



ISVPT-2018



XVIII Annual Conference of

"Indian Society of Veterinary Pharmacology and Toxicology"

and

**National Symposium on "One Health: Veterinary
Pharmacology and Toxicology Approaches"**

5-7 December, 2018

Anand, Gujarat



PROCEEDINGS



Organized By
Department of Veterinary Pharmacology and Toxicology
College of Veterinary Science and Animal Husbandry
Anand Agricultural University, Anand - 388001 (Gujarat)

Financial Assistance by following agencies is gratefully acknowledged

- **Indian Council of Agricultural Research, New Delhi**
- **Science & Engineering Research Board (DST), New Delhi**
- **Gauseva & Gauchar Vikas Board, Gandhinagar**
- **Gujarat Livestock Development Board, Gandhinagar**
- **Gujarat Sheep & Wool Development Corporation Ltd., Gandhinagar**
- **Gujarat State Biotechnology Mission, Gandhinagar**
- **Gujarat Council on Science & Technology, Gandhinagar**
- **Jai Research Foundation, Vapi**
- **Bansal Audio Visual Systems Pvt. Ltd., Ahmedabad**
- **Provimi Animal Nutrition India Pvt. Ltd., Bengluru**
- **Gujarat Co-operative Milk Marketing Federation, Anand**
- **Cadila Healthcare Ltd., Ahmedabad**
- **Hester Biosciences Ltd., Ahmedabad**
- **Intas Pharmaceuticals Ltd., Ahmedabad**
- **AD Instruments, New Delhi**
- **Asian Printery, Ahmedabad**
- **Unim Pharma-Lab Pvt. Ltd., Himatnagar**
- **Asha Trading, Ahmedabad**
- **Nishi Engineering Pvt. Ltd., Ahmedabad**

: Organized By :

Department of Veterinary Pharmacology and Toxicology

College of Veterinary Science and Animal Husbandry
Anand Agricultural University, Anand - 388001, Gujarat



ISVPT-2018



**XVIII Annual Conference of
"Indian Society of Veterinary Pharmacology and Toxicology"**

and

**National Symposium on "One Health: Veterinary
Pharmacology and Toxicology Approaches"**

5-7 December, 2018

Anand, Gujarat



PROCEEDINGS

: Editors :

Dr. S. K. Bhavsar, Professor & Head

Dr. K. A. Sadariya, Assistant Professor

Dr. B. R. Patel, Junior Teaching Associate

Dr. A. M. Thaker, Dean/Principal



**Organized By
Department of Veterinary Pharmacology and Toxicology
College of Veterinary Science and Animal Husbandry
Anand Agricultural University, Anand - 388001 (Gujarat)**

© Organizing Committee-ISVPT-2018, Department of Pharmacology and Toxicology, College of Veterinary Science and Animal Husbandry, Anand Agricultural University, Anand, Gujarat.

All right reserved. Part of this publication may be reproduced for non-commercial use provided that such reproduction shall be subject to acknowledgement of ISVPT-2018 as holder of copy right.

Title	: Proceedings of XVIII Annual Conference of ISVPT and National Symposium on One Health: Veterinary Pharmacology and Toxicology Approaches
Editors	: Dr. S.K. Bhavsar, Dr. K.A. Sadariya, Dr. B.R. Patel and Dr. A.M. Thaker
Publication Year	: 2018
ISBN	: 978-93-5351-386-3
AAU Publication Series No.	: EDU : 3 : 10 : 2018 : 100
Copies	: 100
Price	: Free of Cost

Published by :
Department of Veterinary Pharmacology and Toxicology,
College of Veterinary Science and Animal Husbandry,
Anand Agricultural University,
Anand, Gujarat.

Printed by:
Asian Printery, 229/1, Bhutani Ambali, Nr. Talati Hall, Raipur, Ahmedabad-380 001.

:: Disclaimer ::

The content and views expressed in the articles are the sole responsibilities of the respective authors.

The editors bear no responsibility with regard to source and authenticity of the contents.

CONTENTS

1. Inaugural Function	5
2. Orations.....	8
3. Technical Session I (National Symposium)	9
4. Technical Session II	11
5. Technical Session III (Dr. Jayvir Anjaria Award)	14
6. Technical Session IV(A) (Dr. R. Natrajan Award).....	15
7. Technical Session IV(B) (Prof. V.V. Ranade Young Scientist Award).....	16
8. Technical Session V.....	17
9. Technical Session VI.....	19
10. Technical Session VII	21
11. Technical Session VIII.....	23
12. Technical Session IX.....	25
13. Technical Session X.....	26
14. Technical Session XI	27
15. Technical Session XII.....	28
16. Poster Session I.....	29
17. Poster Session II.....	32
18. Plenary session	34
19. Valedictory Function.....	35

