

CURRICULUM VITAE

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Senior Research Scientist

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Associate Editor (Research Journal of Animal Science, Research Journal of Dairy Science, Indian Journal of Small Ruminant)

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Academic qualifications

- 2006 Certificate in "**Rumen Microbiology and Biotechnology**"
Indian Veterinary research Institute, Izatnagar, India
- 2004 **Accreditation to Supervise Research**
Agra University Agra, Uttar Pradesh
- 2000 Certificate in "**Nutrition and production of Animals Under Stress Conditions**"
Indian Veterinary research Institute, Izatnagagr, India
- 1999 **Doctorate in Animal Nutrition and Biochemistry (PhD)**
Govindballabh Pant University of agriculture and Technology,
Pantnagar
- 1990 **Master of Science in Agriculture (Animal Nutrition)**
Agriculture College, Animal Science Department
Govindballabh Pant University of agriculture and Technology,
Pantnagar
- 1996 Certificate in **Dietary Manipulation of Rumen Fermentation and Reduced methane production in Ruminants**
National Dairy Research Institute, Karnal
- 1990 **Master of Science in Agriculture (Animal Nutrition)**
Agriculture College, Animal Science Department
Govindballabh Pant University of agriculture and Technology,
Pantnagar
- 1984-1987 Student of **Bachelor of Science (Agriculture & Animal Science)** at the
Kanpur University Kanpur

Positions

- 2009-continued Senior Research scientist,
Research Group "Metabolic Functions of the Rumen Microbiota"
CIRG, Division of Nutrition Feed Resource and Product Technology
Mkhdoom, Farah, Mathura, UP, India
- 2005-2009 Senior Research scientist,
Research Group "Metabolic Functions of the Rumen Microbiota"
In-charge, Feed Technology Unit
Head, Institute Intellectual Property Management since 2007
In-charge, Feed Biotechnology group
CSWRI, Animal Nutrition Department, Avikanagar, Rajasthan, India
- 2004-2005 Research scientist
Research Group "Metabolic Functions of the rumen Microbiota"
Head, Animal Research Facilities
CSWRI, Animal Nutrition Department, Avikanagar, Rajasthan, India
- 2003-2004 Visiting Scientist
INRA, UEPSD, Jouy-en-Josas, France
France
- 2000-2003 Research scientist
CSWRI, Animal Nutrition Department, Avikanagar, Rajasthan, India
- 1996-99 Doctoral fellow
GBPUA & T, Pantnagar, India
- 1995-96 Junior Scientist
CSWRI, Animal Nutrition Department, Avikanagar, Rajasthan, India
- 1994-1995 Junior Scientist
Dairy Cattle Nutrition Division
NDRI, Karnal, India

Main expertise

- **Gut Microbiology:** metabolism of dietary components, probiotic and feed enzymes including (eg phytochemicals, compounds formed during food processing), rumen microbiota and rumen microbial manipulation
- **Nutrition and Health:** relations between food, intestinal microbiota and health
- **Animal Experimentation:** experiments with rabbit, goat and sheep models, management of experimental animal facilities and Feed technology facilities

Publications

International Journals	: 35
Indian National Journals	: 24
Book	: 01
Others (Book chapters/ Invited papers)	: 13
Patents	: 02

