

## Bio-data

**Name:** Dr. (Smt.) Pushp Lata Verma

**Designation:** Associate Professor in Zoology

**Educational Qualifications:** M.Sc., NET (JRF), Ph.D.

**Specialization:** Entomology

**Department:** Department of Education in Science and Mathematics, NIE, NCERT, New Delhi

**Ext.:** 210

**Major Contribution** - working in the area of Research, Development, Training, Extension and Teaching.

- **Research:** involved *inter-alia* in Textbook evaluation in science & mathematics for upper primary, secondary & higher secondary stages; Children With Special Needs (CWSN); Biology Curriculum; Textbooks and syllabi analysis; Students difficulties in conceptual understanding of science; Rashtriya Avishkar Abhiyan; Analysis of concepts in science & mathematics in terms of learning performance; Status of laboratory facilities & their use in learning science; Evaluation of training packages in science; **Working paper** on Science Education & Environmental Education
- **Development of Textbook** : Biotechnology for class XI; Learning Outcomes (Hindi & English) at Secondary and upper primary stages; Module on *Ayurveda* for class XI; Handbook on understanding science through activities, games toys & art forms at secondary and upper primary stages; Kit manual in biology (hindi & english) at higher secondary stage; JNSMEE exhibits; Tsunami; Drought; Landslide; Flood; Earthquake; Mosquito borne diseases; Swine flu; HIV-AIDS; Fire and stampede; Emerging concern lifestyle related issues; Food poisoning; Vigyan prashan pradershika, class VIII; Pryogshala pustika- vigyan for upper primary stage; Exploring the environment; etc.; This apart, **developed Training Package** of Science and Mathematics for Secondary Stage (ITPD Package - Hindi Version) in online mode; Training Package in Biology for higher secondary stage (MOOC format), etc.; Besides, **developed kit** in Biology at higher secondary stage; Tactile kit for upper primary stage; **Reviewed NCERT science textbooks** from class VI to XII (hindi & english); Reviewed existing science kits for secondary & upper primary stages; Vocational education textbooks on Floriculturism; Dairy farmer-I; Animal health worker, etc.
- **E-resources:** developed *inter-alia* e-resources in Science at upper primary to higher secondary stages based on laboratory manual & science textbooks; **QR codes** for science textbooks for upper primary,

secondary & higher secondary stages; **Alternative Academic Calendars (AAC)** for upper primary, secondary & higher secondary stages; **AR-VR content** based on science textbooks.

- **PM e-vidya Channel:** involved for online sessions in science at secondary stage.
- **Swayam Prabha Channel:** involved live discussions on Fundamental unit of life part- I, II and III; Environmental pollution; Role of plants in reducing air pollution; Adolescence & menstruation; Why do we fall ill part-I & II; Tissue; Animal tissue; Food where does it come from; Respiration in organisms; Circulatory system; Excretion in animals.
- **Online course:** involved as a mentor for Certificate Programme for Teaching of Elementary Science (CTES).
- **Capacity Building Programmes:** involved *inter-alia* as programme coordinator and resource person for Biology at higher secondary stage: Use of biology kit at higher secondary stage; Activity based teaching at secondary & upper primary stages; Capacity building of KRP in science at upper primary stage from educationally backward blocks of Bihar; Capacity building of KRP in science at secondary stage from ST dominated areas; Strengthening of state functionaries (SCERTs/SIEs/RMSA/SSA) on preparation and use of science kits developed by NCERT at upper primary stage.
- **Research Papers:** national and international Journals-
  - An inventory of fish diversity of Ox-bow lake in Champaran district of Bihar
  - Fundamentals of child rights
  - Shikshan ki rachnatmak vidhiya
  - Climate change: national and international scenario
  - Cyber warfare: A serious threat to global security
  - Cyber crime
  - Protecting the Planet: Role of Youth
  - Climate Change: National and International Responses
  - Water pollution
  - Sagar ka kaher tsunami.
- **Teaching:** involved in teaching for B.Sc.B.Ed four year courses and B.Ed two year courses at RIE Ajmer including teaching of upper primary stage during field visit.
- **Administrative:** Was member of Committee for 'Admissions, Examinations at RIE, Ajmer and Hostel warden at RIE Ajmer.