID and WhatsApp number for further communication. If email ID and WhatsApp number are not valid, you may not receive any communications.
- Zoom meeting link, ID and password for joining the online session will be communicated through WhatsApp group of the selected candidates 30mins before the start of the session.

- Note : Those participants who fill feedback forms only will be considered as present & based on that Certificates will be issued.

Training Coordinators

Kalloji Ravi Kumar (RA) : 9533933360

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Er. Tanzim khan (JE), Er. Apurva Deshmukh (JE)

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Patrons



Dr. Ashok Dhawan
Hon'le. Vice Chancellor
VNMKV, Parbhani



Dr. R.C. Agrawal
National Director
NAHEP, ICAR, New Delhi

Chief Convenors



Dr. D.N. Gokhale
DI & Dean (F/A)
VNMKV, Parbhani



Dr. Prabhat Kumar
National Co-ordinator
NAHEP, New Delhi

Co - Convenors



Dr. G.U. Shinde
PI, NAHEP - CAAST
VNMKV, Parbhani



Er. S.N. Pawar
Asstt. Professor
VNMKV, Parbhani

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Assistant Professor
Irrigation & Drainage Engineering
VNMKV, Parbhani



Dr. Megha Jagtap
Assistant Professor
Dept. of Agronomy
VNMKV, Parbhani

Presenter Profile

- He has eight years of experience in the domain of Additive Manufacturing with specialization in technologies like FDM/FFF, DLP, SLA and Polyjet.
- He possesses a doctorate on utilizing SLA and DLP for the **fabrication of Microfluidic devices which has earned him three patents and several high impact journal publications.** He has done his Masters on Nano technology securing the Gold Medal at the University level from Anna University.
- He has been the Technical Lead in distributing Maker Bot AM solutions in India. he has been successful in enabling close to 200+ customers from the commercial and academic space with the Additive Manufacturing.



Dr. Venkateswaran P.S.
Ph.D (Nano), M. Tech (Nano),
National Technical Manager – AM
ARK Infosolutions Pvt Ltd



3D Printing scope of Agricultural Applications



Covid-19



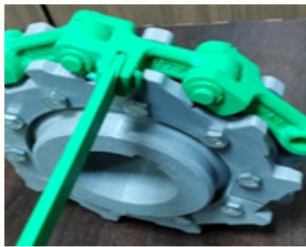
Hydrofarm ebb (pot)



Tractor Tire Treads



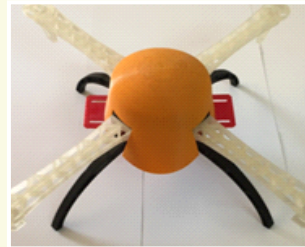
Water drip spare parts



Agri spare parts



Railing Planter



Drones



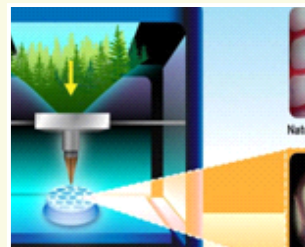
Agri Machinery components



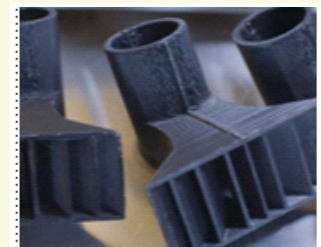
Bio-degradable



Pumps & spare parts



Printed wood tissue



Plant hangings