

CURRICULUM VITAE

Dr. Dinesh Kumar Dhanasekaran

Research Assistant

Nutrition and Food Research Groups
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Personal Information

Father name : K.Dhanasekaran.
Date of Birth : 25-03-1986
Sex & Nationality : Male & Indian
Marital Status : Married
Languages Known : English, Portuguese, Tamil

Research Experience

- I had 10 years of research experience (India, Brazil and USA) in the fields of **Food Microbiology, Animal Science, Biochemistry, Nutrition, Molecular Biology**.
- I have been involved in several *in vitro* and *in vivo* experiments in the field of animal science and I had rich experience in statistical analysis (SPSS & SAS) & MS Office.
- I had technical competency to design, conduct and interpret my research findings and I had 19 Research articles in quality peer reviewed journals.

Awards & Professional Recognition

- **2015:** ADSA-ASAS Northeast Section Graduate Student Oral Competition (Joint Annual Meeting, USA) has awarded a grant to present my part of my PhD work.
- **2014:** CNPq (Brazil) – TWAS (Italy) has awarded a travel grant for my research work in Joint
- ISNH/ISRP International Conference held at Canberra, Australia.
- **2012:** Selected for CNPq-TWAS full time PhD fellowship funded by Brazilian National Council for Scientific and Technological Development & Third World Academy of Science.
- **2012:** Nil's Lagerlof Memorial Award as a Co-author for research paper awarded in Indian Society for the study of Animal Reproduction (ISSAR).

Academic profile

| Qualification | University /college | Year | Division |
|---|--|----------------------------|----------|
| SSLC | T. P. Govt. Higher Secondary School, Karaikal | 2001 | FIRST |
| Higher Secondary | T. P. Govt. Higher Secondary School, Karaikal | 2003 | FIRST |
| B.Sc-Biochemistry | Bharathidhasan University/(E.G.S.P.C. science) | 2006 | FIRST |
| M.Sc-Biochemistry | Periyar University/(K.S.R.college of science) | 2008 | FIRST |
| Doctorate Degree (PhD) | Center for Nuclear Energy in Agriculture (CENA), University of Sao Paulo, Brazil. | Completed May- 2016 | |
| Course work on Doctorate Degree: <ul style="list-style-type: none">❖ Food & Animal Biochemistry.❖ Statistical methods in Animal Experimentation.❖ Nuclear and Correlated Techniques in Agricultural Productivity studies.❖ Controlling Parasite in ruminants. | | | |

Additional Course & Work Experience

| Qualification | University /college | Year | Duration |
|--------------------------------------|---|------|----------|
| Environmental studies | Bharathidhasan University/(E.G.S.P.C. science) | 2006 | 6 months |
| Writing in the sciences | Online Stanford OpenEdx Course | 2013 | 3 months |
| Radiation Protection Course | Center for Nuclear Energy in Agriculture (CENA), University of Sao Paulo, Brazil. | 2014 | 50 hours |
| Work Experience | | | |
| Senior Research Fellow (DBT Project) | National Institute of Animal Nutrition & Physiology, Bangalore | 2012 | 4 Years |

Professional Affiliations

- Member in Society for Animal Physiologist in India (SAPI), Karnal, India.
- Livestock Emissions and Abatement Research Network, (New Zealand).
- Member in American Society of Animal Science (Membership ID: 070370).
- Reviewer for Czech Journal of Animal Science and British Microbiology Research.

International Visit

(2015): United States of America:

- Short term Visiting Scholar (June-July 2015) to the Department of Animal Science, University of Florida, Gainesville, United States of America.
- Joint Annual Meeting ADSA/ASAS, July 12-16, 2015 held at Orlando, Florida, United states of America.

(2014): Australia:

- Joint ISNH/ISRP International Conference 8-12, September 2014 held at Canberra, Australia.

(2013-2016): Ph. D Project (CENA, BRAZIL)

Project Title: “Mitigating the greenhouse gas balance of ruminant production by identifying plants with high tannin content and to quantifying the methane emission *in vivo*”.

***In vitro* Experiment:**

1. Effect of native tropical plant species on *in vitro* rumen fermentation and methane emission.
2. Isolation and characterization of chemical components of *Leucaena leucocephala* for anti-methanogenic properties by using gas chromatography and mass spectroscopy (GC-MS).

***In vivo* Experiment:**

3. Effect of available human inedible resources (*Leucaena leucocephala*) to improve animal productivity and methane mitigation.

