

# IASRI NEWS

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INDIAN AGRICULTURAL STATISTICS RESEARCH INSTITUTE ( ICAR ), LIBRARY AVENUE, PUSA, NEW DELHI-110 012



## From Director's Desk . . . . .

This Newsletter highlights some of the salient research and training achievements made and other significant activities performed during the period under report.

The steps of analysis of factorial experiments conducted using randomized complete block designs, partially confounded factorial experiments, balanced confounded factorial experiments with extra treatment, response surface designs, and correlation, regression, analysis of latin square designs, augmented designs and tests of significance based on t-distribution using SAS and SPSS have been uploaded on the page "Analysis of Data" launched earlier on Design Resources Server ([www.iasri.res.in/design](http://www.iasri.res.in/design)).

Two new projects entitled "National Information System on Agricultural Education in India (NISAGENET 2)" and "Experimental Designs for Agricultural Research involving Sequences of Treatments" have been initiated.

Four training programmes on different topics two under aegis of Centre of Advanced Studies, one Winter School and one sponsored training programme for ICFRE were organised. Apart from these one Discussion Seminar and one Dissemination Workshop were also organised during the period.

The Institute also provided consultancy services to various research studies/projects in NARS.

The Institute participated in number of meetings / conferences / symposia/workshops etc. It is hoped that the contents of this document would be informative and useful for scientists in NARS. Any suggestions for improving the contents of the newsletter further, would be highly appreciated.

  
(SD SHARMA)

### IN THIS ISSUE

- Research Achievements
- New Projects/Schemes
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### निदेशक की कलम से . . .

समाचार पत्र के इस अंक में प्रतिवेदनाधीन अवधि के दौरान प्रमुख अनुसंधान एवं प्रशिक्षण सम्बन्धी उपलब्धियों और संस्थान की अन्य महत्वपूर्ण गतिविधियों पर प्रकाश डाला गया है।

यादृच्छिकीकृत पूर्ण ब्लॉक अभिकल्पनाओं, आंशिक रूप से कन्फाउन्डेड बहु-उपादानी परीक्षणों, अतिरिक्त उपचार सहित सन्तुलित कन्फाउन्डेड बहु-उपादानी परीक्षणों, अनुक्रिया अन्तरापृष्ठ अभिकल्पनाओं के उपयोग द्वारा बहु-उपादानी परीक्षणों के विश्लेषण की प्रक्रिया को, तथा एस.ए.एस. एवं एस.पी.एस.एस. पैकेजों के उपयोग द्वारा सहसम्बन्ध, समाश्रयण, लेटिन स्कवेअर अभिकल्पनाओं के विश्लेषण, संवर्धित अभिकल्पनाओं एवं टी-वितरण पर आधारित सार्थकता परीक्षण के विश्लेषण की प्रक्रिया को डिजाइन रिसोर्सेज सर्वर (www.iasri.res.in/design) पर पूर्व-लॉन्चड “एनालिसिस ऑफ डाटा” नामक पेज पर अपलोड किया गया।

भारत में कृषि-शिक्षा पर राष्ट्रीय सूचना तंत्र (निसेजेनेट) तथा उपचारों के अनुक्रमों (सीक्वेन्स) सहित कृषि अनुसंधान में परीक्षणआत्मक अभिकल्पनाएँ नामक दो नयी परियोजनाएँ आरम्भ की गयी हैं।

विभिन्न शीर्षकों पर चार प्रशिक्षण कार्यक्रम आयोजित किये गये - उच्च अध्ययन केन्द्र के तत्वाधान में दो, एक शीतकालीन स्कूल, और आई.सी.एफ.आर.ई. के लिए एक प्रायोजित प्रशिक्षण कार्यक्रम। इसके अतिरिक्त प्रतिवेदनाधीन अवधि के दौरान एक विचार-विमर्श (डिस्कशन) सेमिनार और एक प्रसार कार्यशाला भी आयोजित की गयी।

संस्थान द्वारा एन.ए.आर.एस. में विभिन्न अनुसंधान अध्ययनों/परियोजनाओं के लिए परामर्श सम्बन्धी सेवाएँ उपलब्ध करायी गयीं।