CENTRAL ORGANIZING COMMITTEE

Sr. No.	Name of Members	Designation
	Dr. N.C. Patel, Vice Chancellor	President
	Dr. K.B. Kathiria, Director of Research	Member
	Dr. A.M. Thaker, Dean (Vet)	Member
	Dr. Arun Patel, DEE	Member
	Dr. M.K. Jhala, ADR (Animal Science)	Member
	Dr. M.N. Brahmbhatt, Registrar	Member
	Dr. K. P. Patel, Dean (Faculty of Agriculture)	Member
	Dr. J. B. Prajapati, Dean (Faculty of Dairy Sci.)	Member
	Dr. H. C. Patel, Dean (Faculty of Horticulture)	Member
	Dr. Y. C. Zala, Dean (Faculty of ABM)	Member
	Dr. D. R. Kathiriya, Dean (Faculty of AIT)	Member
	Shri B.N. Bhaliya, Executive Engineer	Member
	Dr. S.H. Akbari, Director, Students' Welfare	Member
	Shri R.H. Gondaliya, Comptroller	Member
	Dr. Y.R. Ghodasara, Librarian	Member
	Dr. S. K. Bhavsar, Professor & Head, VPT	Organizing Secretary
	Dr. K.A. Sadariya, Assistant Professor, VPT	Co- Organizing Secretary

SCIENTIFIC CUM PUBLICATION COMMITTEE

Dr. S. K. Bhavsar, Professor & Head (VPT)
 Dr. K. A. Sadariya, Assistant Professor (VPT)
 Dr. B. R. Patel, Junior Teaching Associate (VPT)
 Dr. A. M. Thaker, Dean/Principal, Vet. College, Anand

TECHNICAL SESSION COMMITTEES

Venue-I Dr. M.T. Panchal (Convener) Dr. J.K. Mahla (Member) Dr. D.V. Chaudhari (Member)	Venue-II Dr. A. J. Dhami Dr. K. K. Hadiya Dr. Prashant Dabhi
Venue-III Dr. K. M. Panchal (Convener) Dr. S.C. Dubal (Member) Dr. V.R. Nimavat (Member)	

INAUGURAL FUNCTION

Inaugural function of the conference was organized on 05 December, 2018 at 9.30 a.m in the Auditorium, B. A. College of Agriculture, Anand Agricultural University, Anand.

Following dignitaries were present on the dais during the function.

Dr. N. C. Patel

Vice Chancellor, Anand Agricultural University, Anand as President

Prof. (Dr.) A. K. Srivastava

Chairman, Agricultural Scientist Recruitment Board, Indian Council of Agricultural Research, New Delhi as Chief Guest

Prof (Dr.) P. D. Juyal

Vice Chancellor, Nanaji Deshmukh Veterinary Science University, Jabalpur as Guests of Honour

Prof. Ramesh K. Goyal

Vice Chancellor, Delhi Pharmaceutical Sciences & Research University, Delhi as Guests of Honour

Dr. A.M. Thaker

President- ISVPT & Dean / Principal, College of Veterinary Science and Animal Husbandry, Anand

Dr. S.K. Sharma

General Secretary-ISVPT

Dr. S. K. Bhavsar

Organizing secretary, ISVPT-2018

Several eminent personalities and senior pharmacologists including Dr. Jayvir Anjaria were present in the audience. University officers, Deans of various faculties and professors of University graced the occasion. Beside dignitaries delegates from almost every state of India including PG / Ph.D. students were present. The inaugural function was attended by more than three hundred scientists / Teachers.

Compendium of Invited papers and Abstracts was released during the function. An android based application “ Veterinary Drug Information System” was also released. Four scientists were awarded Fellow of ISVPT. Dignitaries opined to use drugs rationally in food producing animals to safeguard animal, human and environmental health.

ISVPT - 2018 Fellowship Receipts





ORATIONS

Chellapa Memorial Oration

Prof. Anil Gupta, Founder, Honey Bee Network, SRISTI, GAIN and NIF, Visiting Faculty, IIMA & IITB, Ahmedabad delivered pre-recorded lecture on “Invigorating community veterinary knowledge system: extreme affordability, accessibility and availability”.



Dr. M. Sabir Oration

Vivek Kapur, Department of Animal Science and the Huck Institutes of the Life Sciences, Pennsylvania State University, University Park, PA, USA presented oration on “One health challenge: To eliminate TB, we must control bovine TB” on 05-12-2018 at 12.00-12.45.



TECHNICAL SESSION I

National Symposia on “One Health: Veterinary Pharmacology & Toxicology Approaches”

Chairperson : Dr. A.K. Srivastava, New Delhi

Co-Chairperson : Dr. C. Varshneya, Amritsar

Rapporteur : Dr. Hitesh B. Patel, S.K. Nagar

Date: 05-12-2018

Time: 14:00 to 17:00

Venue: Kapila Teaching Complex, Veterinary College, Anand

- 1) Dr. P.D. Juyal delivered talk on “Role of Veterinarian in the society - one health initiative”
- 2) Dr. J. K. Malik presented paper on “Recent advances in the role of probiotics, prebiotics and synbiotics in poultry health and production”
- 3) Dr. R. K. Goyal talked on “One health- one world: pharmacology bringing biological world together”
- 4) Dr. A.K. Srivastava presented paper on “Food borne zoonotic diseases: status and preventive measures”

Following recommendations emerged from the papers presented during national symposium

- 1) The future research in the area of probiotics, prebiotic and synbiotics with respect to intestinal microbiota, mechanism of action, dose and duration of therapy is required to be explored especially in domestic animals.
- 2) The collaborative research involving multidisciplinary approach for the control of human and animal diseases is need of time and needs trans or multi disciplinary initiatives.
- 3) Continuing education and collaboration among all stake holders like milk producer farmers, processors, consumers, co-operative dairies and businessman is key to milk safety.
- 4) Veterinarians play important role in animal health and production systems. It is imperative to involve veterinarians in the multi-disciplinary team to implement “One World-One Health” Programme.



