



- 1 Name **Dr. Surinder Kumar Kadian**
- 2 Designation **Emeritus Scientist (ICAR)**
- 3 Mailing address Dr Surinder Kumar Kadian
Emeritus Scientist (Immunology)
Department of Veterinary Microbiology
Lala Lajpat Rai University of Veterinary and Animal Sciences
Hisar 125 004, INDIA
- Residential address House No. 441, Sector 15A
Hisar 125 001, INDIA
- Telephone no, 0091 9896689999 (Mobile);
E mail ID skkadian@hau.ac.in or sunitarkadian@gmail.com

4 Educational Qualifications

Degree/Diploma Certificate	Class/Grade	Year	Univ./Board/ Institute	Specialization
B.Sc (Med.)	63%	1978	MDU,Rohtak	Biology & Chemistry
B.V.Sc & AH. (Hons)	3.5/4.00	1982	HAU,Hisar	Vety. & Animal Husbandry
M.V.Sc*	3.65/4.00	1986	HAU,Hisar	Vety. Microbiology
Ph.D*	N.A.	1994	The University of Liverpool (UK)	Immunology

- **Thesis Titles:**

- a) **Kadian, S.K.** (1986). Effect of Aflatoxin-B1 on the Immune Response in Chicks. M.V.Sc thesis, Deptt of Veterinary Microbiology, Haryana Agricultural University Hisar.
- b) **Kadian, S.K.** (1994). Immunoregulation in the Metacestode Infections: Modification of Macrophage Accessory Cell Activity by tetrathyridia of *Mesocestoides corti*. PhD Thesis, Department of Veterinary Pathology, The University of Liverpool (UK).

5 Employment records:

Designation	Date of joining	Date of leaving	Nature of duties actual performed specifying teaching/research /extension
Emeritus Scientist	3-11-20	Till date	Research on Buffalo Interleukin-17A
Professor (Immunology)	27-7-06	28-2-2019	Teaching of UG & PG Immunology Courses, Guiding PG Students in the field of Veterinary Immunology
Associate Professor (Immunochemistry)	1-4-2002	26-7-06	As above
Associate Professor (Immunobiochemistry)	22-1-99	31-3-2002	Research Work in AICRP (ICAR Project) on Blood Protista
Associate Professor (Immunochemistry)	27-7-98	21-1-99	Teaching of UG & PG Immunology Courses, Guiding PG Students.
Assistant Professor (Senior Scale)	25-8-94	26-7-98	Teaching of UG & PG classes in the field of Veterinary Immunology
Assistant Professor (Immunology)	25-8-86	24-8-94	Teaching of UG & PG Classes in the field of Veterinary Immunology

6 Additional Qualifications/Trainings Acquired in India/Abroad:

1. Successfully completed a Short Term Course on "Production of Monoclonal antibodies by Hybridoma Technique in Murine System" sponsored by DST and Ministry of Science and Technology, held at Deptt. of Microbiology, AIIMS, New Delhi from March 15-31, 1987.
2. Participated in the "IUIS-WHO-AIIMS Advanced Immunology Course (With focus on the Immunology of Infectious Diseases)" held at AIIMS, New Delhi in November, 1989.
3. Attended Two Weeks Training on "Modules in Teaching Methodologies" organized by Department of Education, The University of Liverpool, U.K. in 1993.
4. Successfully completed Two Weeks Training on "First Faculty Development Programme in Educational Technology" organized jointly by Institute of Agricultural Research and Education Management, Hyderabad and Academy of Agricultural Research and Education Management (AAREM), CCS Haryana Agricultural University, Hisar from Jan. 12 to 24, 1995.
5. Successfully completed Two Weeks Training on "Molecular Biological Techniques in Diseases Diagnosis" organised by Deptt of Biotechnology, IVRI, Izatnagar from Feb. 6-22, 1998.
6. Successfully completed Four Weeks Training on "Computer Applications" organised by Academy of Agricultural Research and Education Management (AAREM), CCS Haryana Agricultural University, Hisar from March 2 to 30, 2000.

7. Participated in the “FIMSA-IIS Advanced Course on Basic and Molecular Immunology” held at AIIMS, New Delhi from March 5-9, 2001.
8. Participated in the Training Course on the “Recombinant DNA technology in Vaccine Development” conducted at IVRI, Izatnagar from **November 20-29, 2001 (10days)**.
9. Successfully completed Training Course on “Development of Instructional Material for General Veterinary Microbiology” organised by Centre of Advanced Studies, Department of Veterinary Microbiology, CCS HAU, Hisar from **10th February, 2004 to 1st March, 2004**.
10. Successfully completed Training Course on “Accreditation and Allied issues with focus on Web-Based Instructional Material for core courses of Veterinary Microbiology” organised by Centre of Advanced Studies, Department of Veterinary Microbiology, CCS HAU, Hisar from **February 1-21, 2005**.
11. Successfully completed Training Course on “Methods in Virology for Disease Diagnosis” organised by Centre of Advanced Studies, Department of Veterinary Microbiology, CCS HAU, Hisar from **28th December, 2006 to 17th January, 2007**.