International Journals

- **Tripathi, M.K.**, Mondal, D., Somvanshi, R. and Karim, S.A. 2010. Hematology, blood biochemistry and tissue histopathology of lambs maintained on diets containing an insect controlling protein (Cry1Ac) in Bt-cottonseed. *Journal of Animal Physiology and Animal Nutrition* (in press)
- **Tripathi, M.K.** and Karim, S.A. 2010. Effect of yeast culture supplementation on live weight change, rumen fermentation, ciliate protozoa population, microbial hydrolytic enzymes status and slaughtering performance of growing lambs. *Livestock Science* (DOI.10.1016/j.livsci.2010.06.007)
- **Tripathi, M.K.** and Karim, S.A. 2010. Effect of individual and mixed yeast culture feeding on growth performance, nutrient utilisation and microbial protein synthesis in lambs. *Animal Feed Science and Technology*. 155: 163-178.
- Bhatt, R.S., **Tripathi, M.K.**, Verma, D.L. and Karim, S.A. 2009. Effect of different feeding regimes on pre-weaning growth rumen fermentation and its influence on post-weaning performance of lambs. *Journal of Animal Physiology and Animal Nutrition*. 95 (5): 568-573.
- **Tripathi, M. K.**, Mondal, D., Karim, S. A., 2008. Growth, haematology, blood constituents and immunological status of lambs fed graded level of animal feed grade damaged wheat as substitute of maize. *Journal of Animal Physiology and Animal Nutrition*. 92 (1):75-85.
- **Tripathi, M.K.**, Karim, S.A., Chaturvedi, O.H., Verma, D.L., 2008. Effect of different liquid cultures of live yeast strains on performance, ruminal fermentation and microbial protein synthesis in lambs. *Journal of Animal Physiology and Animal Nutrition* 92 (6): 631-639.
- **Tripathi, M.K.**, Mishra, A.S., 2007. Glucosinolate in animal nutrition, A Review. *Animal Feed Science and Technology*. 132: 1-27.
- **Tripathi, M.K.**, Karim, S.A., Chaturvedi, O.H., Verma, D.L., 2007. Nutritional value of animal feed grade wheat as replacement of maize in lamb feeding for mutton production. *Journal of the Science of Food and Agriculture* 87 (13): 2447-2455.
- **Tripathi, M.K.**, Mishra, A.S., Misra, A.K., Vaithyanathan, S., Prasad, R., Jakhmola, R.C. 2007. Selection of white-rot basidiomycetes for bio-conversion of mustard (*Brassica campestris*) straw under solid state fermentation into energy substrate for rumen micro-organism. *Letters in Applied Microbiology* . 46 (3): 364-370
- **Tripathi, M.K.**, Mishra, A.S., Mondal, D., Misra, A.K., Prasad, R., Jakhmola, R.C. 2007. Caecal fermentation characteristics, blood composition and growth rabbits on substitution of soya-bean meal by unconventional high glucosinolate mustard (*Brassica juncea*) meal as protein supplement. *Animal*. 2 (2): 207-215.