संस्थान द्वारा अनेक बैठकों/सम्मेलनों/सगोष्ठियों/कार्यशालाओं इत्यादि में सहभागिता की गयी। आशा है कि इस अंक की विषयवस्तु नार्स के वैज्ञानिकों के लिए सूचनाप्रद एवं उपयोगी होगी। समाचार पत्र की विषयवस्तु में सुधार लाने हेतु आपके सुझावों का स्वागत है।

  
( सुखदेव शर्मा )

### RESEARCH ACHIEVEMENTS

- The steps of analysis of factorial experiments conducted using randomized complete block designs, partially confounded factorial experiments, balanced confounded factorial experiments with extra treatment, response surface designs, and correlation and regression using SAS and SPSS have been uploaded on the page “Analysis of Data” launched earlier on Design Resources Server (www.iasri.res.in/design). The steps for performing multiple comparison procedures and treatment contrast analysis are also given both using SAS and SPSS.
- The steps of analysis of latin square designs, augmented designs and tests of significance based on t-distribution using SAS and SPSS have been uploaded on the page “Analysis of Data” launched earlier on Design Resources Server (www.iasri.res.in/design). The steps of analysis of augmented designs using SPAD and tests of significance based on t-distribution using MS-EXCEL are also given. Further, the steps for performing multiple comparison procedures and treatment contrast analysis in case of latin square designs and augmented designs are also given both for SAS and SPSS. The data files and result files for all the links on “Analysis of Data” are also uploaded.

### NEW PROJECTS/SCHEMES/PROGRAMMES

The following new projects have been approved by IRC and initiated from 01 January 2008:

- National Information System on Agricultural Education in India (NISAGENET 2).
- Experimental Designs for Agricultural Research involving Sequences of Treatments.

### HUMAN RESOURCE DEVELOPMENT

- A two weeks specially designed Training Programme on “Research methodology” was organised for scientists of Indian Council of Forestry Research and Education (ICFRE) from 07 to 18 January 2008. Nineteen scientists from various disciplines of forestry representing nine different Institutes of ICFRE attended the training programme. The topics Statistical Methods, Experimental Designs, Sample Surveys, Biometrics and Spatial Statistics were



covered. The practicals were done using statistical softwares, mainly SPSS. Course material in the form of Reference Manual and Electronic Manual was provided to all the participants. Dr. Seema Jaggi was the Course Director for the training programme.

- A Winter School on “Sample survey techniques in agricultural research” was organized during 16 January – 05 February 2008. Twenty-one participants from different SAUs/ICAR Institutes participated in the training programme. Dr. KK Tyagi was the Course Director. Scientists of the Institute and outside faculty delivered the lectures to the participants.
- A 21 days Training Programme on “Advances in biometrical techniques” was organized during 08 – 28 February 2008 under aegis of Centre of Advanced Studies in Agricultural Statistics and Computer Applications. Dr. Amrit Kumar Paul was the Course Director for the training programme. The training programme was aimed with the objective to familiarize the participants with



the recent advances in the field of Biometrics and other useful statistical and computational tools applied in the areas like Plant/Animal Breeding, Genomics and Bioinformatics. Nineteen participants from different SAUs/ICAR Institutes participated in the training programme.

The training programme was structured under five modules: (i) Some Preliminaries, (ii) Introduction to Computers and use of Statistical Software Packages for Data Analysis, (iii) Advanced Statistical Methods in Breeding and Genetics, (iv) Advanced Statistical and Computational Techniques in Genomics and Bioinformatics, and (v) Statistical Modeling in Biological Phenomena.

- A 21 days Training Programme on “Development of web applications for knowledge dissemination in agriculture” was organized during 04 - 24 March 2008 under aegis of Centre of Advanced Studies in Agricultural Statistics and Computer Applications. Sixteen participants from different SAUs/ICAR Institutes participated in the training programme. Mohammad Samir Farooqi was the Course Director for the training programme.



This training programme offered sufficient practical knowledge to design, develop and host a web application using Microsoft .NET technology on IIS web server with MS-SQL server as database.