Research Experience:

M.Sc Research Project (Nianp, India)

Estimation of organochlorine pesticide in animal feeds sample by *HPLC* technique.

Research Project (DBT-Research Scholar, Nianp, India)

Detoxification and utilization of key agro-forest based non- conventional oil cakes in production of livestock.

Effect of dietary energy on seminal plasma IGF-1, semen quality and fertility

Research involved in other project (Cena, Brazil)

Use of enzymes and nuclear technologies to improve the utilization of fibrous feeds and reduce greenhouse gas emission from livestock.

Animal Handling

Small laboratory Animals: (Wistar Rats) worked in two experiments for 8 months (metabolism trial and biochemical profiles).

Laying Birds: Worked in experiment for one month for overcome infectious disease.

Laboratory Animals: (Small Ruminant- Goat, Sheep; Ruminants-Dairy) worked in three experiments (Metabolism trial, Immunology, Biochemical profiles and Gene expression studies).

Techniques handled during my Experience:

Handling the HPLC and HPTLC Instrument, proximate analysis instruments, ELISA Reader, Gamma counter, RT-PCR, Computerized Assisted Semen Analyzer, Gas chromatography mass spectrometer (GCMS-QP2010) coupled with quadrupole detector and CH₄ respiration chamber

List of Publications (n=24)

2020-2011:

1. Tareq M. Osaili, Reyad S. Obaid, Klaithem Alowais, Rawan Almahmood, Moza Almansoori, Noora Alayadhi, Najla Alowais, Klaithem Waheed, **Dinesh Kumar Dhanasekaran**, Anas A. Al-Nabulsi, Mutamed Ayyash & Stephen J. Forsythe, "Microbiological quality of kitchens sponges used in university student dormitories" **BMC Public Health** (2020) 20:1322
2. Gabriel Zanuto Sakita, Thiago Francisco Ventoso Bompadre, **Dhanasekaran Dineshkumar**, Paulo de Mello Tavares Lima, Adibe Luiz Abdalla Filho, Tania Sila Campioni, Pedro de Oliva Neto, Herman Bremer Neto, Helder Louvandini, Adibe Luiz Abdalla. "Fibrolytic enzymes improving in vitro rumen degradability of tropical forages" **Journal of Animal Physiology and Animal Nutrition** (2020); 00:1–10.
3. Osaili, Tareq M., Fayeza Hasan, **Dinesh Kumar Dhanasekaran**, Reyad S. Obaid, Anas A. Al-Nabulsi, Sowmya Rao, Hera Fatima, Mutamed Ayyash, Ioannis Savvaidis, Richard Holley. "Thermal inactivation of Escherichia coli O157: H7 strains and Salmonella spp. in camel meat burgers." **LWT-Food science and Technology** 120 (2020): 108914.
4. Osaili, Tareq M., Anas A. Al-Nabulsi, **Dinesh Kumar Dhanasekaran**, Fayeza Hasan, Sowmya Rao, Hera Fatima, Mutamed Ayyash, Richard Holley, and Reyad S. Obaid. "Growth behaviour and thermal inactivation of E. coli O157: H7 and Salmonella spp. in ground lean camel meat." **International journal of food microbiology** 316 (2020): 108423.
5. Silva, Tairon Pannunzio Dias, Thiago Francisco Ventoso Bompadre, **Dinesh Kumar Danasekaran**, Gabriel Zanuto Sakita, Adibe Luiz Abdalla Filho, Carolina Rodrigues Jimenez, Ana Carolina Brandão de Campos Fonseca, Alessandro Francisco Talamini do Amarante, Concepta McManus, and Helder Louvandini. "Trichostrongylus colubriformis infection: Impact on digesta passage rate and lamb performance." **Veterinary parasitology** 272 (2019): 17-22.
6. **Dineshkumar Dhanasekaran**, Tairon Pannunzio Dias-Silva Adibe Luiz Abdalla Filho Gabriel Zanuto Sakita Adibe Luiz Abdalla Helder Louvandini, Mona M. M. Y. Elghandour. 2019. "Plants extract and bioactive compounds on rumen methanogenesis" **Agroforestry Systems**, June 2019. doi: 10.1007/s10457-019-00411-6.
7. A.L. Abdalla Filho, P.S. Corrêa, L.N. Lemos, **D. Dineshkumar**, J. Issakowicz, E.H. Ieda, P.M.T. Lima, M. Barreal, C. McManus, T.S. Mui, A.L. Abdalla, H. Louvandini. 2017. "Diets based on plants from Brazilian Caatinga altering ruminal parameters, microbial community and meat fatty acids of Santa Inês lambs" **Small Ruminant Research** 154, 70–77.
8. A. L. Abdalla Filho, **D. Dineshkumar**, M. Borredat, A. L. Abdalla and H. Louvandini. 2016. "Performance, metabolic parameters and enteric methane production of Santa Inês sheep fed *Orbignya phalerata* and *Combretum leprosum*" **Journal of Animal Physiology and Animal Nutrition** Aug 30. doi: 10.1111/jpn.12561.
7. D. N. Raj, J. V. Ramana, S. B. N. Rao, **D. Dineshkumar**, M.V.A.N. Suryanarayana and I. J. Reddy 2016. "Evaluation of detoxified karanja (*Pongamia* sp.) and neem

