

BIRAC Innovator Awards (6)

A. Biomedical Devices & Diagnostics

(i) VOXELGRIDS INNOVATIONS PRIVATE LIMITED

Dr. Arjun Arunachalam

Lightweight, Ultra-fast, Next Generation Magnetic Resonance Imaging (MRI) scanner

- World's first fully mobile, low liquid helium, full body, high field human MRI scanner that can be mounted on a truck and taken to the remotest parts of the country
- Scanner is extremely cost-effective and will result in a 3-4 X increase in Return on Investment (ROI). Lightweight and compact, this scanner can be installed on any floor of a hospital.
- Only entity in India to develop such cryogenics for large scale superconducting magnets that can be used in MRI scanners.

(ii) 4S Medical Research Pvt. Ltd.

Dr. Shomeshwar Singh

See Sound Live: Speech Development in Deaf

- Assistive technology that empowers a deaf child or adult to learn to speak without surgery or implants
- It has the potential to become for the deaf, what Braille is for the blind, today
- See Sound Live has been conceived, prototyped, trialed, patented and commercialized completely in India by 4S Medical Research Pvt. Ltd

B. Therapeutics, Vaccines & Drug Delivery

HiMedia Laboratories Pvt. Ltd.

(Collaborator: ICT, Mumbai)

Dr. Vishal Warke and Dr. Ratnesh Jain

Chemically Defined Serum-free Media (CDSFM)

- Developed a novel and cost effective clone specific CDSFM and feeds for Biosimilar production in Herceptin & Avastin monoclonal antibody producing CHO cell clones, thereby becoming the only Indian company that manufactures clone-specific customized CDSFM
- The need to be indigenous in this range of products is a prime step to become "Atmanirbhar" in the protein therapeutics business, which is worth several billion dollars

C. Agriculture, Veterinary Science and Aquaculture

Indo-American Hybrid Seeds (India) Pvt. Ltd.

Dr. Devaraja Achar

Double disease resistant aromatic & non aromatic cytoplasmic male sterile (CMS) lines for bacterial blight and blast

- The test cross F1 rice hybrids derived from gene pyramided CMS lines showed promising yield of more than 8.0 tons/ha with commercial desired grain qualities, suitable for large paddy growing areas of western, central, northern and north east parts of India
- The rice growing farming community will get benefited from double resistance F1 rice hybrids with assured yield and less dependence on fungicides and bactericides

D. Energy, Environment & Secondary Agriculture

(i) Mallipathra Nutraceutical Private Limited

(Collaborator: Sir M Visvesvaraya Institute of Technology, Bangalore)

Dr. Mousumi Mondal and Dr. Priya Narayan

Malli's Cordyceps

- Developed a novel process for growing worlds costliest endangered medicinal mushroom cordyceps in an artificial environment which grows much faster than the naturally available cordyceps
- The innovation involves a process of growing these mushrooms on both vegetarian and non-vegetarian substrates which is at par with the naturally grown Cordyceps in terms of active ingredients
- Developed various formulations like health drinks, infusions, capsules etc., comprising of cordyceps for nutraceutical applications

(ii) Kanpur Flowercycling Private Limited

Mr. Ankit Aggarwal

Fleather - Animal-free leather made from floral-waste

- Developed the world's first alternative to animal leather- made from floral waste and farm stubble- 'Fleather'.
- Built on the principles of biomimicry, Fleather is a breakthrough material that performs like animal leather and can be customized for aesthetic expression, flexibility, density, and strength.
- Fleather not only cuts down several traditional downstream leather tanning processes but also helps provide better job opportunities to women from the marginalized sections of society.