The course contents were completed in 39 lectures and 19 practicals. Eighteen faculty members from the Institute and 4 guest speakers delivered the lectures in the training programme.

- A Discussion Seminar on “Experiments with mixtures: Theoretical advances and applications” and a Dissemination Workshop on “Fractional factorials with special emphasis on experiments with scarce resources” were organised jointly by Dr. VK Gupta, National Professor and Dr. Rajender Parsad, National Fellow during 17-18 March 2008. In the discussion seminar and the dissemination workshop, Professor Bikas K. Sinha, Member, National Statistical Commission and Professor, Indian Statistical Institute, Kolkata, Dr. NK Mandal and Dr. Manisha Pal from Calcutta University, Kolkata; Dr. Premadish Das, Kalyani University, Kalyani; Dr. Aloke Dey, INSA Senior Scientist, ISI Delhi Centre participated alongwith other delegates from Delhi University and Delhi based ICAR Institutes.
- A Dissemination workshop on “Design resources server” was organised jointly by Dr. Rajender Parsad, National Fellow and Dr. VK Gupta, National Professor on 26 March, 2008. The workshop was inaugurated by Dr. SP Tiwari, DDG (Education). Dr. BS Bisht, ADG (HRD-I) and Dr. HS Gaur, Dean and Joint Director (Education), IARI, New Delhi also participated along with other delegates. The participants of the workshop included the experimenters from IISS, Bhopal; ANGRAU, Hyderabad; NDRI, Karnal; NBPGR, New Delhi and various Divisions of IARI, New Delhi. During the Introductory Session, Dr. Rajender Parsad made a presentation on Genesis and Main Features of Design Resources Server. Dr. SP Tiwari was quite appreciative of the efforts made and said that such workshops should be organized in different regions of the country. The practicing statisticians and experimenters should use this server rigorously and send

their comments for further improvements. Introductory Session was followed by two Technical Sessions, in which indepth discussions were made on the Design Resources Server. All the participants were highly impressed with the efforts made. After long deliberations, several recommendations were emerged for wider dissemination and to further brought improvement in the server to make it more user friendly and informative to the experimenters.

#### PANORAMA OF ACTIVITIES

- The meeting of Institute Research Committee (IRC) of the Institute was held during 22-23 February 2008 under the Chairmanship of Prof. SD Sharma, Director, IASRI, to review the progress of on-going research projects.
- Two meetings of the Grievance Committee of the Institute were held on 27 February and 29 March 2008 under the Chairmanship of Prof. SD Sharma, Director, IASRI.
- A meeting of the Institute Joint Staff Council was held on 20 March 2008 under the Chairmanship of Prof. SD Sharma, Director, IASRI.
- दिनांक 17 जनवरी, 2008 को निदेशक महोदय की अध्यक्षता में संस्थान राजभाषा कार्यान्वयन समिति की बैठक हुई जिसमें राजभाषा विभाग द्वारा जारी वार्षिक कार्यक्रम की प्रत्येक मद पर विस्तार से चर्चा हुई।

#### हिन्दी कार्यशाला

- दिनांक 28 तथा 29 फरवरी, 2008 को संस्थान के कर्मियों के लिए “राजभाषा नीति एवं कार्यान्वयन” विषय पर एक द्वि-दिवसीय हिन्दी कार्यशाला का आयोजन किया गया। कार्यशाला का उद्घाटन 28 फरवरी, 2008 को संस्थान के निदेशक, डॉ. सुखदेव शर्मा द्वारा किया गया। कार्यशाला में कार्मिक और प्रशिक्षण विभाग, नार्थ ब्लॉक के उप-निदेशक (राजभाषा), श्री प्रेम सिंह ने 28 फरवरी, 2008 को तथा अलीगढ़ मुस्लिम विश्वविद्यालय, अलीगढ़ के हिन्दी विभाग के रीडर, डॉ. राजीव नाथ लोचन शुक्ला ने 29 फरवरी, 2008 को “राजभाषा नीति एवं कार्यान्वयन” विषय पर व्याख्यान दिये। कार्यशाला के समापन के अवसर पर संस्थान के निदेशक महोदय द्वारा प्रतिभागियों को प्रमाण-पत्र वितरित किये गये।