7 Awards / Recognitions:

1. Awarded State Merit Scholarship by M.D. University Rohtak on completion of B.Sc (Med) degree for higher studies.
2. Awarded H.A.U. University Merit Scholarship throughout B.V.Sc.& A.H.
3. Awarded Certificate of Honour in B.V.Sc.& A.H.
4. Awarded I.C.A.R. Junior Research Fellowship (JRF) for doing M.V.Sc in the field of Veterinary Microbiology after competing at ALL INDIA LEVEL
5. Elected **Chief-Councilor**, College Student Union, College of Veterinary Sciences.
6. Elected **President**, Haryana Agricultural University Student Union, Hisar.
7. British National Committee for Microbiology awarded full grant to present my research paper in the XIV International Congress of Microbiology held at Manchester (UK), 1986.
8. **Awarded Commonwealth Scholarship** by Association of Commonwealth Universities, London for doing Ph.D in Immunology at University of Liverpool, U.K.
9. **Invited Speaker** at School of Tropical Medicine, Liverpool (UK) to deliver a Special Lecture on "Immunity to Helminths" in North-West Parasitology Group Meeting (A rare honour for a Ph.D student).
10. Awarded "**Rhoda Le Marchant Bequest Travel award**" by The University of Liverpool for oral presentation of my research paper in the 12th European Immunology Meeting held at BARCELONA, Spain 1994.
11. Invited as a **Member of International Delegation** of Parasitologists and Professionals Specializing in Tropical Medicine to visit China and Mongolia for Scientific Discussions and high level Meetings under Citizen Ambassador Program (USA) in 1995. This Program was having Sponsorship of Chinese Medical Association and Mongolian Medical Association.
12. Awarded “**Young Scientists Scholarship**” for Outstanding Research in Immuno-Parasitology in the XIV International Congress of Tropical Medicine and Malaria held at Nagasaki, Japan in November, 1996.

13. Awarded **Best Poster Presentation Award** in the XXII Annual Conference and National Symposium of IAVMI held at CSK-HPKV Palampur (HP) in October, 2004.
14. **Elected President**, VCTA in 2001, 2003, 2006, 2008, 2009 & 2010 (Veterinary College Teachers' Association)
15. **Elected Secretary**, HAUTA 2005 (Haryana Agricultural University Teachers Association).
16. **Founder President**, LUVASTA 2011 (Lala Lajpat Rai University of Veterinary and Animal Sciences Teachers' Association).

8 Membership of Scientific Committees/Councils/Associations:

1. Life Member of Association of Microbiologists of India (AMI).
2. Life Member of Indian Immunology Society (IIS).
3. Life Member of Indian Association of Veterinary Microbiologists, Immunologists and Specialists in infectious diseases (IAVMI).
4. Life member of Indian Society of Veterinary Immunology and Biotechnology.
5. Member, Haryana Veterinary Council.
6. Member, Veterinary Council of India.
7. Ex-Member, British Society of Immunology from 1991 to 1995.
8. Ex-Member, British Society of Parasitology from 1992 to 1995.
9. Ex-Member, Merseyside Immunology Group (UK) from 1992 to 1995.
10. Ex-Member, North-West Cytokine Discussion Group (UK) from 1992 to 1995

9 Specialization:

Microbiology, Immunology of Infectious Diseases, Immuno-parasitology, Interleukin-17A and Th17 Cells, Monoclonal Antibodies.

10 PUBLICATIONS:

(A) Research Papers Published in Standard Scientific Journals:

1. **Kadian, S.K.**, Monga, D.P., and Goel, M.C. (1988). "Effect of aflatoxin B1 on the cellular Immune response of chicks". *Mycopathologia*, **104**: 33-36.
2. **Kadian, S.K.**; Dixon, J.B.; Green, J.R.; Carter, S.D. and Jenkins, P. (1994). Modification of Macrophage-T-Cell interaction during infection of the mice with *Mesocetoides corti* (cestoda). *Parasitology*, **109**, 591-597.
3. **Kadian, S.K.**; Dixon, J.B.; Carter, S.D. and Jenkins, P. (1996). Macrophage modifying factor secreted by the tetrathyridia of *Mesocestoides Corti* (cestoda): Monoclonal antibody to the modifying factor antagonises its immunological activity. *Parasite Immunology*, **18**, 65-70.
4. **Kadian, S.K.**; Dixon, J.B.; Carter, S.D. (1998). Characterization of factors from murine tape worm larvae which induce impaired macrophage-T-cell interaction. *The immunologist*, Supplement I, 405.
5. Sangwan, M.L.; Singh, B. and **Kadian, S.K.** (2002). Studies on immunological variables and their association with body weights in calves. *Indian Journal of Animal Science*. **72**: 1040-41.

6. Grover, YP; Sukhija, Y; Kapoor, S and **Kadian, SK** (2004) Studies on the rotavirus excretion pattern in cow calves using polyclonal antibody sandwich ELISA test. *J. Immunol. Immunopathol.* **6** (2): 49-54
7. **Kadian, S.K.** and Khokhar, RS (2004). Effect of dietary aflatoxin-B1 on Antibody production to particulate and soluble antigens in chicks. *The Haryana Veterinarian.* **43**: 60-65
8. Sharma, P.; Nain, SPS; **Kadian, SK**; Jindal, N; Mahajan, NK; Khurana, R and Khokhar, RS (2004). Seromonitoring of Buffaloes vaccinated against Haemorrhagic Septicaemia in Haryana. *Indian Journal of Comparative Microbiology, Immunology and Infectious Diseases.* **25**: 59-60
9. Malik, Gita; Gera, S; Dahiya, JP; **Kadian, S.K.** and Agarwal, VK (2005). Biochemical and immunological alterations induced by chlorpyrifos intoxication in broiler chickens. *Indian Journal of Animal Sciences.* **75** (6): 668-671.
10. Sharma Maitri; **Kadian, SK**; Sharma, R and Rana, TS (2005). Kinetics of humoral immune responses in pigs vaccinated against Foot and Mouth Disease. *Indian Journal of Experimental Biology.* **43**: 1144-1149.
11. Sharma Maitri; **Kadian, SK**; Sharma, R and Gulati, B R (2005). T-cell mediated immune response in pigs vaccinated with oil adjuvanted foot and mouth disease vaccine. *Indian Journal of Microbiology.* **45**: 309-312.
12. Kapoor, S.; Grover, Y.P. and Kadian, S.K. (2006). Development and application of latex agglutination test for detection of infectious bursal disease virus antigen. *The Haryana Veterinarian.* In press.
13. Rathi, R., **Kadian, S.K.**, Khurana, B., Grover, Y.P. and Gulati, B.R. (2007) Evaluation of immune response to bovine rotavirus following oral and intraperitoneal inoculation in mice. *Indian Journal of Experimental Biology*, **45**: 212-216.
14. Markam S K, Khokhar R S, Kapoor S and Kadian S K (2009). Molecular characterization of field isolates of *Pasteurella multocida* by polymerase chain reaction in the state of Haryana. *Indian J. comp. microbial. immunol and infectious diseases*, **30**, 31-34.
15. Singh, S.R.; Sangwan, A.K.; Manuja, A; **Kadian, S.K.** and Nichani, A.K. (2012). Heterogeneity of antigenic proteins in Indian isolates of *Theileria annulata*. *Journal of Veterinary Parasitology.* **26** (1), 27-30.
16. Gupta, A.K.; **Kadian, S.K.** and Gulati, B.R. (2013). Production and Characterization of Monoclonal antibodies against West Nile Virus. *Veterinary Practitioner*, **14** (2), 275-278.
17. Beenu Jain, Upendra Lambe, Anuj Tewari, **Surinder Kumar Kadian** & Minakshi Prasad (2018). Development of a rapid test for detection of foot-and-mouth disease virus specific antibodies using gold nanoparticles, *Virus Disease*, **29** (2): 192-198.
18. Beenu Jain, Anuj Tewari, Kanisht Batra & **Surinder Kumar Kadian** (2019). New approaches for post-vaccination surveillance of foot-and-mouth disease. *Acta Virologica*, **63** (1): 22-29.
19. Beenu Jain, Anuj Tewari, Minaksi Prasad, Prakash S Dhamannapatil & **Surinder Kumar Kadian** (2021). Utility of Vaccine Extracted FMDV RNA as a Positive Control in Real Time