TECHNICAL SESSION II

ETHNOPHARMACOLOGY

Chairperson : Dr. Gopakumar, Thrissur

Co-Chairperson : Dr. Ashok Gaur, Bikaner

Rapporteur : Dr. Harshad B. Patel, Junagadh

Date: 05-12-2018

Time: 17.00-19.00

Venue: Kapila Teaching Complex, Veterinary College, Anand

Oral Presentations:

- 1) Verma P.K.: Evaluation of antioxidant and nephroprotective potential of floral extract of *Cynara scolymus* in rats
- 2) Verma P.K.: Protective effect of *Bergenia ciliata* ethanolic extract on acetaminophen induced hepatotoxicity in Wistar rats
- 3) Dev R.: Effect of hydroalcoholic extract of *Cordia dichotoma* leaves on isolated ileum of Wistar rat
- 4) Varia R.D.: Pharmacokinetic of quercetin and chrysin in wistar rats after single dose intramuscular administration
- 5) Sadariya K.A.: Evaluation of antidiabetic activity of *Linum usitatissimum* aqueous extracts in diabetic sprague dawley rats
- 6) Raja M.J.: Environmental factors as quality determinants on biological activity of *Kedrostis foetidissima (jacq.) cogn* plant
- 7) Vinay Kant : Acceleration of healing of wound in diabetic rats due to antioxidant potential of quercetin
- 8) Singh S.P.: Evaluation of turmeric nanoformulation in heparin induced osteoporosis in rat model
- 9) Singh S.P.: Effect of turmeric nanoformulation on hepatorenal function of rat
- 10) Mekala P.: Immunomodulatory effect of *Nilavembu Kudineer Chooranam* in backyard chicken
- 11) Priyadarshini U.: Piperine in amelioration of arsenic toxicity in swiss albino mice
- 12) Sanjay B.M.: Modulation of Nrf2 and NF- κ B gene signalling pathways by hexane fraction of *Phyllanthus emblica* leaves extract in acetaminophen induced hepatic damage in rats

- 13) Nirbhay Kumar: Polyphenolic compounds and *in vitro* antioxidant activity of *Chenopodium album* Linn. Extracts
- 14) Sadhu D.B.: Effect of *Vigna unguiculata* and *Hordeum vulgare* seed extracts on kidney homogenate and rat kidney injury molecule-1 (KIM-1) on ethylene glycol and ammonium chloride induced urolithiasis in female wistar rats
- 15) Singh P.: Studies on 2, 4 dichloro phenoxyacetic acid toxicity and its amelioration by *Andrographis paniculata* (kalmegh) and *Boerhaavia diffusa* (punarnava) in rats
- 16) Devi A.R.: Immunomodulatory potential of *Kaempferia parviflora* against cyclophosphamide induced immune suppression in Swiss albino mice

Following recommendations emerged from the papers presented during the session II

- 1) Herbal plants are being used in the form of various extracts or crude powders alone or in combination of more plants. Further analysis about isolation and identification of active ingredients and their pharmacological activity evaluation will enhance the therapeutic efficacy and reduce the cost of treatment.
- 2) More systemic research and efforts are required for scientific validation of the ethnoveterinary practices which is commonly being used by local people of different regions of India and disseminate the information to all livestock farmers.
- 3) Turmeric nano formulation (20mg/kg PO) was found effective in reversing osteoporosis in rat model. It requires further investigations and clinical trials in target species.

Following Scientists / Teachers received the best oral presentation awards for the Technical session- II:

- **Dr. S.P. Singh (First Position)**
- **Dr. Kamlesh A. Sadariya & Dr. Vinay Kant (Second position)**





TECHNICAL SESSION III

DR. JAYVIR ANJARIA AWARD

Chairperson : Dr. J.K. Malik, Dehradun
Co-Chairperson : Dr. S. Kalpana, Hyderabad
Rapporteur : Dr. Nirbhay Kumar, Patna
Date: 06-12-2018
Time: 09.00-11.00

Venue: Kapila Teaching Complex, Veterinary College, Anand

The following topics were delivered by respective candidates for Dr. Jayvir Anjaria Award

- 1) Solanki Shivani L.: Protective effect of poly-herbal extract mixture against gentamicin-induced toxicity by ameliorating hemato-biochemical, oxidative stress and toxico-pathological in rats
 - 2) Maradiya J.J.: Bioenhancing effects of piperine on oral pharmacokinetics of gemifloxacin in layer birds
 - 3) John R.: Apoptosis mediated cytotoxic potential of *Mimosa pudica* in breast carcinoma cell lines
 - 4) Chakravarthi P.V.: Establishing antigout activity of *Piper betle* through molecular docking and *in vivo* study in gout induced broiler chicken
 - 5) Kumawat S.: *In vitro* and *ex vivo* evaluation of *Shorea robusta* Gaertn F. resin on LPS stimulated Raw 264.7 and STZ-diabetic rat peritoneal macrophages
 - 6) Mir A.H.: Genoprotective effects of *Dalbergia sissoo* and *Calotropis gigantea* leaf extracts on
 - 7) ethnylestradiol induced genotoxicity in human mammary epithelial cell line and cycling female mice
 - 8) Nagajothi S.: Antiviral activity of *Andrographis paniculata* against newcastle disease virus
 - 9) Soman Swathi: Antibacterial activity of endophytic bacteria isolated from different varieties of babool leaves
- **Judging committee declared John Reni of Mannuthy (Kerala) as winner of Dr. Jayvir Anjaria Award for the year 2018**