#### PARTICIPATION OF INSTITUTE

Various Scientists and Technical Personnel of the Institute participated in

- Meeting regarding modified NAIS and small area estimation methodology under the Chairmanship of Secretary (A&C), Krishi Bhavan, New Delhi on 01 January 2008
- Meeting related with procurement and M&E activities under the NAIP project at NAARM, Hyderabad during 03-06 January 2008
- Meeting at Directorate of Arecanut and Spices at Kalicut on 22 January 2008
- COCSSO meeting at Gandhi Nagar, Gujarat during 07-08 February 2008
- 31<sup>st</sup> HLCC meeting on Agricultural Statistics

for the State of Rajasthan at Rajasthan House, Prithvi Raj Road, New Delhi

- Meeting on “AICRP-Home Science (Extension Component)” in NRC-WA, Bhubaneswar during 15-16 February 2008
- International meeting on “Mapping the Scientific Consciousness: National and International Efforts” organized by CSIR and DST on 7-8 March 2008
- Meeting on “Development of Gender Data Base in Agriculture” in NRC-WA, Bhubaneswar on March 24, 2008

#### Conference/Workshop/Symposia/Training etc.

Various Scientists and Technical Personnel of the Institute participated in

- Brain Storming Session to bring out a status report on “State of Indian agriculture” organized by National Academy of Agricultural Sciences, New Delhi on 07 January 2008
- First International Conference on “Agrochemicals protecting crop, health and natural environment” sponsored by IUPAC and organized at Division of Agricultural Chemicals, IARI, New Delhi during 08-11 January 2008
- Vice Chancellor’s Conference at NASC Complex during 19-20 January 2008
- National Symposium on “Bio-entrepreneurship and bio-business opportunities” organized jointly by Sardar Ballabh Bhai Patel University of Technology and Agriculture and M/S Lifecare Innovations Private Ltd. at New Delhi during 28-29 January 2008
- NAIP project proposal meeting entitled “Evolving a decision support system for agricultural commodity market outlook” held at NCAP, New Delhi during 28-29 January 2008
- Two days workshop on “Impact assessment of new agricultural technologies” during 30-31 January 2008 at NCAP, New Delhi
- National Conference on “Distance education to animal farmers with emphasis on women self-help groups”, jointly organized by Indian Association for Animal Production (IAAP), Noida/New Delhi and Institute of Agricultural Sciences, BHU at Varanasi during 01-03 February 2008
- One day seminar on “Women empowerment and rights” organized by ICAR in support with Women’s Studies Programme, JNU, New Delhi on 04 February 2008 at NASC Complex, New Delhi
- National workshop on “Applications and trends in data warehousing, data mining and data modeling” held at FRI, Dehradun during 09 -10 February 2008 and presented a paper on “Implementation of agricultural data warehouse - An IASRI experience”
- Workshop cum training on “Bioinformatics applications in agricultural research” at Unit of Simulation and Informatics, IARI, New

Delhi on 25 February 2008 and delivered a lecture

- Dataquest e-Governance Summit 2008 on 14 March 2008 at New Delhi
- Platinum Jubilee Celebrations of the Institute of Agricultural Sciences, Banaras Hindu University, Varanasi during 12-13 March 2008
- Golden Jubilee Celebrations of the Dairy Science College at NDRI, Karnal during 28-29 March 2008
- Training workshop on "Technology foresight methodologies in agricultural innovation system" from 31 March - 10 April 2008 at the Centre for Studies in Science Policy, JNU, New Delhi
- Conference on "Science-based agricultural transformation towards alleviation of hunger and poverty in SAARC countries" jointly organized by Ministry of Agriculture, Govt. of India, ICAR, New Delhi and IFFCO Foundation, New Delhi during 05-07 March 2008
- National seminar on "Children communal harmony and museum" at Conference Hall, National Museum, Janpath, New Delhi on 14 March 2008

#### NOMINATION

Scientists of the Institute are:

- Nominated as Member, Governing Body, Institute of Applied Statistics & Development Studies (IASDS), Lucknow
- Nominated as Member, Broad Subject Matter Area Committees (BSMA), ICAR, New Delhi
- Nominated as Member in IARI Academic's Council

#### COMPUTING FACILITIES

##### Wide Area Network

- Internet services have been provided to the users and the website of IASRI is being updated regularly. This site has been visited 593619 times since 05 September 2003.

