

- 93 Sarkar J, Sreenivasa BP, Singh RP *et al.* Comparative efficacy of various chemical stabilizers on the thermostability of live attenuated peste des petits ruminants (PPR) vaccine. *Vaccine* 21, 4728–4735 (2003).
- Brief account of the development of a live-attenuated peste des petits ruminants (PPR) vaccine. The comparative efficacies of conventional sugar-based stabilizers have been assessed, and thermostability studies on a live-attenuated PPR vaccine were performed. A pioneering effort in the field of thermostabilization of the PPR vaccine.
- 94 Rajendra KB. Current status of DNA vaccines in veterinary medicine. *Adv. Drug Deliv. Rev.* 43(1), 3–11 (2000).
- 95 Kaye S, Loveday C, Tedder R. Storage and preservation of whole blood samples for use in detection of human immunodeficiency virus type-1 by the PCR. *J. Virol. Methods* 35, 217–226 (1991).
- 96 Zhang L, Wu Q. Single gene retrieval from thermally degraded DNA. *J. Biosci.* 30(5), 599–604 (2005).
- 97 Hofmann MA, Thur B, Liu L *et al.* Rescue of infectious classical swine fever and foot-and-mouth disease virus by RNA transfection and virus detection by RT-PCR after extended storage of samples in Trizol. *J. Virol. Methods* 87(1–2), 29–39 (2000).
- 98 Thibier M, Guerin B. Hygienic aspects of storage and use of semen for artificial insemination. *Anim. Reprod. Sci.* 62(1–3), 233–51 (2000).
- 99 Balasuriya UBR, Christian M, Leutenegger JB *et al.* Detection of equine arteritis virus by real-time TaqMan® reverse transcription-PCR assay. *J. Virol. Methods* 101(1–2), 21–28 (2002).
- 100 Hatanaka H. Clinical results of neutron capture therapy. In: *Neutron Beam Design, Development, and Performance for Neutron Capture Therapy (Basic Life Sciences volume 54)*. Harling OK, Bernard JA, Zamenhof RG (Eds). Pergamon Press, New York, USA and London, UK, 15–21 (1989).
- 101 Crespi HL. The isolation of deuterated bacteriorhodopsin from fully deuterated *Halobacterium halobium*. *Methods Enzymol.* 88, 3–5 (1982).
- 102 Haon S, Auge S, Tropis M *et al.* Low cost production of perdeuterated biomass using methylotrophic yeasts. *J. Labelled Comp. Radiopharmaceuticals* 22, 1053–1063 (1993).
- 103 Levin I, Doerr H. Carbon (¹⁴C, ¹³C) and hydrogen (D) isotope measurements on atmospheric methane and its sources (sinks). Final Report. Institute für Umweltphysik, Heidelberg University, Germany, 1–61 (1991).
- 104 Smith RB. Deuterium in North Atlantic storm tops. *J. Atmos. Sci.* 49, 2041–2057 (1992).
- 105 Jouzel J, Lorius C, Petit JR *et al.* Vostok ice core: a continuous isotope temperature record over the last climatic cycle (160,000 years). *Nature* 329, 403–408 (1987).
- 106 Cooper LW, DeNiro MJ. Covariance of oxygen and hydrogen isotopic compositions in plant water: species effects. *Ecology* 70, 1619–1628 (1989).
- 107 Ramesh R, Bhattacharya SK, Gopalan K. Dendroclimatological implications of isotope coherence in trees from Kashmir Valley, India. *Nature* 317, 802–804 (1985).
- 108 Kaufmann J, Luethi T, Flisch A *et al.* First results from the measurement of the distribution of water in building concrete by means of MRI (magnetic resonance imaging) and x-ray computer tomography. *Proceedings of the DGZFP Annual Meeting, Innovative Nondestructive Testing – A Challenge to all Sectors of Industry*. Fulda, Germany, 27–29 April 1992.
- 109 Baker MT, Ronnenberg WC Jr, Ruzicka JA *et al.* Inhibitory effects of deuterium substitution on the metabolism of sevoflurane by the rat. *Drug Metab. Dispos.* 21, 1170–1171 (1993).
- 110 Shapiro A, Modai Y, Kohn A. Efficacies of vaccines containing alginate adjuvant. *J. Appl. Bacteriol.* 30(2), 304–311 (1967).
- 111 Aksan A, Toner M. Isothermal desiccation and vitrification kinetics of trehalose-dextran solutions. *Langmuir* 20, 5521–5529 (2004).
- 207 Abrahamson S, Dinh-Nguyen N, Hellgren LG, Vincent JG: Patent SE426011 B (1982).
- 208 MERCK AND CO., INC: US4028405 (1977).

Websites

- 301 Heavy water in depth
www.circuitskin.com/heavy_water
(Accessed 16 February 2006)
- 302 Biotechnological potential of heavy water and deuterated compounds
www.isb.vt.edu/brarg/brasym96/kushner96.htm
(Accessed 19 July 2009)
- 303 Heavy water and molecular evolution of life and primordial forms
www.scientificblogging.com/olegmosin/blog/heavy_water_molecular_evolution_and_life_by_dr_oleg_v
(Accessed 17 July 2009)

Affiliations

- Arnab Sen, MVSc, PhD
Senior Scientist, Division of Virology, IVRI, Mukteswar, Nainital, India
Tel.: +91 594 228 6348
arnabsen123@gmail.com
- Vinayagamurthy Balamurugan, MVSc, PhD
Senior Scientist, Project Directorate on-Animal Disease Monitoring and Surveillance, HA Farm, Hebbal, Bangalore-560024, Karnataka, India
Tel.: +91 802 341 5329
balavirol@gmail.com
- Kaushal Kishor Rajak, MVSc, PhD
Division of Virology, IVRI, Mukteswar, Nainital, India
Tel.: +91 594 228 6348
kaushalvirol@gmail.com
- Soumendu Chakravarti, MVSc
Division of Virology, IVRI, Mukteswar, Nainital, India
Tel.: +91 594 228 6348
drsoumendu@rediffmail.com
- Veerakyathappa Bhanuprakash, MVSc, PhD
Principal Scientist & Head, Division of Virology, IVRI, Mukteswar, Nainital, India
Tel.: +91 594 228 6348
bhanu6467@gmail.com
- Raj Kumar Singh, MVSc, PhD
Director, NRC on Equine, Sirsa Road, Hisar, Haryana, India
Tel.: +91 166 227 5787
rks_virology@rediffmail.com

Patents

- 201 Crainic R, Simpson K: Patent WO9421298 (1994).
- 202 Hamaya T, Horikoshi K: Patent JP01179689 (1989).
- 203 TEVA PHARM. INDUSTRIES, LTD: EP-332826 (1989).
- 204 BOEHRINGER SOHN CH CMBH: DE2516836 (1976).
- 205 Liepins A: Patent US5223269 (1993).
- 206 Neidrig M, Stahl-Hennig C, Hunsmann G: Intranasal yellow fever vaccination. US6337073 (1998).