TECHNICAL SESSION IV (A)

DR. R. NATRAJAN AWARD

Chairperson : Dr. Usha P.T.A., Thrissur

Co-Chairperson : Dr. Uttam Singh Thakur, Izatnagar

Rapporteur : Dr. Pallavi Bhardwaj, Palampur

Date: 06-12-2018

Time: 11.15-12.00

Venue: Kapila Teaching Complex, Veterinary College, Anand

The following topics were delivered by respective candidates for Dr. R. Natrajan Award

- 1) Bhatiya S. I.: Functional involvement of l-type calcium channels, potassium channels and β -adrenoceptors in chromium-induced myometrial relaxation of rat uterus
 - 2) Sultan F: Retinoic acid and rosuvastatin alleviate β -agonist-induced myocardial injury by improving antioxidant status through Nrf2 mRNA expression and cytokine modulation
 - 3) Mahesh D.M.: *In-vitro* hepatic metabolism of 1, 8-cineole in domestic fowl
- **Judging committee declared Bhatiya Shirish I. of Mathura (U.P.) as winner of Dr. Jayvir Anjaria Award for the year 2018**



TECHNICAL SESSION IV (B)

PROF. V.V. RANADE YOUNG SCIENTIST AWARD

Chairperson : Dr. Vinod Kumar, Hisar

Co-Chairperson : Dr. P.K.Verma, Jammu

Rapporteur : Dr. Harshad A. Patel, Dantiwada

Date: 06-12-2018

Time: 12.00-13.00

Venue: Kapila Teaching Complex, Veterinary College, Anand

The following topics were delivered by respective candidates for Prof. V.V. Ranade Young Scientist Award

- 1) Modi Falguni D.: Pharmacokinetics antibacterial and anti-inflammatory activities of rutin in wistar albino rats
 - 2) Patil N.V.: Neurotoxicological evaluation of carbendazim and ameliorative effect of quercetin in male rats
 - 3) Patel Bhargavi R.: Assessment of heavy metals in soil, water, fodder and milk of dairy animals
 - 4) Patel H.B.: Effect of piperine and quercetin administration on pharmacokinetics of marbofloxacin and CYP3A37 and MDR1 mRNA expressions in broiler chickens
- **Judging committee declared Patel Harshad B. of Junagadh (Gujarat) as winner of Prof. V.V. Ranade Young Scientist Award for the year 2018**



TECHNICAL SESSION V

TOXICOLOGY OF XENOBIOTICS

Chairperson : Dr. S.K.Mody, S.K. Nagar

Co-Chairperson : Dr. Nitin Bhatia, Ahmedabad

Rapporteur : Dr. Santwana Palai, Bhubaneswar

Date: 06-12-2018

Time: 14.00-16.00

Venue: Kapila Teaching Complex, Veterinary College, Anand

Lead Papers:

- 1) Singh S.P.: Phytotherapeutics of pesticide toxicity in poultry

Oral Presentations:

- 1) Verma P.K.: Effect of quinalphos and arsenic co-exposure on brain antioxidant status and acetylcholine esterase activity in wistar rats
- 2) Verma P.K.: Histopathological and antioxidant biomarkers alterations in renal tissue following repeated administrations of quinalphos and arsenic alone and in-combination in wistar rats
- 3) Patel H. B.: Safety profile of marbofloxacin following repeated intravenous and oral administration alone and in piperine and quercetin pretreated broiler chickens
- 4) Rao S.S.: Evaluation of blood biochemical parameters and oxidative alterations caused by cadmium chloride in male rats
- 5) Sadariya K. A.: Safety evaluation of gemifloxacin and piperine alone and in combination in layer birds
- 6) Modi C.M.: Amelioration of ethylene glycol induced alterations by poly-herbal mixture extract in wistar rats
- 7) Vinod Kumar : Acute oral toxicity study of anilofos in Swiss albino mice
- 8) Prakash A.: Alpha-tocopherol and curcumin attenuates cisplatin-induced nephrotoxicity in rats: Impact on early biomarker KIM-1, oxidative stress, hemato-biochemical parameters and histoarchitecture of kidney
- 9) Thakur Shraya: Role of vitamin C in amelioration of thiamethoxam induced cytotoxicity in madin–darby bovine kidney cell line
- 10) Rana J.R.: Fish embryo toxicity test as a potential alternative to the fish acute toxicity test

11) Nagane R.M.: Toxicological evaluation of medicinal plant *Acorus calamus*

Following recommendations emerged from the papers presented during the session V

- 1) Repeated oral administration of gemifloxacin (10mg/kg) and marbofloxacin (5mg/kg) is safe for use in chicken.
- 2) Fish embryo toxicity test is more sensitive than acute fish toxicity test for toxicity evaluation of industrial effluents. It can be used as an alternate to the acute fish toxicity test.