#### SEMINARS DELIVERED

- Seminars in different areas of Agricultural Statistics and Computer Application were delivered.

These seminars include presentation of salient findings of the completed research projects by the scientists, thesis/ORW/

course seminars of students of M.Sc. and Ph.D. (Agricultural Statistics) and M.Sc. (Computer Application).

#### LECTURES DELIVERED

Scientists of the Institute delivered

- An invited lecture on "Statistical package for animal breeding II" on 4 January 2008 in a Winter School on "Applications of Computers and Computational Skills in Veterinary and Animal Science" organized by Directorate of Research for Veterinary and Animal Sciences, Rajasthan Agricultural University, Bikaner
- Three lectures on "Nonlinear statistical models", "Fuzzy regression analysis" and "Nonlinear time-series models" at Banasthali University, Rajasthan
- A lecture on "Design and development of fisheries data mart in India" during National Workshop cum Training Program on "Bioinformatics and Statistics in Aquaculture Research" organized at CIFA, Bhubaneswar during 24-26 March 2008
- An invited talk on "Statistical modelling in fisheries research" at CIFA, Bhubaneswar on 25 March 2008
- A talk on "Bioinformatics: An introduction" in a sensitization workshop on "Advance Computing" organized by Acharya Narendra Dev College, University of Delhi on 4 March 2008
- A lecture on "Statistical packages for agricultural research data" in a FAO sponsored training programme on "Varietal Development and Evaluation" during 14 February to 26 March 2008 at the Division of Seed Science and Technology, IARI, New Delhi

#### PUBLICATIONS

##### Research Papers Published

- अग्रवाल, रंजना एवं शर्मा, सुखदेव। संस्थान के कीर्तिस्तम्भ-डॉ गोविन्द राम सेठ। सांख्यिकी विमर्श, 2007-08 ( 3 ), 1-3.
- अग्रवाल, रंजना। कम्प्यूटर की कहानी उसी की चुबानी। सांख्यिकी विमर्श, 2007-08 ( 3 ), 23-28.
- Bhardwaj, SP and Vasisht, AK (2007). Policy support for contract farming in lac cultivation—An alternative marketing model. *Ind. J. Agril. Marketing*, **21(3)**, 43-54.
- Bhardwaj, SP (2007). Conceptual reforms to improve marketing efficiency. *Ind. J. Agril. Marketing*, **21(3)**, 100-107.
- Das, MN, Lahiri, Aloke and Shukla, Mukti Kant (2007). A convenient algorithm for extraction of any root of any number. *Statist. Appl.*, **5(1-2)** (new series), 99-100.
- Jaggi, Seema (2007). Analysis of multilevel data using SPSS. *The SPSS Analyst*, April-June, 43-49.
- Kaul, Sushila, Ram, Ghasi and Panwar, Sanjeev (2006). Economic analysis of productivity and profitability in rice production in India. *Agril. Situation Ind.*, **63(5)**, 295-300.

#### The details of Seminars Delivered

Category	Type of seminar	Number
Student	Course	08
	Thesis	01
	ORW	06
Scientist	Project completion	01
	New project	03
<b>Total</b>		<b>19</b>