PCR for the Detection of FMDV Carrier Animals. Acta Scientific Veterinary Sciences, 3 (2): 25-31.

(B) REVIEWS:

- 1 Goel, M.C. and **Kadian, S.K.** (1987). "Psyche and the Immune System". Published as review in the Proceeding of the Summer Institute on "Neuropharmacology" held at Department of Pharmacology, H.A.U., Hisar.
- 2 Goel M.C. and **Kadian, S.K.** (1988). "Immunodeficiency diseases in Equines". Published as review article in the proceedings of National symposium on Emerging disease of equine held at National Research Centre on Equines, Hisar.
- 3 Goel, M.C. and **Kadian, S.K.** (1988). "Immune system of Equines" published as review in proceeding of summer Institute on Emerging disease of equines" and their controls" held at National Research Centre on Equines, Hisar.
- 4 Gulati, B.R., Gupta, A.K. and **Kadian, S. K.** (2014). West Nile Virus Infections among Animals and Humans in India. Advances in Animal and Veterinary Sciences, 2 (4S), 17-23.

(C) PAPERS PRESENTED IN NATIONAL AND INTERNATIONAL CONFERENCES:

1. Monga, D.P., **Kadian, S.K.** and Goel, M.C. (1986). "Effect of Aflatoxin-B1 on the Immune System of Chicks. Paper Presented in XIV International Congress of Microbiology held at Manchester (U.K.) Sept. 1986.
2. **Kadian, S.K.**, Monga, D.P. and Goel, M.C. (1986). "Effect of Aflatoxin B1 on Humoral and Non-Specific Immune Response of Chicks". Paper Presented in XIII Annual Conference of Indian Immunology Society & Symposium on Immunodiagnosics held at Indian Institute of Immunology, New Delhi from 6-8 Dec. 1986.
3. **Kadian, S.K.**, Monga, D.P. and Goel, M.C. (1988). "Effect of Aflatoxin B1 feeding and subsequent withdrawal on the Immunity of Chicks. Paper presented in International Symposium on Agricultural and Biological Aspects of Aflatoxin related health hazards, New Delhi, March 22-25, 1989.
4. **Kadian, S.K.**; Dixon, J.B.; Carter, S.D. and Jenkins, P. (1993). Modified accessory cell function induced by Tapeworm larvae. Paper presented & published as abstract in the proceeding of the British Society for Immunology held at The University of Liverpool, 14-16 April, 1993.
5. Dixon, J.B.; Rakha, N.K.; **Kadian, S.K.**; Jenkins, P.; Carter, S.D. and Craig, P.S. (1993). Characterization of a Putatively Immunoregulatory factor from tapeworm larvae which is mitogenic for unprimed CD4+ T cells. Paper presented & published as abstract in the proceeding of the British Society for Immunology held at The University of Liverpool, 14-16 April, 1993.
6. **Kadian, S.K.**; Dixon, J.B.; Carter, S.D. & Jenkins, P. (1993). Modulation of antigen presenting function in Macrophages and Lymphocyte responsiveness in mice infected with *Mesocostoides Corti*. Paper presented & published as abstract in the proceeding of the British Society for Parasitology held at University of Leeds, 5-7 April, 1993.