Following Scientists / Teachers received the best oral presentation awards for the Technical session- V:

- **Dr. Kamlesh A. Sadariya (First Position)**
- **Dr. Harshad B. Patel (Second position)**



TECHNICAL SESSION VI

ANTIMICROBIALS AND ANTIMICROBIAL RESISTANCE

Chairperson : Dr. D.N. Rank, Anand

Co-Chairperson : Dr. M.J. Raja, Namakkal

Rapporteur : Dr. Vikram Chakravarthy, Namakkal

Date: 06-12-2018

Time: 17.00-18.30

Venue: Sandipani Complex Room-I, Veterinary College, Anand

Lead Papers:

- 1) Bhardwaj Pallavi : Marbofloxacin-resistant *Escherichia coli* isolated from fecal flora of healthy goats during marbofloxacin administration: Is there a link?
- 2) Sharma S.K.: Antimicrobials and antimicrobial resistance
- 3) Bhatia N.: Anti-microbial resistance and its relevance to India - the animal healthcare perspective

Oral Presentations:

- 1) Senthil Kumar P.: Cathepsin D Degradable Dendrimer-MPEG-Histone 3-Enrofloxacin Conjugate Nanovehicle for Target Specific Bovine Mastitis Therapy
- 2) Singh P.: Antibiotic resistance pattern of mastitic milk sample of Gir cattle
- 3) Bhavsar P.P.: Screening of commercial dairy products for antimicrobial resistance (AMR) among probiotic organisms
- 4) Bhanderi B.B.: Multiple drug resistant bacteria isolated from clinical mastitis in cows

Recommendations:

- 1) Extensive research is required to study the impact of fluoroquinolones administration on the emergence of fluoroquinolone resistant *E. coli* present in the GIT flora. It is important to elucidate the molecular mechanisms through which *E. coli* develops resistance against fluoroquinolones.
- 2) Looking to biodiversity, production systems, emerging disease scenario and availability of resources, it is required to tailor regulation in terms of bacterial resistance as per Indian context. There is also need to educate farmers on drug withdrawal periods.



TECHNICAL SESSION VII

MOLECULAR AND NEUROPHARMACOLOGY

Chairperson : Dr. V.K. Dumka, Ludhiana

Co-Chairperson : Dr. Suresh Nair, Pookode

Rapporteur : Dr. Mamta Meena, Jaipur

Date: 06-12-2018

Time: 17.00-18.30

Venue: Sandipani Complex Room-II, Veterinary College, Anand

Lead Papers:

- 1) Barua C.C.: Exploring neuropathy and its probable treatment with reference to diabetic neuropathy
- 2) Usha P.T.A : Palmitoylethanolamide- a potential target for analgesic medicine
- 3) Thakur U.S.: Role of iNOS signaling in sepsis-induced lung injury

Oral Presentations:

- 1) Mandil R.: Flubendiamide induces apoptosis and genotoxicity in primary cell culture of rat thymocytes: Modulation by resveratrol, catechin, curcumin and α -tocopherol
- 2) Palai Santwana : Mechanism of vasorelaxation of Naringenin in pulmonary artery of *Capra hircus*
- 3) Srinivasan G.: Effect of high fat high cholesterol diet on β -adrenergic response in late pregnant rats
- 4) Thakur U.S.: Investigation of biochanin-A on vascular tone of the rat isolated pulmonary artery
- 5) Sheikh Y.: Genotyping for β -Casein gene using PCR-RFLP in HF Crossbred and Indigenous Cattle of Gujarat state

Recommendations:

- 1) Extensive research is required to elucidate analgesic activity of palmitoylethanolamide, an endogenous fatty acid commonly found in egg yolk and milk.
- 2) Narigenin is a potent natural flavanoid found in gray fruit, bitter orange, tangerine etc. Narigenin induced vasodilation in pulmonary artery of *Capra hircus* is exclusively dependent on NO production via NO-eNOS pathways with a minimal role of PGI₂-COX pathways. The potential vasodilatory effect

of nerigenin could be used for prevention or treatment of pulmonary arterial hypertension.

Following Scientist / Teacher received the best oral presentation award for the Technical session- VII:

- **Dr. Santwana Palai (First Position)**



TECHNICAL SESSION VIII

PHARMACOKINETICS / TOXICOKINETICS

Chairperson : Dr. Deepak Barot, Gandhinagar

Co-Chairperson : Dr. Jatin H. Patel, Navsari

Rapporteur : Dr. Dinesh M.B., Shivamogga

Date: 07-12-2018

Time: 09.00-10.30

Venue: Sandipani Complex Room-I, Veterinary College, Anand

Oral Presentations:

- 1) Modi C.M.: Effect of piperine on the pharmacokinetics of marbofloxacin following subcutaneous administration in rats
- 2) Bhavsar S.K.: Bioenhancing effect of single and multiple dose piperine on gemifloxacin following intravenous administration in layer birds
- 3) Bhavsar S.K.: Pharmacokinetics of piperine following intravenous and oral administration in layer birds
- 4) Thaker A. M.: Effects of gemifloxacin administration on pharmacokinetics of piperine in layer birds
- 5) Bhardwaj Pallavi: Effect of piperine co-administration on pharmacokinetics of marbofloxacin in goats
- 6) Mody S. K.: Plasma disposition and pharmacodynamic relationship of ceftizoxime in sheep and goats
- 7) Singh R.D.: Effect of ciprofloxacin on the oral pharmacokinetics of roxithromycin in broiler chickens
- 8) Meena Mamta: Disposition kinetics of moxifloxacin in calves following a single intravenous bolus dose
- 9) Suraj S.V.: Fatty acid profile and *in-vitro* anti-diabetic activity of petroleum-benzene extract of *Leucasindica* (Linn.)
- 10) Dinodia Neelam: Disposition kinetics of marbofloxacin in calves following a single intravenous bolus dose

Recommendations:

- 1) Co-administration of piperine (15mg/kg, oral daily for 5 days) with marbofloxacin (2mg/kg, IM) revealed that marbofloxacin pharmacokinetics

improved and its significantly reduced marbofloxacin dose against *E.coli* and *P. multocida*.

- 2) Co-administration of ciprofloxacin and roxithromycin did not alter pharmacokinetics of oral roxithromycin administration in broiler chicken.

Following Scientists / Teachers received the best oral presentation awards for the Technical session- VIII:

- **Dr. S. K. Bhavsar (First Position)**
- **Dr. R.D. Singh (Second position)**



TECHNICAL SESSION IX

CLINICAL REGULATORY PHARMACOLOGY & TOXICOLOGY

Chairperson : Dr. Chandana Barua, Guwahati

Co-Chairperson : Dr. Ratndeeep Singh, S.K. Nagar

Rapporteur : Dr. R.D. Varia, Navsari

Date: 07-12-2018

Time: 09.00-10.30

Venue: Sandipani Complex Room-II, Veterinary College, Anand

Lead Papers:

- 1) Dr. A. Kumaresan: Infertility in dairy animals: target for clinical pharmacology
- 2) S. P. Singh: Regulation and management of pesticides in india

Oral Presentations:

- 1) Vinay Kant : Gross and histopathological effects of dimethyl sulfoxide on wound healing in rats
- 2) Jadhav S.: Preclinical safety pharmacology studies



TECHNICAL SESSION X

FOOD SAFETY / XENOBIOTIC RESIDUE

Chairperson : Dr. S.K. Sharma, Ludhiana

Co-Chairperson : Dr. Nisha A.R., Pookode

Rapporteur : Dr. R.K. Nirala, Patna

Date: 07-12-2018

Time: 09.00-10.30

Venue: Kapila Teaching Complex, Veterinary College, Anand

Oral Presentations:

- 1) Jayaraj A.: *In vitro* mitigation of pesticide residue in animal substance
- 2) Bhavsar P.P.: ELISA based monitoring and analysis of residue level of Tetracycline group of antibiotics in raw and pasteurised milk collected from Anand district of Gujarat state
- 3) Bhanderi B.B.: Antibiotic sensitivity pattern of staphylococci and streptococci isolated from subclinical mastitis in cows
- 4) S. Kalpana: Quantitative determination of residual enrofloxacin and ciprofloxacin in field samples of buffalo meat using RP-HPLC

Following Scientist received the best oral presentation award for the Technical session- X:

- **Dr. S. Kalpana (First Position)**



TECHNICAL SESSION XI

a) ANIMAL WELFARE AND GOOD LABORATORY PRACTICES

b) EDUCATION IN VETERINARY PHARMACOLOGY AND TOXICOLOGY

Chairperson : Dr. C.N. Nair, Thrissur

Co-Chairperson : Dr. Manimaran, Bengaluru

Rapporteur : Dr. P. Mekala, Namakkal

Date: 07-12-2018

Time: 10.40-11.30

Venue: Sandipani Complex Room-I, Veterinary College, Anand

Lead Papers:

- 1) Sadariya K.A.: Alternatives to experimental animals
- 2) Barot Deepak : *In vitro* hepatic and enteric experimental systems for the evaluation of human xenobiotic metabolism and toxicity early in drug discovery and development

Oral Presentations:

- 1) Date R.: Assessment of photosensitization Potential via *In Chemico* Assays



TECHNICAL SESSION – XII

NUTRITIONAL PHARMACOLOGY & NUTRACEUTICALS

Chairperson : Dr. R.D. Rana, Hisar

Co-Chairperson : Dr. Neetu Rajput, Mhow

Rapporteur : Dr. Chirag Modi, Junagadh

Date: 07-12-2018

Time: 10.40-11.30

Venue: Sandipani Complex Room-II, Veterinary College, Anand

Lead Papers:

- 1) Mody S.K.: Plant derived products for poultry health and performance: a solution initiative of one health
- 2) Lunagariya P.M.: Herbal feed additives/phytobiotics in animal nutrition: an important aspects

Oral Presentations:

- 1) Mandil R.: Ameliorative potential of α -tocopherol against flubendiamide and/or copper-induced altered blood-biochemical indices, oxidative stress and histopathological changes in liver of wistar rats
- 2) Devalia B. R.: Effect of supplementing fenugreek (*Trigonella foenum graecum*) seeds in total mixed ration (TMR) of lactating surti goats

Recommendations:

- 1) The best health and performance strategy designed feed additive formulation with using plants derived products, which would be the key to fight for sustainable poultry rearing.
- 2) Herbal feed additive is handy and cost-effective tool in farm animal production system to produce safer food for human.