- **Tripathi, M.K.**, Chaturvedi, O.H., Karim, S. A., Singh, V. K., Sisodiya, S.L., 2007. Effect of different levels of concentrate allowances on rumen fluid pH, nutrient digestion, nitrogen retention and growth performance of weaner lambs. *Small Ruminant Research* 72, 178-186.
- Raghuvansi, S.K.S., Prasad, R., **Tripathi, M.K.**, Mishra, A.S., Chaturvedi, O.H., Misra, A.K., Saraswat, B.L., Jakhmola, R.C., 2007. Intake, performance, nutrient utilisation, rumen fermentation and rumen microbial enzymes of lambs maintained on complete feed blocks or grazing and supplementation. *Animal (Cambridge)*. 1: 221-226.
- Raghuvansi, S.K.S., Prasad, R., Mishra, A. S., Chaturvedi, O.H., **Tripathi, M. K.**, Misra, A. K., Saraswat, B. L., Jakhmola, R. C., 2007. Effect of tree leaves inclusion on nutrient utilization, rumen fermentation pattern, protozoal population and blood bio-chemical constituents of sheep fed straw based complete feed blocks. *Bioresource Technology*. 98: 511-517.
- Raghuvansi, S.K.S., **Tripathi, M.K.**, Mishra, A.S., Chaturvedi, O.H., Prasad, R., Saraswat, B. L., Jakhmola, R.C., 2007. Feed digestion, rumen fermentation and blood-biochemical constituents of Malpura rams on feeding of tree leaves included pearl millet stover based complete feed block diets. *Small Ruminant Research* 71, 21-30.
- Misra, A.K, Mishra, A.S., **Tripathi, M.K.**, Prasad, R., Vaithyanathan, S., Jakhmola, R.C., 2007. Optimisation of solid-state fermentation of mustard (*Brassica campestris*) straw for production of animal feed by white rot fungi (*Ganoderma lucidium*). *Asian-Australasian Journal of Animal Science*. 20 (2): 208-213.
- **Tripathi, M.K.**, Karim, S.A., Chaturvedi, O.H., Singh, V.K. 2006. Effect of *ad libitum* tree leaves feeding with varying levels of concentrate on intake, microbial protein yield and growth of lambs. *Livestock Research for Rural Development*. 18 (12): 1-6.
- Misra, A.K. Misra, A.S., **Tripathi, M.K.**, Chaturvedi, O.H., Vaithyanathan, S., Prasad, R., Jakhmola, R.C. 2006. Intake, digestion and microbial protein synthesis in sheep on hay supplemented with prickly pear cactus [*Opuntia ficus-indica* (L) Mill] with or without groundnut meal. *Small Ruminant Research*. 63: 125-134.
- **Tripathi, M.K.**, Santra, A. Chaturvedi, O.H., and Karim, S.A. 2004. Effect of graded levels of NaHCO₃ supplementation on ruminal fluid pH, feed intake, nutrient utilization, growth performance and blood biochemical constituents of lamb on high concentrate diets. *Animal Feed Science and Technology*. 111: 27-39.
- **Tripathi, M.K.**, Chaturvedi, O.H., Goyal, B.M., Karim, S.A., Singh, V.K. 2004. Nutrient utilisation, blood constituents and growth performance of growing lambs fed varying concentrate levels. *Nutrition Reproduction Development*. 44 (Supple. 1): S72.
- Mishra, A.S., Misra, A.K., **Tripathi, M.K.**, Santra, A., Prasad, R., Jakhmola, R.C., 2004. Effect of sodium hydroxide plus hydrogen peroxide treated mustard (*Brassica campestris*) straw based diets on rumen degradation kinetics (in sacco), fermentation pattern and nutrient utilization in sheep. *Asian-Australasian Journal of Animal Science*. 17: 355-365.
- **Tripathi, M.K.**, Mishra, A.S., Misra, A.K., Prasad, R., Mondal, D., Jakhmola, R.C., 2003. Effect of graded levels of high glucosinolate mustard (*Brassica juncea*) meal inclusion on nutrient utilization, growth, performance, organ weight and carcass composition of growing rabbits. *World Rabbit Science*. 11: 211-226.
- Santra, A., Chaturvedi, O.H., **Tripathi, M.K.**, Kumar, R., Karim, S.A. 2003. Effect of graded levels of sodium bicarbonate supplementation with high concentrate diet on rumen fermentation and ciliate protozoal population in sheep. *Small Ruminant Research*. 47: 203-212.