7. Sangwan, M.L.; Singh, B. and **Kadian, S.K.** (1994). Studies on immunological Variables and their Association with Body weights in Calves. Paper published as abstract in the proceeding of the Comparative Gene Mapping in Terrestrial and Aquatic Vertebrates (CGTA-V), Oslo Norway, Feb. 7-11.
8. **Kadian, S.K.**; Dixon, J.B.; Carter, S.D.; and Jenkins, P. (1994) Immunoregulation by *Mesocestoides Corti* (Cestoda): Chromatographic isolation of an accessory-cell modifying factor. Paper presented & published as abstract in the proceeding of the British Society of Parasitology held at the University of Bath, 6-8 April, 1994.
9. **Kadian, S.K.**; Dixon, J.B.; Carter, S.D.; Jenkins, P. and Self, I.A. (1994). Isolation of excretory/secretory factors from *Mesocestoides corti* tetrathyridia which induce impaired Macrophage-T-cell interactions. Paper presented & published as abstract in the proceeding of the British society of Parasitology held at the University of Bath, 6-8 April.
10. Dixon, J.B.; Rakha, N.K.; **Kadian, S.K.**; Jenkins, P.; Carter, S.D. and Craig, P.S. (1994). Characterization of a putatively immunoregulatory factor from tapeworm larvae which is mitogenic for unprimed CD4⁺ T cells. Paper presented & published as abstract in the proceeding of the British society of Parasitology held at the University of Bath, 6-8 April.
11. **Kadian, S.K.**; Dixon, J.B.; Carter, S.D. & Jenkins, P. (1994). Factors mediating immunoregulation in *Mesocestoides Corti* (Cestoda) infection. Paper presented & published as abstract in the proceeding of the 12th European Immunology Meeting held at Barcelona, Spain from 14-17 June.
12. Dixon, J.B.; **Kadian, S.K.**; Carter, S.D.; Jenkins, P. (1994). Abnormal immunoregulation in metacestode infections: *Mesocestoides corti* (Cestoda) secretes a factor which can modify Macrophage-T-Cell interaction. Paper presented & published as abstract in the proceeding of the Eighth International Congress of Parasitology held at IZMIR, Turkey 10-14 october, 1994.
13. **Kadian, S.K.**; Dixon, J.B. and Carter, S.D. (1995). A monoclonal antibody antagonises the effect of macrophage modifier excreted/secreted by tapeworm larvae. Paper published as abstract in the proceeding of the 12th International Congress of Immunology held at San Francisco, California from 23-29 July, 1995.
14. **Kadian, S.K.**; Dixon, J.B. and Carter, S.D. (1996). A monoclonal antibody that antagonises the effect of macrophage modifier excreted/secreted by tapeworm larvae. Paper presented orally & published as abstract in the proceeding of the XIV International Congress of Immunology of Tropical Medicine and Malaria held at Nagasaki (Japan) from Nov. 17 to 22, 1996.
15. **Kadian, S.K.** (1996). Antagonistic effect of a monoclonal antibody against antigen presenting cell modifier excreted/secreted by tape worm. Invited lecture in the 8th National Congress of Veterinary Parasitology held at CCS Haryana agricultural University Hisar from Oct. 9-11.
16. **Kadian, S.K.**; Dixon, J.B. and Carter, S.D. (1998). Characterisation of factor/s from murine tape larvae which induce impaired macrophage-T Cell interaction. Presented in the 13th International Congress of Immunology held at New Delhi, Nov. 7-12.

17. Sharma, S.K.; **Kadian, S.K.** and Pandey, R. (1999). Kinetics of cellular immune response to bovine rotavirus in experimentally immunised mice. Paper presented orally and published as abstract in the proceeding of “XIX Annual Conference of IAVMI and National Symposium on Animal Health: Reterospect and Prospect” held at Deptt of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, Oct. 22-24.
18. Sharma, S.K.; **Kadian, S.K.** and Pandey, R. (1999). Peritoneal Macrophages act as accessory cells for generation of rotavirus-specific T-cell response. Paper presented orally and published as abstract in the proceeding of “XIX Annual Conference of IAVMI and National Symposium on Animal Health: Reterospect and Prospect” held at Deptt of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, Oct. 22-24.
19. **Kadian, S.K.**; Dixon, J.B. and Carter, S.D. (2000). Effect of *Mesocestoides corti* tetrathyridia secretions/excretions on lymphocyte reactivity in bovine and ovine whole blood cultures and murine lymphnode cells. Paper presented & published as abstract in the proceeding of the 41st Annual Conference of Association of Microbiologists of India held at Jaipur, Nov. 25-27.
20. Sharma, S.K. and **Kadian, S.K.** (2001). Kinetics of bovine rotavirus-specific T cell response following two routes of immunization in experimentally immunized mice. Paper presented & published as abstract in the proceeding of the 42nd Annual Conference of Association of Microbiologists of India held at Gulbarga (Karnataka), Nov., page 186
21. Chhikara Karun and **Kadian, S.K.** (2002). Kinetics of anti-piroplasm and anti-schizont antibodies in *Theileria annulata* (Hisar) infected experimental calves. Paper presented & published as abstract in the proceeding of the 43rd Annual Conference of Association of Microbiologists of India held at Deptt of Microbiology, CCS Haryana Agricultural University, Hisar, Dec. 11-13, p70.
22. Charan, S.; Gupta, R. P. and **Kadian, S.K.** (2002). Effect of immune-complex mediated complement deficiency on the pathogenesis of infectious bursal disease in chicken. Paper presented & published as abstract in the proceeding of the 43rd Annual Conference of Association of Microbiologists of India held at Deptt of Microbiology, CCS Haryana Agricultural University, Hisar, Dec. 11-13, p72.
23. Rohit Kumar, **Kadian, S.K.** and Gulati B. R. (2002). Detection of *Theileria annulata* in an in vitro maintained schizont cell culture by PCR. Paper presented & published as abstract in the proceeding of the 43rd Annual Conference of Association of Microbiologists of India held at Deptt of Microbiology, CCS Haryana Agricultural University, Hisar, Dec. 11-13, p77.
24. **Kadian, S.K.** (2004). Effect of Aflatoxin B1 on the complement activity and metabolic activity of heterophils in chicks. Paper presented & published as abstract in the proceeding of the XXII Annual conference of IAVMI held at Palampur (HP), October 18-19.
25. **Kadian, S.K.** (2004). Effect of dietary Aflatoxin B1 on antibody production to particulate and soluble antigens in chicks. Paper presented & published as abstract in the proceeding of the XXII Annual conference of IAVMI held at Palampur (HP), October 18-19.
26. Sharma, P.; Nain, SPS.; **Kadian, S.K.**; Jindal, N.; Mahajan, N.K.; Khurana, R.; and Khokhar, R.S. (2004). Seromonitoring of buffaloes vaccinated against Haemorrhagic septicaemia in Haryana. Paper presented & published as abstract in the proceeding of the XXII Annual conference of IAVMI held at Palampur (HP), October 18-19.