POSTER SESSION I

ETHNOPHARMACOLOGY AND TOXICOLOGY OF XENOBIOTICS

Date: 06-12-2018

Time: 16.00-17.00

Venue: Sandipani Complex- Ground Floor, Veterinary College, Anand

Posters presented:

- 1) Patel H. B.: Evaluation of healing potential of polyherbalgel formulation on full-thickness skin wounds in rabbits
- 2) Modi C.M.: Comparative study of *in-vitro* free radical scavenging activity of different extracts of leaves of *Abrus precatorius*
- 3) Rao S.S.: Pharmacological effects and safety profile following administration of poly-herbal extract in diabetic rats
- 4) Modi Falguni D.: *In vitro* and *in vivo* anti-inflammatory activity of quercetin and chrysin in wistar albino rats
- 5) Patel J.H.: Investigation of *in vitro* and *in vivo* antibacterial activity of quercetin and chrysin in wistar rats
- 6) Sarvaiya Vaidehi N.: Anti-gout activity of *Curcuma longa* and *Phyllanthus emblica*: a comparative experimental study in rats
- 7) Preethy J.: Effect of *Carica papaya* leaves in alleviating cyclophosphamide induced oxidative stress in mice
- 8) Palai S.: Acaricidal activity of *Datura stramonium* on *Rhipicephalus (boophilus) microplus*
- 9) Verma M.K.: Immunostimulant activity of *Chenopodium album* in cyclophosphamide induced immunosuppression in rats
- 10) Singh S.P.: Pathological changes induced by cyclophosphamide and their amelioration by *Ajuga macrosperma* in rats
- 11) Pranjali K.: Nematocidal activity of methanolic extract of fruits of *Piper longum* on *Mecistocirrus digitatus*
- 12) Jisha S.: Effect of methanolic extract of germinated seeds of *Hordeolum vulgare* on *Fischoederius cobboldi*
- 13) Akhil G.H.: Adulticidal activity of methanolic extract of stem of *Tinospora cordifolia* against *Fischoederius cobboldi*

- 14) Makwana C.N.: Amelioration of paracetamol induced alterations by administration of poly-herbal extract mixture and silymarinin rats
- 15) Aathira K.K.: Reversal of fluoroquinolone resistance by phytochemicals- an *in silico* approach
- 16) Hajare S.W.: Ameliorative effect of *curculigo orchoides* on sub acute cypermethrin toxicity with special reference to male reproductive system in wistar rats
- 17) Vinod Kumar : Assessment of anilofos induced mutagenicity in bone marrow and germ cells of swiss albino mice
- 18) Senthil Kumar P.: Assessment of heavy metals in water hyacinth (*Eichhornia crassipes*) plants and its toxic effects on cattle
- 19) Nisha A. R.: Immunotoxicity of fluranthene in developing chicks
- 20) Bibu J.K.: Pharmacological and toxicological effects of chloroform soluble fraction of methanolic extract of seeds of *Annona muricata*
- 21) Patel H.B.: Protective effects of poly-herbal mixture enriched feed against cadmium chloride induced toxicity in broiler chickens

Following Scientists / Teachers received the best oral presentation awards for the Poster I:

Ethnopharmacology:

- **Dr. S.W. Hazare (First Position)**
- **Dr. V.N. Sarvaiya & Dr. G.H. Akhil (Second position)**
- **Dr. K.K. Athira (Third position)**

Toxicology of Xenobiotics:

- **First : Dr. Vinod Kumar (First Position)**





POSTER SESSION II

PHARMACOKINETICS, MOLECULAR & NEUROPHARMACOLOGY, FOOD SAFETY/ XENOBIOTIC RESIDUE, ANTIMICROBIALS AND ANTIMICROBIAL RESISTANCE, CLINICAL AND REGULATORY PHARMACOLOGY AND TOXICOLOGY

Date: 06-12-2018

Time: 16.00-17.00

Venue: Sandipani Complex- First Floor, Veterinary College, Anand

Posters presented:

- 1) Singh R.D.: Disposition interaction of a novel antimicrobial drug combination in poultry
- 2) Daundkar P.S.: Pharmacokinetics of ketoprofen and its interaction with ceftiofur and cefquinome in buffalo calves
- 3) Sadariya K.A.: Pharmacokinetics of gemifloxacin following intravenous and oral administration in layer birds
- 4) Dumka V.K.: Pharmacokinetics of cefquinome in buffalo calves
- 5) Dinesh M.B.: Influence of ketoprofen administration on the disposition of marbofloxacin in buffalo calves
- 6) Dinodia N.: Disposition kinetics of marbofloxacin in calves after a single intramuscular injection
- 7) Meena M.: Disposition kinetics of moxifloxacin following a single intramuscular injection in calves
- 8) Maletha D.: Screening of antibacterials and chlorpyrifos residues in poultry birds of various farms and retail outlets of garhwal region, uttarakhand
- 9) Sharma S.: Screening of antibacterials and chlorpyrifos residues in poultry birds of various farms and retail outlets of kumaon region, uttarakhand
- 10) Manimaran A.: Comparison of indirect tests to milk somatic cell count method for diagnosis of subclinical mastitis in lactating dairy cows
- 11) Bhanderi B. B.: Antimicrobial sensitivity pattern of *Pasteurella multocida* isolated from animals and avian species of gujarat state
- 12) Nimavat V. R.: Occurrence of methicillin resistant coagulase Negative *Staphylococcus spp.* (MRCONS) from bovine mastitis milk samples in and around junagadh district

