

भारतीय कृषि अनुसंधान परिषद कृषि अनुसंधान भवन— II, पूसा, नई दिल्ली—110 012 INDIAN COUNCIL OF AGRICULTURAL RESEARCH Krishi Anusandhan Bhavan - II, Pusa, New Delhi – 110012

Dr. G. Venkateshwarlu Asstt. Director General (HRD)

> F. NO. EDN. 5/86/2014-HRD Dated 7.10.2014

To,

All the Vice Chancellors of Agriculture Universities (AUs-comprising of SAUs/AAI-DU/CAU/ICAR DUs/CUs having faculty of Agriculture)
All the Directors of ICAR Institutes

Subject: Organization of Summer/Winter Schools and Short Courses-Inviting Proposals for the year 2015-2016 Sir/Madam,

As an HRD initiative, the Council supports the organization of Summer/Winter Schools and Short Courses in different disciplines of agriculture and allied sciences in Agricultural Universities (AUs) and ICAR Institutes. The main objective of Summer/Winter Schools and Short Courses is to provide an in-service opportunity to teachers, research workers and specialists working in AUs and ICAR Institutes to update their knowledge and skills in order to keep abreast with the latest developments in the specialized/emerging areas of agriculture and allied sciences. These Summer/Winter Schools and Short Courses also cover specialized new techniques, research methodology and teaching methods and materials. The detailed operational guidelines for Summer/Winter Schools and Short Courses available **ICAR** on website (http://www.icar.org.in/files/edu/Norms-Operatinal-Guidelines-SWS 2012.pdf) and **CBP** Vortal (http://www.iasri.res.in/cbp/).

For the conduct of Summer/Winter Schools and Short Courses, availability of expertise, good laboratory/experimental facilities, guest house availability, adequate number of senior faculty members and research base in the concerned field is necessary. Accordingly, proposals are invited on sharply focused topics of inter-disciplinary subject within the broad disciplinary framework. A suggestive list of topics that may receive priority consideration is annexed.

Applicants from ICAR and AU-System need to send their proposals online through the CBP Vortal of ICAR, accessible on any one of the following links:

- i. http://www.iasri.res.in/cbp/
- ii. 'Capacity Building Program' link available on ICAR portal http://www.icar.org.in

To submit proposals, strictly follow the link 'Guidelines for CAFT, Summer / Winter Schools & Short Courses' given at the home page of the CBP Vortal. The last date of submitting the training proposal online is 5th December, 2014.

Further, applicants need to download signed and approved copy of proposal submitted online on the CBP Vortal and send by post (in duplicate) to the undersigned so as to reach this office latest by 10th December, 2014. You are requested **not to recommended more than four training proposal** from your Organization.

For consideration of the proposals, please ensure that the statement of expenditure (ICAR Institutes)/ Audit Utilization (AUs) of all the previous such training programmes conducted by your organization have been submitted to the ICAR.

Yours faithfully,

(Dr. G. Venkateshwarlu)

EDUCATION DIVISION, INDIAN COUNCIL OF AGRICULTURAL RESEARCH INSTITUTE, NEW DELHI SUGGESTIVE LIST OF TOPICS FOR ICAR's SUMMER/ WINTER SCHOOLS AND SHORT COURSES FOR THE YEAR 2015-2016*

