

डा. कुसुमाकर शर्मा
सहायक महानिदेशक (मानव संसाधन विकास)

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EDUCATION DIVISION
INDIAN COUNCIL OF AGRICULTURAL RESEARCH
KRISHI ANUSANDHAN BHAVAN-II, PUSA, NEW DELHI 110 012

F. NO. EDN. 5/74/2013-HRD
Dated 29.10.2013

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 2014-2015*

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 are available on ICAR 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:

- <http://www.iasri.res.in/cbp/>
- '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 **10th December, 2013**.

However, 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 **20th December, 2013**. 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,

(Kusumakar Sharma)

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 2014-2015*

S. No	Topic/ Subject Area	S. No	Topic/ Subject Area
1.	Advances for the assessment of soil-plant-atmosphere system to increase input use efficiency of soil and water resources	45.	Entrepreneurship development through agro-processing centres
2.	Advances in bioremediation Technologies of agrochemicals.	46.	Environmental pollutants & food quality standards
3.	Advances in disease forecasting tools in changing weather scenario	47.	E-sensor for Agriculture
4.	Advances in heterosis and plant breeding	48.	Experimental approaches in functional genomics
5.	Advances in Micro-irrigation technologies	49.	Exploitation of underutilized vegetables/fruits
6.	Advances in molecular epidemiology	50.	Extension Strategies for combating current Agrarian Crisis
7.	Agri-business and market intelligence	51.	Farmers empowerment and entrepreneurial development
8.	Agricultural engineering interventions for saving water and energy and higher productivity.	52.	Fish Disease Diagnostics
9.	Agro-forestry for mitigating climate change	53.	Fish biotechnology/DNA Fingerprinting/Molecular markers
10.	Allele mining using germplasm resources	54.	Fish feeds, Nutraceuticals, Food fish as health nutrients
11.	Animal Transgenics and cloning	55.	Fish product quality standards and certification
12.	Apparel manufacturing and designing	56.	Fish stock assessment in Marine and Fresh water resources
13.	Aquaculture engineering	57.	Gender mainstreaming and gender budgeting
14.	Assessment and management of soil and water quality under evolving resource conserving technologies and agricultural intensification	58.	Hi-tech breeding for higher productivity, quality, food colorants and nutraceutical bioactive health compounds in vegetable crops
15.	Bio informatics	59.	Hi-tech interventions in Fruit Production for enhancing productivity, nutritional quality and value-addition.
16.	Bio processing/food processing / packaging/product marketing	60.	Impact assessment of Rural Poultry in livelihood security
17.	Bio-drainage for combating water-logging and salinity	61.	Improving reproduction rate in small and large ruminants by reproductive technologies
18.	Bio-fortification of staple food crops	62.	Innovations in educational technology
19.	Bio-fuels	63.	Integrated Nutrient management
20.	Bio-management of orchard soil health	64.	Integration of quality parameters into food safety-focussed HACCP systems
21.	Biomethanation of Solid and Liquid Organic Wastes	65.	Knowledge Management in agriculture
22.	Bio-safety studies for GMOs	66.	Mariculture
23.	Breeding crop varieties for stress environment	67.	Measurement and management of resistance to chemical pesticides
24.	Breeding for biotic and abiotic stress with special reference to climate change traits.	68.	Micro propagation techniques
25.	Climate change and stress physiology (Plants/Animals)	69.	Micro-irrigation
26.	Climate Change-Mitigation and adaptation including carbon sequestration	70.	Modern Methods of irrigation for enhanced water use efficiency and productivity
27.	Communication and management skills for extensional professionals	71.	Molecular approaches in disease diagnostics and vaccines
28.	Conservation Agriculture	72.	Molecular mapping of genomes and genes/QTL
29.	Crop diversification through tropical and subtropical fruit crops.	73.	Multiple breeding of fishes
30.	Crop health management in protected agriculture	74.	Nano-technology and plant disease management
31.	Crop modeling for better management	75.	Nano-technology tools (NTT) for crop health and risk assessment techniques of NTT
32.	Crop pollination as agri-inputs for high productivity and quantity of crop commodities	76.	Natural edible colours and flavours
33.	Crop residue management equipment	77.	Noval genomic tools and modern genetic and breeding approaches for crop improvement
34.	Crop transformation and the challenge to increase yield potential	78.	Numerical methods for the analysis of agricultural engineering systems
35.	Current trends in commercial floriculture/ornamental pisciculture.	79.	Nutritional security through Horticulture.
36.	Decision support systems in agricultural research	80.	On-Farm technology testing and impact assessment
37.	Designer foods and feeds	81.	Participatory Extension Research and Management
38.	Developing efficacious human resource / Learning Resources/objects	82.	Pest management in protected agriculture/horticulture.
39.	Development and application of single nucleotide polymorphic marker system	83.	Pest risk analysis research as support to domestic quarantine system
40.	DNA Barcoding in fishes	84.	Phenotyping and Phenomics in Agriculture
41.	Drudgery reduction technologies useful for farm women and farm workers	85.	Physiological approaches to phytoremediation: advances, impact and prospects
42.	Emerging diseases of livestock	86.	Phytochemicals formulations for pest management
43.	Enhancing water productivity in scarcity zones	87.	Plant architectural engineering and management
44.	Entomopathogenic nematodes and their significance in insect biocontrol	88.	Plant diseases and their management strategies

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89.	Popularization of rootstocks in vegetables and fruits	102.	Risk assessment of pesticides in crop commodities
90.	Postharvest pathology	103.	Role of Pollinator and pollinating agents in enhancing quality crop production
91.	Power generation from New and Renewable Energy sources	104.	RS & GIS application to water resources
92.	Pre-harvest management of fruit crops for improved post-harvest value	105.	Securing Commodities from pests and diseases
93.	Processing of milk and milk products/Dairy byproducts for value addition	106.	Seed production including hybrid seed production, processing & marketing
94.	Processing value addition and waste utilization technologies for natural fibres	107.	Soil health assessment techniques
95.	Production of quality planting material in horticultural crops and certification under changing WTO regime.	108.	Stem cell research
96.	Quality management of plant protection inputs and appliances	109.	Use of CAD & CAM for designing of agricultural machinery
97.	Quantitative genetics and statistical genomics	110.	Use of ICT in Agriculture/Fisheries & Aquaculture
98.	Recent advances in micro-irrigation and fertigation	111.	Utilization of degraded land through Horticulture.
99.	Recent development in conservation technology in Animal Genetic Resources	112.	Value addition of livestock products and quality control
100.	Renewable Energy sources for mitigating climate change	113.	Waste Recycling and Resource Recovery Process
101.	Resource Conservation Technologies	114.	WTA, GATS and IPR

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