- Vaithiyathan, S., Raghuvansi, S.K.S., Mishra, A.S., **Tripathi, M.K.**, Misra, A.K., Prasad, R., Jakhmola, R.C. 2003. Effect of feeding chemically treated mustard (*Brassica campestris*) straw on rumen fiber degrading enzymes in sheep. *Asian-Australasian Journal of Animal Science*. 16 (11): 1610-1613.
- Prasad, R., Misra, A.K., Sankhyan, S.K., Mishra, A.S., **Tripathi, M.K.**, Karim, S.A., Jakhmola, R.C. 2003. Growth performance and caecal fermentation in growing rabbits fed on diets containing graded levels of mulberry (*Morus alba*) leaves. *Asian-Australasian Journal of Animal Science*. 16 (9): 1309-1314.
- **Tripathi, M.K.**, Agrawal, I.S., Sharma, S.D., Mishra, D.P. 2001. Effect of substitution of soybean meal with treated or untreated high glucosinolates mustard (*Brassica juncea*) meal on intake, nutrient utilization, growth performance and body composition of cross-bred calves. *Animal Feed Science and Technology*. 94 (3-4): 137-146
- **Tripathi, M.K.**, Agrawal, I.S., Sharma, S.D., Mishra, D.P. 2001. Effect of untreated, HCl treated or copper and iodine supplemented high glucosinolate mustard (*Brassica juncea*) meal on nutrient utilization, liver enzymes, thyroid hormones and growth of calves. *Animal Feed Science and Technology*. 92 (1-2): 73-85.
- **Tripathi, M.K.**, Mishra, A.S., Misra, A.K., Mondal, D., Karim, S.A. 2001. Effect of substitution of groundnut with high glucosinolate mustard (*Brassica juncea*) meal on nutrient utilization, growth, vital organ weight and blood composition of lambs. *Small Ruminant Research*. 39 (3): 261-267.
- Misra, A.K., Karim, S.A., Verma, D.L., Mishra, A.S., **Tripathi, M.K.** 2000. Nutrient intake, its utilization, rumen fermentation pattern and blood Bio-chemical constituents of sheep fed urea treated mustard straw. *Asian- Australasian Journal of Animal Science*. 13 (12): 1674-1680.
- **Tripathi, M.K.**, Mondal, D., Karim, S.A. 1998. Effect of high glucosinolate diet on growth, carcass quality and hematology of Avivastra lambs. *8th World Conference on Animal Production*, June 28- July 4, Seoul, Korea. 928-929.
- **Tripathi, M.K.** and Singhal, K.K. 1997. Change in glucosinolate content of Chinese cabbage: its effect on rumen fermentation, dry matter digestibility and gas production. *XVIII International Grassland Congress*, June 8-19, 1997, Canada. ID- 161, 178-1182
- **Tripathi, M.K.**, Tyagi, A.K. and Karim, S.A. 1997. Effect of dietary glucosinolate on DMI, growth and nutrient utilization in sheep. *XVIII International Grassland Congress*, June 8-19, 1997, Canada. ID- 162, 183-189.
- **Tripathi, M.K.**, Tyagi, A.K. and Karim, S.A. 1996. Effect of mustard cake and its glucosinolate on milk production, milk composition and blood bio-chemistry of lactating ewes maintained on Siris (*Albizia lebbeck*) pods and Baru (*Sorghum helepense*) hay as basal roughage. *World Review of Animal Production*. 31(1-2): 31-34.
- **Tripathi, M.K.**, Sharma, S.D. and Naulia, U. 1997. Potentialities of feeding *Leucaena leucocephala* to sheep and goat production. *World Review of Animal Production*. 32(1-2): 71-78.
- **Tripathi, M.K.**, Tiwari, A.D., Sharma, S.D. and Singh, M. 1996. Rumen degradation of nutrients (Paddy straw) and their correlation. *Agriculture and Biological Research*. 12 (1&2): 1-12.
- Tyagi, A.K., **Tripathi, M.K.** and Karim, S.A. 1995. performance of pregnant ewes on mustard and groundnut cake based diets. *World Review of Animal Production*. 30 (3-4): 93-98.