27. Sharma, Maitri.; **Kadian, S.K.**; Sharma,R. and Rana, T.S. (2004). Kinetics of humoral immune responses in pigs following FMD vaccination. Paper presented & published as abstract in the proceeding of the XI Annual convention of Indian Society of Veterinary Immunology and Biotechnology (ISVIB) held at Mukteswar (Uttarnchal), November 3-4.
28. Deepak Saini, **Kadian, SK**, Arvind Kumar and Ajit Singh (2007). Detection of immunodominant antigens of *Pasteurella multocida* B:2 vaccine strain and field isolates by immunoblotting. Paper presented and published as abstract in the proceeding of the 34 Annual Conference of Indian Immunology Society held at Pune, Dec 16-18.
29. **Kadian, S.K.** (2010) Effect of *M. corti* tetrathrydial secretions/excretions of lymphocyte reactivity in bovine and ovine whole blood cultures and murine lymphnode cells. Paper presented in XX National Congress of Veterinary Parasitology, 18-20 Feb, 2010, held at CCS, HAU Hisar.
30. Manuja A, Singh S R, Malhotra D V, Sangwan A K, **Kadian S K** and Nichani A K. (2010). Indian isolates of *Theileria annulata* at molecular as well as antigenic level but show conserved protein profile. Paper presented in XX National Congress of Veterinary Parasitology, 18-20 Feb, 2010, held at CCS, HAU Hisar.
31. Akhil Gupta; **Kadian, S.K.** and Gulati, B.R. (2011). "Production and Characterization of monoclonal antibodies against West Nile Virus". Paper presented in 52nd Annual conference of Association of Microbiologists of India, Punjab University, Chandigarh, November 3-6, 2011.
32. Akhil Gupta; **Kadian, S.K.** and Gulati, B.R. (2011). "Development of monoclonal antibody-based blocking enzyme-linked immunosorbent assay for detecting West Nile infection in horses". Paper presented in XX National Conference of Indian Virological Society, National Research Centre on Equines, Hisar, December 29-31, 2011.
33. Beenu Jain, Anuj Tewari and **Surinder Kumar Kadian** (2018). "IgA-ELISA for detection of foot-and-mouth disease virus (FMDV) carriers during post vaccination surveillance" Paper presented in the 9th Conference of Indian Science Congress Association organized by Department of Biological Sciences, CBSH G.B. Pant University of Agriculture & Technology, Pantnagar, Uttarakhand on "FUTURE INDIA: SCIENCE AND TECHNOLOGY" October 13-14, 2018.
34. Beenu Jain, Anuj Tewari, Upendra Lambe, Minakshi Prasad and **Surinder Kumar Kadian** (2020). Gold nanoparticles based test for detection of anti foot-and-mouth disease virus structural protein antibodies. Paper presented in IAVMI Conference on "Challenges and Threats of Microbes to Animals and Humans" Feb 6-7, 2020.
35. Beenu Jain, Anuj Tewari, Upendra Lambe, Minakshi Prasad and **Surinder Kumar Kadian** (2020). New approaches for post-vaccinated surveillance of foot and mouth disease. Paper presented in IAVMI Conference on "Challenges and Threats of Microbes to Animals and Humans" Feb 6-7, 2020.

(D) MANUALS/COMPENDIUM EDITED:

1. Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", Edited by **Kadian, S.K.** (2003).

2. *Compendium for JRF (ICAR) in Veterinary Sciences*, Edited by **Kadian, S.K.** (2003)
3. *A Text Book for Junior Research Fellowship in Veterinary Sciences*”, First Edition, Edited by **Kadian, S.K.** (2004).
4. *A Text Book for Junior Research Fellowship in Veterinary Sciences*”, Second Edition, Edited by **Kadian, S.K.** (2006).

(E) POPULAR ARTICLES:

1. **Kadian, S.K.** (2003). About FMD in Column “Aaj Ke Mehman” in Rang Magazine, Dainnik Bhaskar dated 9th April, 2003.
2. **Kadian, S.K.** (2003). Pasuo me Muh Khur Rog ke Karan v Bachav, A TV talk on DDK Hisar on 26-2-2003.

(F) PATENT FILED:

- 1 A KIT FOR ESTIMATION OF ANTI-FMDV PROTECTIVE IMMUNITY GENERATED IN MULTIPLE VACCINATED FIELD ANIMALS USING AVIDITY ELISA AS AN INDICATOR.

Beenu Jain, Anuj Tewari and Surinder Kadian
Application number: 202011053750
Dated: 10.12.2020.

(G) PAPERS PUBLISHED IN MANUALS/COMPENDIUM:

1. **Kadian, S.K.**; Kumar, S.; Pruthi, N.; Maity, N.K.; Phogat, U.S.; Potalia, D.S. and Gupta, S.C. (1995). Status paper on Teaching Methodologies in CCS HAU Hisar. Published in the proceedings of first Faculty Development Programme in Educational Technology organised by Academy of Agricultural Research and Education Management, CCS HAU, Hisar from 12-24 Jan.
2. **Kadian, S.K.** and Goel, M.C. (1996). Precipitation in the Gel-media: General Methodology. In Laboratory Manual on "Trends in Immunodiagnosics in Veterinary Microbiology", (Ed. by Kalra, S.K. and Parsad, G.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar. Feb., 28-31.
3. **Kadian, S.K.** and Goel, M.C. (1996). Quantitation of Immunoglobulin isotypes in the serum of chicks by SRID test. In Laboratory Manual on "Trends in Immunodiagnosics in Veterinary Microbiology", (Ed. by Kalra, S.K. and Parsad, G.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar. Feb., 32-33.
4. **Kadian, S.K.** and Goel, M.C. (1996) Immunoelectrophoresis technique for assessing purity of bovine isotypes. In Laboratory Manual on "Trends in Immunodiagnosics in Veterinary Microbiology", (Ed. by Kalra, S.K. and Parsad, G.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar. Feb., 34-36.