(*Azadirachta indica*) cakes in total mixed ration (TMR) for dairy cattle – Effect on nutritional, biochemical profiles” **Open Access Journal of Veterinary Science and Research** 1(1) - 000107.

8. Tairon Pannunzio Dias Silva, Jacira Neves da Costa Torreão, Carlo Aldrovandi Torreão Marques, Marcos Jácome de Araújo, Leilson Rocha Bezerra, **Dinesh kumar Dhanasekaran**, Veerasamy Sejian, 2016. “Effect of multiple stress factors (thermal, nutritional, and pregnancy type) on adaptive capability of native ewes under semi-arid environment” **Journal of Thermal Biology** 59: 39–46.
9. D. N. Raj, J. V. Ramana, S. B. N. Rao, **D. Dineshkumar**, M. V. A. N. Suryanarayana, Y Ravindra reddy and K.S. Prasad. 2016. “Effect of incorporation of detoxified karanja (*Pongamia pinnata*) and neem (*Azadirachta indica*) seed cakes in total mixed rations on milk yield, composition and efficiency in crossbred dairy cows” **Indian Journal of Animal Sciences** 86 (4): 489–492.
10. S. B. N. Rao, S. Jash, **D. Dineshkumar**, P. Krishnamoorthy, A.V. Elangovan, M.Sivaram, S.Parthipan and S.Selvaraju. 2015. “Influence of detoxified neem cake on diet digestibility, body weight change, hormonal profiles, immune response and testicular gene expression in male sheep” **Animal Feed Science and Technology**, 211: 41-49.
11. **Full length Article (2015)**. Samy E. C, Vania R. V, A. L. Abdalla, A. A. Alves, A. S.Natel, **D. Dinesh Kumar**, L. R. Silva, J. C. Siqueira. “Faecal Inoculum as Alternative Microbial Source for *in vitro* Rumen Fermentation Techniques”, In: Management of land use systems for enhanced food security: conflicts, controversies and resolutions, Tropentag, Berlin, Germany.
12. S. B. N. Rao and **D. Dineshkumar**. 2015. “Effect of substitution of soyabean meal by detoxified karanja cake on diet digestibility, growth, carcass and meat traits of sheep” **Small Ruminant Research** 126:5, pp 26-33 doi:10.1016/j.smallrumres.2015.03.010.
13. **D. Dineshkumar**, A. L. Abdalla, S. C. M. L. Silva, R. C. Lucas, S. E. A. S. Cavalcante, G. D. Souza, P. P. dos Santos, J. E. M. dos Santos and H. Louvandini. 2014. “Effect of temperature and pre-incubation time of fibrolytic enzymes on *in vitro* degradability of *Brachiaria* (*Brachiaria decumbens*)”**Animal Production Science**, 2014, 54, 1779–1783. (doi:10.1071/AN14262).
14. B. Berenchtein, A.L. Abdalla , T. do Prado Paim, M.S. bardella, H. Louvandini, A.L.A.Filho, **D. Dhanasekaran**, P. P. Dos Santos. 2014. “Effects of detoxified *Jatropha curcas* kernel meal in finishing pig diets on their performance, carcass traits, meat quality and intoxication” **Livestock Science**, 165, pp 100-103 (doi:10.1016/j.livsci.2014.04.005).
15. Krishnamoorthy, P; Rao, S. B. N; **Dineshkumar, D** and Rahman, H. 2014. “Effect of feeding detoxified karanj seed cake on immunity and pathology in growing lambs” **Iranian Journal of Veterinary Research** 15 (1) 46 pp 69-71.
16. S. B. N Rao, **D. Dineshkumar**, M Saravanan and S Jash. 2014. “Incriminating factors in neem seed kernels and *in vitro* evaluation of graded levels of raw and detoxified neem seed cake based concentrate mixtures” **Indian Journal of Animal Sciences** 84 (1): 82-84.