Indian National Journals

- Vaithianathan, S., Mishra, A.S., Chaturvedi, O.H., Prasad, R., **Tripathi, M.K.**, Raghuvansi, S.K.S. and Jakhmola, R.C. 2008. Effect of feeding chemically treated *Pennisetum ryphoides* stover in complete feed (mash or block form) on rumen fermentation characteristics and rumen microbial enzyme in sheep. *Indian Journal of Animal Science*. 78(8): 852-857.
- **Tripathi, M.K.** and Karim, S.A., 2008. Minerals requirement of small ruminants with special reference to their role in rumen fermentation – a review. *Indian Journal of Small Ruminant*, 14 (1), 1-47.
- Raghuvansi, S.K.S., Prasad, R., Chaturvedi, O.H., Mishra, A.S., **Tripathi, M.K.**, Misra, A.K., Saraswat, B.L., Jakhmola, R.C., 2007. *In sacco* DM degradability of *Brassica campestris* (mustard) straw and *Pennisetum typhoides* (bajara) kadbi based complete feed block. *Animal Nutrition and Feed Technology*. 7: 103-110.
- Vaithianathan, S., Mishra, A. S., Prasad, R., **Tripathi, M. K.**, Misra, A. K., Chaturvedi, O. H., Jakhmola, R. C. 2005. Remazol brilliant blue reactive dye decolouration and mustard straw utilisation by white rot fungi. *Indian Journal of Biotechnology*. 4: 144-148.
- Chaturvedi O. H., Prasad, R., Misra, A. K., Mishra, A. S., **Tripathi, M. K.** and Jakhmola, R. C. 2003. Botanical and nutritional evaluation of different fractions of mustard (*Brassica campestris*) and pearl millet (*Pennisetum typhoides*) varieties at maturity. *Indian Journal of Animal Science*. 73(11): 1274-1277.
- **Tripathi, M. K.**, Mishra, A.S., Misra, A. K., Prasad, R. and Jakhmola, R. C. 2002. Macro and micro mineral status of grazing livestock on community rangeland of semiarid Rajasthan. *Indian Journal of Animal Science*. 72 : 1182-1184.
- **Tripathi, M. K.**, Misra, A. K., Mishra, A. K., Prasad, R. and Karim, S. A. 2002. Utilization of minerals and their contents in *Longissimus dorsi* muscle of lambs maintained on groundnut or high glucosinolate mustard (*Brassica juncea*) meal diets. *Animal Nutrition & Feed Technology*. 2 : 65-74.
- Chaturvedi, O. H., Santra, A., **Tripathi, M. K.** and Karim, S. A., 2003. Weight gain and body conformational changes in weaner lambs fed high concentrate diets containing graded levels of sodium bicarbonate. *Indian Journal of Animal Science*. 73: 668-673.
- Misra, A. K., Mishra, A.S., **Tripathi, M. K.**, Prasad, R. and Jakhmola, R.C. 2002. Effect of graded levels of concentrate and nitrogen replacement on dry matter digestibility of untreated and alkaline hydrogen peroxide treated mustard (*Brassica campestris*) straw *in vitro*. *Animal Nutrition & Feed Technology*. 2 : 49-56.
- Chaturvedi, O. H., **Tripathi, M. K.**, Mishra, A. S., Verma, D. L., Rawat, P. S. and Jakhmola, R. C. 2002. Land as well as livestock holding pattern and feeding practices of livestock in Malpura taluk of semi-arid eastern plan of Rajasthan. *Indian Journal of Small Ruminant Research*. 8 :133-143.
- **Tripathi, M.K.**, Agrawal, I.S. and Sharma, S.D. 2001. Performance of crossbred calves on acid-processed or copper and iodine supplemented high glucosinolate mustard meal incorporated diets. *Animal Nutrition & Feed Technology*. 1 (1) : 39-50.
- **Tripathi, M.K.**, Mishra, A.S., Misra, A.K. and Karim, S.A. 2001. Soil estimates (pH, N and OM), biomass yield and chemical composition of vegetation of community range land in semi-arid region of Rajasthan. *Indian Journal of Animal Sciences*. 71 (4): 285-286.