- Lahiri, Alope and Das, MN (2007). Finding eigen values related to precision of GCA effects using diallel crossing plans. *Statist. Appl.*, **5(1-2)** (new series), 101-104.
- मैहता, सुभाष चन्द्र, सत्य पाल एवं कुमार, विनोद। आलू की उपज के पूर्वानुमान हेतु मौसम चरों पर आधारित मॉडल। सांख्यिकी विमर्श, 2007-08 ( 3 ), 58-62.
- प्रज्ञेष्, अग्रवाल, रंजना एवं घोष, हिमाद्रि। वर्षा का पूर्वानुमान : वर्तमान परिदृश्य एवं अपेक्षित भावी शोध कार्य। सांख्यिकी विमर्श 2007-08 ( 3 ), 41-46.
- Rai, Anil, Chaturvedi, KK and Malhotra, PK (2008). Design and development of fisheries data mart. In: *Applied Bioinformatics Statistics and Economics in Fisheries Research*, Eds. Ajit Kumar Roy and Niranjan Sarangi, New India Publishing Agency, New Delhi, 261-292.
- Nilakanta,Sree, Kevin, Scheibes and Rai, Anil (2008). Dimensional issues in agricultural data warehouse design. *Comp. Elect. Agril.*, **60(2)**, 263-278.
- Tomar, Jitendra Singh and Jaggi, Seema (2007). Efficient neighbour balanced block designs for correlated observations. *Metron*, **65(2)**, 229-238.
- विशाखी, पी. एवं बिन्दल, विजय। संस्थान का पुस्तकालय सूचना तंत्र। सांख्यिकी विमर्श, 2007-08 ( 3 ), 63-69.
- Vishwakarma, RK, Wanjari, OD, Rai, Anil, Bathla, HVL and Gupta, RK (2007). New methodology to study harvest and post-harvest losses in groundnut. *Agril. Situation Ind.*, 625-630.

#### Research Papers Presented in the Conference/Symposium etc.

- Delivered an invited lecture on "Significance of statistical tools for agrochemical research" by Rajender Parsad, VK Gupta, Jitendra Kumar and NA Shakil during IUPAC sponsored first International Conference on Agrochemicals Protecting Crop, Health and Natural Environment organized at Division of Agricultural Chemicals, IARI, New Delhi during 08-11 January 2008.

#### CONSULTANCY

- Scientists of the Institute analyzed the data of research workers from ICAR Institutes and State Agricultural Universities. Dr. Jagmail Singh, Principal Scientist, Division of Genetics, IARI, New Delhi was advised on the analysis of data from complete diallel cross experiment pertaining to cotton (*Gossypium hirsutum* L.) conducted using a randomized complete block design.

#### PERSONNEL

##### Deputation

- Sh. Satish Kumar, AAO has been relieved on 01-02-2008(forenoon) to join Ministry of Social Justice & Empowerment on deputation till 30-06-2008 vide O.O. No. 19(692)/75-Admn-I dated 01-02-2008.



A view of Discussion Seminar on "Experiments with Mixtures: Theoretical Advances and Applications"

#### Saleable Technologies

- Statistical Package for Factorial Experiments (SPFE 1.0)
- Statistical Package for Agricultural Research (SPAR 2.0)
- Statistical Package for Augmented Designs (SPAD)
- Statistical Package for Block Designs (SPBD 1.0)
- Statistical Package for Animal Breeding (SPAB)



A view of Dissemination Workshop on "Design Resources Server"

### Transfer

- Sh. KK Hamza, Finance & Accounts Officer has been transferred to SBI, Coimbatore from the Institute w.e.f.18-02-2008.
- Sh. Krishan Kumar joined the Institute as Finance & Accounts Officer w.e.f. 28-02-2008.