5. Tewari, S.C. and **Kadian, S.K.** (1996). Scope of Precipitation in the Gel Media. In Laboratory Manual on "Trends in Immunodiagnosics in Veterinary Microbiology", (Ed. by Kalra, S.K. and Parsad, G.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar. Feb., 21-27.
6. **Kadian, S.K.**; Monga, D.P. and Sharma, S.K. (1998). Laboratory procedure for determining non-specific defense status of poultry: Part 1 Phagocytosis. In "laboratory Manual on Update in poultry Microbiology" Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar. Aug, 98-105.
7. **Kadian, S.K.**; Monga, D.P. and Sharma, S.K. (1998). Laboratory procedure for determining non-specific defense status of poultry: Part 11 Complement. In "laboratory Manual on Update in poultry Microbiology" Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar. Aug, 106-110.
8. **Kadian, S.K.**; Nichani, A.K. and Chhikara, K (2000). Flourescent Immunoassays as immunodiagnostic tools: Principles and Classification. In Laboratory manual on "Recent approaches in Immunodiagnosics for livestock & Poultry diseases" Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar. Jan, 84-88.
9. Nichani, A.K and **Kadian, S.K.** (2000). Detection of Theilerial antibodies by Immuno-flourescent test In Laboratory manual on "Recent approaches in Immunodiagnosics for livestock & Poultry diseases" Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar. Jan, 154-156.
10. Nichani, A.K; **Kadian, S.K.**; Sangwan, A.K.; and Goel, M.C. (2000). In vitro propagation of schizont stage of the protozoan parasite *Theileria annulata*. In Laboratory manual on "Advances in cell culture technology". Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar. March, 117-119.
11. **Kadian, S.K** and Chhikara, K (2000). Determination of phagocytic index of reticulo-endothelial system in poultry by carbon clearance test: Phagocytosis in vivo. In Laboratory manual on "Emerging and re-emerging infections of poultry" Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar. Sept, 203-205.
12. **Kadian, S.K.** and Kumar, D. (2002). Immune responses and immunity to viruses. In Course manual on "Production and use of instructional material on Veterinary Virology" Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar. February 8-28, 49-58.
13. **Kadian, S.K.** (2003). Antigen I: Specificity and Types. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p37-42.
14. **Kadian, S.K.** (2003). Antigen II: Characteristics of Immunogenicity. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p43-47.

15. Kakkar, N.K. and **Kadian, S.K.** (2003). Immunoglobulin I: Structure, Properties and Classification. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p49-54.
16. **Kadian, S.K.** and Kakkar, N.K. (2003). Immunoglobulin II: Theories of Antibody Production and Generation of Antibody Diversity. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p55-60.
17. **Kadian, S.K.** (2003). Complement system: Activation Pathways and Biological Consequences. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p65-72.
18. **Kadian, S.K.** (2003). Various Types of Immunity. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p119-124.
19. Chhabra, A.K.; **Kadian, S.K.** and Sukhija Y. (2003). Computer I: Preparation of Instructional Material using MS Powerpoint. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p125-127.
20. Kapoor, P.K. and **Kadian, S.K.** (2003). Bleeding and Inoculation of Various Laboratory Animals. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p155-158.
21. **Kadian, S.K.** (2003). Preparation of Water-in-oil Emulsion for Immunisation. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p159-160.
22. **Kadian, S.K.** (2003). Raising of Antisera against Particulate and Soluble Antigens. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p161-163.
23. **Kadian, S.K.** (2003). Agglutination Reactions: A brief Introduction. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p164-166.
24. **Kadian, S.K.** (2003). Plate and Tube Agglutination Tests. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian,

S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p167-168.

25. **Kadian, S.K.** (2003). Precipitation in Gel Media: Various formulations and their Principles. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p178-182.
26. **Kadian, S.K.** (2003). Precipitation in the Gel: General Methodology. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p183-186.
27. **Kadian, S.K.** (2003). Quantitation of Ig Isotypes in the serum by Single Radial Immunodiffusion (SRID) Test. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p187-188.
28. **Kadian, S.K.** and Sharma Maitri (2003). Rocket Immunoelectrophoresis Tcehnique. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p189-190.
29. **Kadian, S.K.** (2003). Immunoelectrophoresis Technique for Assessing Purity of Bovine Isotypes. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p191-192.
30. **Kadian, S.K.** and Sharma Maitri (2003). Counter Immunoelectrophoresis Technique. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p193.
31. **Kadian, S.K.** and Sehrawat, S. (2003). Mitogen-Induced Lymphoproliferative Assay. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p194-196.
32. **Kadian, S.K.** and Gupta Gaurav (2003). Enumeration of T-cells using E-rosette Technique. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p197-198.
33. **Kadian, S.K.** (2003). Carbon Clearance Test for evaluation of *in vivo* Phagocytosis. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p199-201.
34. **Kadian, S.K.** and Sehrawat, S. (2003). Hemolytic Radial Diffusion Test for Quantitation of Chicken Complemnet. In Course Manual on "*Production and Use of Instructional Material on Veterinary Immunology and Serology*", (Ed. by Kadian, S.K.). Centre of Advance Studies,

Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p217-220.