- Misra A. K., Chaturvedi, O. H., Mishra, A. S., **Tripathi, M. K.**, Verma, D. L and Karim, S. A. (2000). Nutrient intake and utilization in sheep fed urea supplemented diets containing mustard straw and other roughage. *Indian Journal of Small Ruminants*. 7 (1) 8-13.
- Mishra, A. S., Chaturvedi, O. H., Misra, A. K., Prasad, R., **Tripathi, M. K.**, Santra, A., Mann, J. S. and Jakhmola, R.C. (2000) Nutritional evaluation of different fractions of mustard (*Brassica campestris*) plant at maturity. *Indian Journal of Small Ruminants*.7(1): 51-52.
- **Tripathi, M.K.**, Agrawal, I.S. and Sharma, S.D. 2000. Effect of physico-chemical treatments on glucosinolate content of various rapeseed-mustard meals. *Indian Journal Animal Nutrition*. 17 (3) : 211-216.
- **Tripathi, M.K.**, Mishra, A. S., Tyagi, A.K., Karim, S.A. and Sharma, S.D. 1999. Rumen fermentation pattern as affected by incorporation of high glucosinolate rapeseed-mustard (*Brassica* sp.) meal as protein supplement in sheep. *Indian Journal of Animal Sciences*, 69 (11): 972-975.
- **Tripathi, M.K.**, Tyagi, A.K. and Karim, S.A. 1999. Feeding value of mustard oil-cake to lactating ewes. *Indian Journal of Animal Sciences*, 69 (11): 988-990.
- **Tripathi, M.K.**, Tyagi, A.K. and Karim, S.A. 1999. Performance of weaner lambs maintained on mustard and groundnut meal based diets. *Indian Journal of Animal Sciences*. 69 (11): 991-992.
- Tyagi, A.K., **Tripathi, M.K.** and Karim, S.A. 1997. Effect of water soaking on glucosinolate of mustard cake and its utilization in sheep feeding. *Indian Journal of Animal Sciences*. 67 (1): 76-77.
- **Tripathi, M.K.**, Tyagi, A. K. and Karim S.A. 1996. Chemical composition of Siris (*Albizia lebback*) pods and leaves. *Indian Journal Small Ruminant*. 2 (6): 52-54.
- Mishra, A.S., Chauhan, S.S. and **Tripathi, M.K.** 1996. Aflatoxins in feed stuffs of Tarai area of Nainital. *Indian Journal of Animal Sciences*. 66 (6) : 123-124.
- **Tripathi, M.K.**, Singh, M., Avinash, C. And Mishra, A.S. 1996. Rumen nutrient degradation pattern and their correlation in two varieties of rice straw. *Indian Journal of Animal Sciences*. 66 (10): 79-84.
- **Tripathi, M.K.**, Tiwari, A.D., Singh, M. and Avinash Chandra. 1995. *In-sacco* nutritive value of different varieties of paddy straw. *Indian Journal of Animal Nutrition*. 12 (3): 177-179.
- **Tripathi, M.K.** and Singhal, K.K. 1995. Change of total glucosinolate content of Chinese cabbage fodder with maturity and its impact on rumen fermentation. *Indian Journal of Animal Nutrition*. 12 (4) 228-230.

Book

- Karim, S.A, **Tripathi, M.K.**, Chaturvedi, O.H., and Shinde, A.K. 2008. Small Ruminant Production in India: Strategies for Enhancing. First edition. Satish Serial Publishing House, Delhi, India p. 618.