- 13) Hirani N. D.: Comparative efficacy of feed anticoccidials on oocyst production in induced caecal coccidiosis in broiler birds
- 14) Patel H. B.: Impact of extraction protocols on marbofloxacin recovery in LC MS/MS assay development
- 15) Sarita Devi : Clinical efficacy of linezolid in canine pyoderma against macrolide-lincosamide-streptogramin B (MLSB) resistant *Stapylococcus aureus*
- 16) Sadariya K.A.: Assessment of antidiabetic effect of alcoholic extracts of *Linum usitatissimum* in diabetic rats

Following Scientists / Teachers received the best oral presentation awards for the Poster II:

Pharmacokinetics:

- **Dr. V.K. Dumka (First position)**

Antimicrobials and antimicrobial resistance:

- **Dr. V.R. Nimavat (First position)**



PLENARY SESSION

Chairperson : Dr. V.V. Ranade, Mumbai

Co-Chairperson : Dr. V. K. Dumka, Ludhiana

Rapporteur : Dr. Reni John, Mannuthy

Date: 07-12-2018

Time: 11.30-12.00

Venue: Kapila Teaching Complex, Veterinary College, Anand

Dr. V.V. Ranade presented his opening remarks regarding technical sessions of the conference. Rapporteurs of each technical session presented report of the session along with recommendations, if any. Scientist / teacher present in the audience approved the reports and recommendations.



VALEDICTORY FUNCTION

Date: 07-12-2018

Time: 12.00-13.30

Venue: Kapila Teaching Complex, Veterinary College, Anand

Valedictory function of the conference was organized on 07 December, 2018 at 12.00 noon in the conference hall of Kapila Teaching Complex, College of Veterinary Science and Animal Husbandry, Anand Agricultural University, Anand.

Following dignitaries were present on the dais during the function.

Dr. N. C. Patel

Vice Chancellor, Anand Agricultural University, Anand as President

Prof. (Dr.) A. K. Srivastava

Chairman, Agricultural Scientist Recruitment Board, Indian Council of Agricultural Research, New Delhi as Chief Guest

Prof. Gaya Prasad

Vice Chancellor, Sardar Vallab Bhai Patel University of Agriculture and Technology, Meerut as Guests of Honour

Prof. A.J. Kachhiapatel

Director, Department of Animal Husbandry, Government of Gujarat, Gandhinager as Guests of Honour

Dr. A.M. Thaker

President- ISVPT & Dean / Principal, College of Veterinary Science and Animal Husbandry, Anand

Dr. S.K. Sharma

General Secretary-ISVPT

Dr. S. K. Bhavsar

Organizing secretary, ISVPT-2018

Dr. A.M. Thaker, Chairman, ISVPT-2018 welcome dignitaries and scientists present in the house and informed that two oration lectures were presented by Dr. Vivek Kapoor, USA and Dr. Anil Gupta, Former Director, NIF, Gujarat following inaugural function of

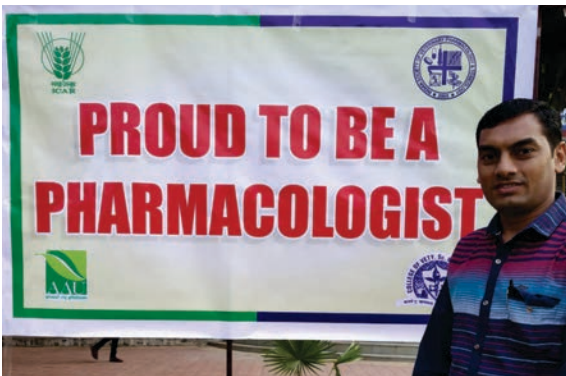
conference. He also informed that five key note papers on important topics related to theme of National Symposium were presented by eminent scientists. A total of twelve technical sessions were arranged during the three day conference. Fifteen budding scientists participated for Dr. Jayvir Anjaria Award, Dr. R. Natrajan Award and Dr. V. V. Ranade Young Scientist award. Twenty one lead papers were present during various scientific sessions. Seventy two research papers were presented orally and fifty research papers were present in the form of posters. One hundred ninety one scientists/ teachers and students participated during the conference. Dr. J.K. Malik and Dr. Pallavi Bhardwaj gave their feedback regarding the conference. All the dignitaries present on the dais also presented their views and appreciated efforts of the organizing committee. Dr. S. K. Bhavsar, organizing secretary, ISVPT-2018 announced the awards and several young scientists were given awards in the form of certificates and cash. He also proposed vote of thanks.



Glimpse of ISVPT - 2018











Glimpse of Workshop





Appreciation of Student Volunteers





Delegates - ISVPT-2018 Conference @ Veterinary College, AAU, Anand



**Department of Veterinary Pharmacology and Toxicology
College of Veterinary Science and Animal Husbandry
Anand Agricultural University, Anand - 388001 (Gujarat)**

ISBN : 978-93-5351-386-3



9789353513863