17. D.Rajendran, G.Selvaraju, S.B.N.Rao, **D.Dineshkumar**, Swathi verma, S.Parthipan and D.Kannan. 2014. “Enhancing the immunity and egg production of stressed laying birds by supplementing organic chromium” **Indian Journal of Animal Sciences** 84 (5): 559–563.
18. **D. Dineshkumar**, S.Selvaraju, S.Parthipan, Allen Thayakumar, D. Rajendran, J. P. Ravindra, P. Krishnamoorthy, I.J. Reddy, S. B. N. Rao. **2013**. “Effect of detoxified karanja (*Pongamia* spp.) cake on testicular architecture and semen production in ram lambs” **Animal** 7:10, pp 1697–1703 (doi:10.1017/S1751731113001316).
19. S.Selvaraju, T.Sivasubramani, Raghavendra BS, Priyadharshini Raju, Rao SBN, **D.Dineshkumar** and JP Ravindra. **2012**. “Effect of dietary energy on seminal plasma IGF-I, serum IGF-I and testosterone levels, semen quality and fertility in adult rams” **Theriogenology**, Aug;78(3):646-55 (doi:10.1016/j.theriogenology.2012.03.010).
20. S.B.N.Rao, **D.Dineshkumar**, M.Chandrasekhariah, A.Thulsai, V.Lyju jose and S.Selvaraju. 2012. “Study the effects of three energy levels on growth, nutrient utilization and rumen biochemical profiles of male sheep” **Indian Journal of Animal Sciences** 82 (10): 108–114.
21. D. Rajendran, P.Vasanthakumar, G.Selvaraju, K. Shibi Thomas, N.Premkumar, and **D.Dineshkumar**. 2012. “Effect of Organic Chromium Supplementation on Performance of White Leghorn Chicken Recovering from Newcastle Disease” **Animal Nutrition and Feed Technology** 12, 247-255.
22. Selvaraju Sellappan, Priyadharshini Raju, Rao SBN, Raghavendra, BS, S.Nandi, **Dineshkumar Dhasekaran**, Allen thaya kumar, Parthipan S and JP Ravindra. 2011. “Evaluation of maize grain and polyunsaturated fatty acid (PUFA) as energy sources for breeding rams based on hormonal, sperm functional parameters and fertility” **Reproduction, Fertility and Development**, 24, 669–678
23. S. B. N. Rao, **D.Dineshkumar**, K. Giridhar, A. V. Elangovan and K. T. Sampath. 2011. “Organochlorine pesticide residues in feedstuffs” **Indian Veterinary Journal** Vol. 88 (8): 38-39.
24. **D.Dineshkumar**, S.B.Nageswara Rao, S. Jash, A.V.Elangovan and S.Hemalatha. 2011. “Chemical composition and anti nutritional factors in Karanja (*Pongamia pinnata*) seed kernels and its in vitro evaluation” **Indian Journal of Animal Sciences** Vol. 81 (5): 478-83.

Presentation in Conference/Congress and other Publications

| Publications | Published | Communicated | Total |
|----------------------------|-----------|--------------|-----------|
| Oral presentation | 8 | - | 9 |
| Poster presentation | 26 | - | 28 |
| Popular articles | 3 | - | 3 |
| Book chapter | 1 | - | 1 |
| Lecture Notes | 4 | - | 3 |
| Course/Event Participation | 15 | - | 15 |
| Training Undergone | 5 | - | 6 |

Extra- Curricular Activities

- **2015:** Badminton Champion (Singles) on SESC, Piracicaba, Sao Paulo, Brazil.
- **2010:** Badminton Champion (Singles) on Institute Foundation Day, Bangalore, India.

Declaration

I hereby declare that all the information provided above is true and accurate to the best of my knowledge. I also assure my complete dedication & hard work towards your organization.

Place: United Arab Emirates

Yours faithfully,



(Dr. D. Dineshkumar)