35. **Kadian, S.K.** (2003). Antigen, Antigenicity and Immunogenicity. In “*Compendium for JRF (ICAR) in Veterinary Sciences*”, (Ed. by Kadian, S.K.). Student Counselling and Placement Cell, CCS Haryana Agricultural University, Hisar, p21-25.
36. **Kadian, S.K.** (2003). Antibody: Structure, Properties, Theories of production and Generation of antibody diversity. In “*Compendium for JRF (ICAR) in Veterinary Sciences*”, (Ed. by Kadian, S.K.). Student Counselling and Placement Cell, CCS Haryana Agricultural University, Hisar, p26-33.
37. **Kadian, S.K.** (2003). Complement System. In “*Compendium for JRF (ICAR) in Veterinary Sciences*”, (Ed. by Kadian, S.K.). Student Counselling and Placement Cell, CCS Haryana Agricultural University, Hisar, p34-40.
38. **Kadian, S.K.** (2003). Various Types of Immunity. In “*Compendium for JRF (ICAR) in Veterinary Sciences*”, (Ed. by Kadian, S.K.). Student Counselling and Placement Cell, CCS Haryana Agricultural University, Hisar, p41-44.
39. **Kadian, S.K.** (2003). Hypersensitivity: An Overview. In “*Compendium for JRF (ICAR) in Veterinary Sciences*”, (Ed. by Kadian, S.K.). Student Counselling and Placement Cell, CCS Haryana Agricultural University, Hisar, p45-46.
40. **Kadian, S.K.** (2003). Generation of Specific Immunity by Vaccines. In Course Compendium on “*Management of Microbes as an Instrument of SPS Compliance and International Livestock Trade*”, (Ed. by Kalra, S.K. et al). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p78-83.
41. **Kadian, S.K.**; Vipin and Maitri Sharma (2004). Immune Mechanisms and Immunity to Bacteria. In Course Manual on “*Development of Instructional Material for General Veterinary Microbiology*”, (Ed. by Grover Y.P. and Kapoor, S.). Centre of Advance Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p65-75.
42. **Kadian, S.K.** (2004). Hapten-Carrier Concept and Factors Affecting immunogenicity. Lecture delivered in “*Comprehensive Training for JRF in Veterinary Sciences*”, conducted between 25th March to 8th April, 2004. Student Counseling and Placement Cell, CCS Haryana Agricultural University, Hisar.
43. **Kadian, S.K.** (2004). Antibody: Structure, properties, Theories of production and Generation of Antibody Diversity. Lecture delivered in “*Comprehensive Training for JRF in Veterinary Sciences*”, conducted between 25th March to 8th April, 2004. Student Counseling and Placement Cell, CCS Haryana Agricultural University, Hisar.
44. **Kadian, S.K.** (2004). Classical and Alternate Pathways of Complement Activation and its Biological Consequences. Lecture delivered in “*Comprehensive Training for JRF in Veterinary Sciences*”, conducted between 25th March to 8th April, 2004. Student Counseling and Placement Cell, CCS Haryana Agricultural University, Hisar.
45. **Kadian, S.K.** and Sharma, M. (2004). Repository of immunomodulators of Indian Medicinal plants. In Compendium of Training course on “*Antimicrobial, Disinfectants and Immunomodulators: The Indian Heritage*” Centre of Advanced Studies, Department of

Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, November, 8-28, pp 100-107.

46. **Kadian, S.K.** (2005). Complement System: Activation pathways and biological consequences. In Compendium of Training course on “*Accreditation and Allied issues with focus on development of Website of core courses of Veterinary Microbiology*” Centre of Advanced Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, Feb 1-21. pp 173-180
47. Singh A and **Kadian, S.K.** (2005). Antigens and Immunogens. In Compendium of Training course on “*Accreditation and Allied issues with focus on development of Website of core courses of Veterinary Microbiology*” Centre of Advanced Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, Feb 1-21, pp 124-129
48. **Kadian, SK** (2004) Hapten-Carrier Concept and Factors affecting immunogenicity. In “*A Text Book for Junior Research Fellowship in Veterinary Sciences*” Ed Kadian SK, Student Counselling and Placement Cell, CCS HAU Hisar, pp 34-38.
49. **Kadian, SK** (2004) Antibody: Structure, properties. Theories of production and Generation of antibody diversity. In “*A Text Book for Junior Research Fellowship in Veterinary Sciences*” Ed Kadian SK, Student Counselling and Placement Cell, CCS HAU Hisar, pp 39-46.
50. **Kadian, SK** (2004) Classical and Alternate pathways of Complement activation and its biological consequences. In “*A Text Book for Junior Research Fellowship in Veterinary Sciences*” Ed Kadian SK, Student Counselling and Placement Cell, CCS HAU Hisar, pp 47-53.
51. **Kadian, SK** (2004) Innate and Acquired immunity. In “*A Text Book for Junior Research Fellowship in Veterinary Sciences*” Ed Kadian SK, Student Counselling and Placement Cell, CCS HAU Hisar, pp 54-57.
52. **Kadian, SK** (2004) Various Types of Hypersensitivity: An overview. In “*A Text Book for Junior Research Fellowship in Veterinary Sciences*” Ed Kadian SK, Student Counselling and Placement Cell, CCS HAU Hisar, pp 58-59.
53. **Kadian, S.K.** and Sharma, M. (2006). Immunity to bacterial infections. In Compendium of Training course on “*Current methods in Veterinary Microbiology*” Centre of Advanced Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, January 17-February 6, pp 72-78.
54. **Kadian, S.K.** (2006). Estimation of Hemolytic Complement titers in microbial infection in Chicks. In Compendium of Training course on “*Current methods in Veterinary Microbiology*” Centre of Advanced Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, January 17-February 6, pp 237-240.
55. **Kadian, SK** (2006) Hapten-Carrier Concept and Factors affecting immunogenicity. In “*A Text Book for Junior Research Fellowship in Veterinary Sciences*” Ed Kadian SK, Student Counselling and Placement Cell, CCS HAU Hisar, pp 34-38.
56. **Kadian, SK** (2006) Antibody: Structure, properties. Theories of production and Generation of antibody diversity. In “*A Text Book for Junior Research Fellowship in Veterinary*