S. No	Topic/ Subject Area	S. No	Topic/ Subject Area
1.	Advances in bioremediation Technologies of agrochemicals.	45.	Innovative methods of arresting soil degradation
2.	Advances in heterosis and plant breeding	46.	Impact assessment of rural poultry in livelihood security
3.	Advances in Micro-irrigation for improving water use efficiency and productivity	47.	Insecticide resistance management strategies
4.	Advances in molecular epidemiology	48.	Livelihood improvement through conservation agriculture
5.	Agri-business and market intelligence	49.	Machinery for conservation agriculture and crop residue management.
6.	Advances in fish health management for enhancing fish productivity	50.	Measurement and management of resistance to chemical pesticides
7.	Agroforestry options for livelihood and diversification	51.	Micro propagation techniques
8.	Allele mining using germplasm resources	52.	Molecular approaches in disease diagnostics and vaccines
9	Apparel manufacturing and designing	53.	Molecular mapping of genomes and genes/QTL
10.	Antimicrobial resistance to antibiotics in animals and its impact on human health	54.	Modern tools and techniques of soil, water, plant and climate analysis
11.	Biotechnological strategies for increasing fish productivity	55.	Meeting export certification requirements for agricultural produce
12.	Bio informatics	56.	Modern crop technologies for marginal holders and resource poor farmers
13.	Bio processing/food processing / packaging/product marketing	57.	Nano-technology and plant disease management
14.	Bio-fortification of staple food crops	58.	Novel genomic tools and modern genetic and breeding approaches for crop improvement
15.	Bio-energy	59.	Numerical methods for the analysis of agricultural engineering systems
16.	Bio-safety studies and regulations on GM crops	60.	National and International treaties on biological diversity
17.	Culturing techniques for bio-fertilizers and bio-pesticides	61.	On-Farm technology testing and impact assessment
18.	Conservation of indigenous breeds in their respective tracts	62.	Participatory Extension Research and Management
19.	Climate change adaptation and mitigation strategies through agroforestry system	63.	Pathogenomics in relation to host pathogen interaction
20.	Communication and management skills for extensional professionals	64.	Pest risk analysis research as support to domestic quarantine system
21.	Crop pollinationas agri-inputs for high productivity and quantity of crop commodities	65.	Phenotyping and Phenomics in Agriculture
22.	Developing efficacious human resource / Learning Resources/objects	66.	Pollination biology: implication in seed/ fruit production
23.	Development and application of single nucleotide polymorphic marker system	67.	Physiological approaches to phytoremediation: advances, impact and prospects
24.	DNA Barcoding in fishes	68.	Plant diseases and their management strategies
25.	Emergence of new disease in globalized world	69.	Prospects of Mariculture in the country
26.	Enhancing water productivity in scarcity zones	70.	Pre-and Post harvest management for enhanced production
27.	Entomopathogenic nematodes and their significance in insect biocontrol	71.	Power generation from New and Renewable Energy sources
28.	Entrepreneurship development through agro-processing centres	72.	Processing value addition and waste utilization technologies for natural fibres
29.	Enviornmental pollutants & food quality standards	73.	Quality management of plant protection inputs and appliances
30.	Experimental approaches in functional genomics	74.	Quantitative genetics and statistical genomics
31.	Exploitation of underutilized vegetables/fruits	75.	Recent development in conservation technology in Animal Genetic Resources
32.	Extension Strategies for combating current Agrarian Crisis	76.	Recent developments in organic production systems
33.	Farmers empowerment and entrepreneurial development	77.	Role of wild life in emergence of zoonotic diseases
34.	Fish as health supplements	78.	Risk assessment of pesticides in crop commodities
35.	Gender mainstreaming and gender budgeting	79.	Recent developments in climate change and watershed hydrology
36.	Hi-tech breeding for higher productivity, quality, food colorants and nutraceutical	80.	Safe movement/ international trade of agricultural commodities
30.	bioactive health compounds in vegetable crops	80.	Safe movement/international trade of agricultural commodities
37.	HACCP, value addition & quality standard in fish products	81.	Secondary Agriculture
38.	Increasing work efficiency for human, animal and mechanical systems and reduction of	82.	Seed trade production, export regulations and treaties
30.	occupational hazards in agricultural operations.	04.	Seed trade production, export regulations and treaties
39.	Inland fish capture at cross roads	83.	Sustainable exploitation of marine resources
40.	Improvement in fish seeds, breeds and feeds for boosting fish production	84.	Stem cell technologies for clinical application
41.	Increasing fish production through reservoir fisheries and cage-culture	85.	Utilization of degraded land through Horticulture.
42.	Impact of climate change on production of livestock and poultry	86.	Use of CAD & CAM for designing of agricultural machinery
43.	Spatial Decision support systems for Watershed Management	87.	Value addition of livestock products and quality control
44.	Improving reproduction rate in ruminants by suitable reproductive technologies	88.	Utilization of waste for wealth production in fisheries
89.	Innovations in educational technology	00.	Othization of waste for wealth production in fisheries
07.	innovations in cutcational technology	1	

^{*} Note: Proposals could also be submitted on other contemporary/ upcoming/ cutting edge technologies.