### Congratulations on your Promotion

- Dr. AR Rao, Senior Scientist w.e.f. 05-12-2006
- Dr. Ramasubramanian V, Senior Scientist w.e.f. 05-06-2007
- Dr. Tauqueer Ahmad, Senior Scientist w.e.f. 29-11-2006
- Dr. Amrit Kumar Paul, Senior Scientist w.e.f. 27-11-2006
- Dr. (Smt.) Cini Varghese, Senior Scientist w.e.f. 10-06-2007
- Dr. Himadri Ghosh, Senior Scientist w.e.f. 26-02-2007
- Sh. AR Keshva, (T-7-8) w.e.f. 01-01-2004
- Dr. AK Mogha, (T-7-8) w.e.f. 03-02-2005
- Sh. Davender Pal Singh, (T-7-8) w.e.f. 03-02-2005
- Sh. Dharam Pal Singh, (T-7-8) w.e.f. 03-02-2005
- Sh. GM Pathak, (T-7-8) w.e.f. 03-02-2005
- Sh. Narain Singh, (T-7-8) w.e.f. 03-02-2005
- Sh. Surender Singh, (T-7-8) w.e.f. 03-02-2005
- Sh. Uday Pratap Singh, (T-7-8) w.e.f. 03-02-2005
- Sh. SK Sharma, (T-7-8) w.e.f. 03-02-2005
- Sh. SP Jain, (T-7-8) w.e.f. 03-02-2005
- Dr. Ved Prakash, (T-7-8) w.e.f. 03-02-2005
- Sh. Mohan Lal, (T-7-8) w.e.f. 03-02-2005
- Km. Vijay Bindal, (T-7-8) w.e.f. 03-02-2005
- Smt. Abha Kant, (T-7-8) w.e.f. 03-02-2005
- Smt. Meena Nanda, (T-7-8) w.e.f. 03-02-2006
- Sh. Asha Ram Sharma, (T-7-8) w.e.f. 03-02-2005
- Sh. Dipti Singh, (T-7-8) w.e.f. 01-07-2005
- Late Sh. RP Gupta, (T-7-8) w.e.f. 03-02-2005
- Sh. Santosh Kumar, (T-7-8) w.e.f. 03-02-2005

- Sh. Lal Mani Verma, (T-7-8) w.e.f. 03-02-2005
- Sh. PP Singh, (T-7-8) w.e.f. 03-02-2005
- Smt. Satender Pal, (T-7-8) w.e.f. 03-02-2005
- Late Sh. SK Bhatnagar, (T-7-8) w.e.f. 03-02-2005
- Sh. RG Kondapalli, (T-7-8) w.e.f. 01-07-2005
- Sh. SC Pandey, (T-7-8) w.e.f. 01-07-2005
- Sh. Naresh Kumar, (T-7-8) w.e.f. 01-01-2006
- Sh. AK Sondhi, (T-7-8) w.e.f. 03-02-2006
- Smt. Savita Wadhwa, (T-7-8) w.e.f. 01-07-2006
- Sh. UC Banduni, (T-7-8) w.e.f. 01-07-2006
- Sh. Subhash Chand, (T-5) w.e.f. 10-06-2006
- Sh. MM Maurya, (T-5) w.e.f. 10-06-2006
- Sh Lakhmi Chand,(T-4) w.e.f. 09-04-2006
- Sh. Mohan Singh, (T-4) w.e.f. 01-01-2006
- Sh. Hira Mani, (T-3) w.e.f. 29-06-2006
- Sh. Dinesh Kumar Rai, (T-1) w.e.f. 03-01-2008
- Sh. Shesha Deba Rout, LDC w.e.f. 19-02-2008
- Sh. Dharmendra Tanwar, LDC w.e.f. 19-02-2008

The following were promoted under ACP Scheme vide O.O.No. 20(50)/99-Admn-I dated 02-01-2008.

- Smt. Meenu Kohli, PA
- Sh. Pradeep Kumar, UDC
- Sh. Lokesh Kumar, UDC
- Sh. KB Sharma, UDC

### Wish you Happy Retired Life

- Dr. VK Sharma, Principal Scientist w.e.f. 31-01-2008
- Dr. R Srivastava, Principal Scientist w.e.f. 31-01-2008
- Sh. RM Sood, Scientist (SG) w.e.f. 31-01-2008
- Sh. Nanak Chand, SS Gr II w.e.f. 31-01-2008
- Smt. Rajinder Kaur, Scientist (SG) w.e.f. 29-02-2008
- Sh. RM Bhasin, Scientist (SS) w.e.f. 31-03-2008

### OBITUARY

The Director, Staff and Students of IASRI deeply condole the death of Sh. Satbir, SS Gr II and Sh. Rajpal Singh Sehwat, SS Gr III, who expired on 13 January and 23 March 2008 respectively.

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