- Sciences*”Ed Kadian SK, Student Counselling and Placement Cell, CCS HAU Hisar, pp 39-46.
57. **Kadian, SK** (2006) Classical and Alternate Pathways of Complement Activation and its Biological Consequences. In “*A Text Book for Junior Research Fellowship in Veterinary Sciences*”Ed Kadian SK, Student Counselling and Placement Cell, CCS HAU Hisar, pp 47-53.
 58. **Kadian, SK** (2006) Innate and Acquired immunity. In “*A Text Book for Junior Research Fellowship in Veterinary Sciences*”Ed Kadian SK, Student Counselling and Placement Cell, CCS HAU Hisar, pp 54-57.
 59. **Kadian, SK** (2006) Various types of hypersensitivity: An overview. In “*A Text Book for Junior Research Fellowship in Veterinary Sciences*”Ed Kadian SK, Student Counselling and Placement Cell, CCS HAU Hisar, pp 58-59.
 60. **Kadian, SK** and Saini Deepak (2006). Isolation of lymphocytes from peripheral blood and lymphoid organs of the mouse. In Compendium of Training course on “*Methods in virology for diseases diagnosis*” Centre of Advanced Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, December 28, 2006 to January 17, 2007, pp132-135.
 61. **Kadian, SK** and Pooja Jangra (2008) Cytokines: Their role in immunoregulation. In Course Manual on “*Techniques in murine monoclonal antibody production*” Centre of Advanced Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, January 23 to February 12, 2008, pp 109-120.
 62. Grover, YP and **Kadian, SK** (2008). Bacterial immunity. In Course Manual on “*Techniques in murine monoclonal antibody production*” Centre of Advanced Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, January 23 to February 12, 2008, pp 77-84.
 63. **Kadian, SK** (2008). Antibodies: Structure and function relationship. In Course Manual on “*Phage display technology for production of single domain antibodies*” Centre of Advanced Studies, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, September 25 to October 15, 2008. pp 53-60.
 64. **Kadian S K** and Jangra Pooja (2010). Immunodiagnostic tests for infectious diseases of domestic animals: General Principles. In 23rd Course Manual on “*Modern Trends in Veterinary Vaccines and Diagnostics for the Control of Infectious Diseases*” Centre of Advance Faculty Training, Department of Veterinary Microbiology, CCS Haryana Agricultural University, Hisar, p69-75.
 65. **Kadian, S.K.** (2011). Highlights of Immunology. In Course Manual on “*Molecular and Cellular Immunology Techniques for Animal Health.*” Centre of Advanced Faculty Training, Department of Veterinary Microbiology, CCS HAU, Hisar, November 3-23, 2011, pp 8-11.
 66. **Kadian S K** and Ray, S.M. (2012).Development of Humoral Immune Response against Infectious Diseases. In 25th Course Manual on “*Control of Infectious Diseases of Animals with particular emphasis on FMD Control Programme*” Centre of Advance Faculty Training, Department of Veterinary Microbiology, LLR University of Veterinary and Animal Sciences, Hisar, p38-43.

67. **Kadian S. K.** and Sharma Ravinder. (2013). Mitogen and Antigen-induced Lymphoproliferative Assay in mice immunized with inactivated FMD virus. In 26th Course Manual on “*Advances in diagnostics of infectious diseases of domestic animals*” Centre of Advance Faculty Training, Department of Veterinary Microbiology, LLR University of Veterinary and Animal Sciences, Hisar, p116-119.
68. Sushila Maan, Nitish Kumar, Akhil Gupta, Aman Kumar and **Surinder K Kadian** (2016). Current Concepts and Advancement in Molecular Diagnostics of Livestock and Poultry Diseases. In 28th Course Manual on “*Development of Validated Diagnostic Assays and Accreditation of Diagnostic Laboratories*” Centre of Advance Faculty Training, Department of Veterinary Microbiology, LLR University of Veterinary and Animal Sciences, Hisar, p15-21.
69. **Kadian, S.K.** (2017). Highlights of Immunology: A historical perspective. In Course Manual on “*Modern technologies for production and applications of antibodies for animal health improvement*” Centre of Advanced Faculty Training, Department of Veterinary Microbiology, LUVAS, Hisar, March 1 to March 21, 2017, 29th CAFT course, pp 6-9.
70. **Kadian, S.K.** (2017). Structure and function of antibody molecules.. In Course Manual on “*Modern technologies for production and applications of antibodies for animal health improvement*” Centre of Advanced Faculty Training, Department of Veterinary Microbiology, LUVAS, Hisar, March 1 to March 21, 2017, 29th CAFT Course, pp 10-16.
71. **Kadian, S.K.** and Akhil K Gupta (2017). Developments in monoclonal antibody production by hybridoma technology. In Course Manual on “*Modern technologies for production and applications of antibodies for animal health improvement*” Centre of Advanced Faculty Training, Department of Veterinary Microbiology, LUVAS, Hisar, March 1 to March 21, 2017, 29th CAFT Course, pp 26-28.
72. Akhil K Gupta and **Kadian S K** (2017). *In Vitro* culture of myeloma and hybridoma cells. In Course Manual on “*Modern technologies for production and applications of antibodies for animal health improvement*” Centre of Advanced Faculty Training, Department of Veterinary Microbiology, LUVAS, Hisar, March 1 to March 21, 2017, 29th CAFT Course, pp 80.
73. Akhil K Gupta and **Kadian S K** (2017). Production of monoclonal antibodies in vitro by hybridoma culture in serum-free medium. In Course Manual on “*Modern technologies for production and applications of antibodies for animal health improvement*” Department of Veterinary Microbiology, Hisar, March 1 to March 21, 2017, 29th CAFT Course, pp 81-82.
74. **Kadian, S.K.** and Somesh Banerjee (2018). Estimation of complement titers in chicken by hemolytic radial diffusion test. In Course Manual on “*Diagnosis and Control of Emerging and Re-emerging Trans-boundary Diseases of Poultry*” Centre of Advanced Faculty Training, Department of Veterinary Microbiology, LUVAS, Hisar, February 7-27, 2018, 31st CAFT course, pp 52-55.