Book chapters/ Invited papers

- Mishra, A.S., Misra, A.K., **Tripathi, M.K.** and Jakhmola, R.C. 2003. Nutrition of Animals During Draught. In R.C. Jakhmola and R.K. Jain (Eds) Sustainable Animal Production. First edition. Pointer Publisher, Jaipur, India pp. 350-375.
- Misra, A.K., **Tripathi, M.K.**, Mishra, A.S. and Jakhmola, R.C.. 2003. Scope and Future Role of Non-Conventional Feeds in Ruminants. In R.C. Jakhmola and R.K. Jain (Eds) Sustainable Animal Production. First edition. Pointer Publisher, Jaipur, India pp. 376-398.
- Jakhmola, R. C., **Tripathi, M. K.** 2005. Feed block technology for arid region of the country. In Kundu, S.S., Mahanta, S.K., Singh, Sultan and Pathak, P.S. (Eds) "Roughage Processing Technology" Ist Edition, Satish Serial Publication, Delhi, India. pp. 231-245.
- Jakhmola, R.C., **Tripathi, M. K.**, 2006. Roughage based complete feed block for ruminants feeding: Prospects under Indian conditions. In: Proc. National Seminar on Energy Management for Sustainable Rural Development, Jan 19-21, Tamilnadu Agricultural University, Coimbatore, India.
- **Tripathi, M.K.**, Jakhmola, R.C. 2006. Technology of complete feed block for drought prone area. In: Training on Contemporary and advanced clinical diagnostic methods for small ruminant disease. September 2- 15, 2006, CSWRI, Avikanagar, Rajasthan, India.
- **Tripathi, M.K.**, Karim, S.A., 2008. Application of rumen microbiology techniques and biotechnology to improve quality and quantity of mutton production. In: Small Ruminant Production in India: Strategies for Enhancing. S.A. Karim, M.K. Tripathi, O.H. Chaturvedi and A.K. Shinde (Eds.), Satish Serial Publishing House, Delhi, India pp. 69-103.
- Karim, S.A., **Tripathi, M.K.**, Soren, N.M., 2008. Nutrition of lambs in pre- and post weaning phase of growth. In: Small Ruminant Production in India: Strategies for Enhancing. S.A. Karim, M.K. Tripathi, O.H. Chaturvedi and A.K. Shinde (Eds.), Satish Serial Publishing House, Delhi, India pp. 51-68.
- Narayan Dutta and **Tripathi, M.K.** 2009. Recent Advances in Feed Evaluation. In: *Advanced Animal Nutrition for Developing Countries* U.R. Mehra, IVRI, Bareilly. In-press
- **Tripathi, M.K.** and Deepika, Chaturvedi. 2009. Nutritional significance and Antimethanogenic Potential of Feed Tannins. In: *Forage for Sustainable Livestock Production*, Satish Serial Publishing House, Delhi, India. pp553- 570.
- **Tripathi, M.K.**, Mishra, A.S. and Misra, A.K. 2009. Glucosinolate: Its Estimation and role in Animal Feeding. In: *Forage for Sustainable Livestock Production*. Satish Serial Publishing House, Delhi, India pp. 83-94.
- Misra, A.K., Das, M.M., Singh, K.K., Kumar, Anil and **Tripathi, M.K.** 2009. Plant Carbohydrates and Protein Fractions as Forage quality Determinants. In: *Forage for Sustainable Livestock Production*, Satish Serial Publishing House, Delhi, India pp. 183-201.
- **Tripathi, M.K.** and Sankhyan, S.K. 2009. Role of Nutrient Augmenting in Wool Production. In: *Wool Technologies-Innovations in Wool Production and Technologies for Value Addition*. Agrotech Publishing Academy, Udaipur India, pp 83-94.
- Karim, S.A. and **Tripathi, M.K.** 2010. Stress management in small ruminants for sustainable production. In: *Climate Change and Stress Management: Sheep and Goat Production* (Eds: Joshi, A., Sankhyan, S.K., Shinde, A.K., Shakyawar, D.B., Naqvi, S.M.K., and Tripathi, B.N.). Satish Serial Publication House, Azadpur, Delhi, India. pp 1-20.

Patents filed:

- Patent No. 2108/DEL/2009 “ Production of fermented probiotic feed, production protocol, fermentation conditions, drying, storage and uses thereof” Inventors **M.K. Tripathi** and S.A. Karim
- Patent No. 2486/DEL/2009 “ Fermentation vessel for conducting gas production studies (in-vitro): Fabrication, protocol and uses” Inventors R.C. Jakhmola, S.K.S. Raghuvansi, Narendra Singh **and M.K. Tripathi**