

CURRICULUM VITAE
(Includes List of Publications)



Name: Vinod Kumar

Father's name: (Late) Shri Guru Prasad Dubey
BORN: 14 January 1956, Pratapgarh (U.P., India)

EDUCATION: M. Sc. (Zoology); Ph. D. (Zoology, Banaras Hindu University; 1981)

CURRENT POSITION AND ADDRESS:

Dr. Vinod Kumar, PhD, FNA

UGC-BSR Faculty Fellow, Ex-Senior Professor

Department of Zoology; University of Delhi; Delhi 110 007, India

Cell: 09818875429; 09415532754; Email: drvkumar11@yahoo.com, drvkumar11@gmail.com,

ACADEMIC POSITIONS HELD:

Jan. 1983 - Dec. 1995: Lecturer in Zoology

Jan. 1996 - Dec. 1999: Reader in Zoology

Jan. 2000 – July 2018: Professor of Zoology

July 2018 – Jan. 2021: Senior Professor of Zoology

Sep. 2021 – contd.: UGC BSR Faculty Fellow

AREA OF RESEARCH: Chronobiology; Behavioural Physiology & Neuroendocrinology

TEACHING AND RESEARCH EXPERIENCE:

Post-doctoral research experience: ~40 years

Teaching experience: ~38 years (since 01 Jan 1983)

As Professor: 18.5 years (since 01 January 2000)

As Senior Professor: 2.5 years (18 July 2018 – 31 January 2021)

As UGC-BSR Faculty fellow (Post superannuation)

RESEARCH SUPERVISION: 22 Ph. D.; 14 M. Phil.; 01 Ph. D. student is yet to submit.

PUBLICATIONS: Research articles: 211 (176 Original papers in 62 Journals; 24 Reviews; 11 Book chapters); **Books: 03** (authored/ edited); **Special journal volumes: 02** (edited)

DISTINCTIONS AND AWARDS:

2022 Elected Fellow of the **Indian National Science Academy (FNA)**

2022 “Aschoff’s Ruler Prize”: One of the highest distinctions in Chronobiology

2016 Elected Fellow of the Indian Society of Chronomedicine (FISC)

2014 Elected Fellow of the International Ornithologists’ Union (FIOU)

2010 Platinum Jubilee Lecture Award, ISCA, SRM University, Chennai

2008 Vijay - Usha Sodha Scientific Research Prize, University of Lucknow

2007 JSPS Senior Scientist Visiting Fellowship

2006 P. Govindarajulu Gold medal from the Society of Reprod. Biology and Comp. Endo., India.

2003-04: Texas A&M University Visiting Professorship

1999-02: Max-Planck Visiting fellowships (short-term early)

1997-98 Max-Planck Postdoctoral Fellowship

1995-96: CIDA-NSERC Associateship

2001 Elected Fellow of the Society for Reproductive Biology and Comparative Endocrinology (FRE).

2000 Young Investigator Award, Gordon Research Conference in Pineal Cell Biology (Oxford, UK)

1991 INSA-Royal Society Exchange Fellowship

1986 Young Scientist Award from Indian Science Congress Association

1985 Fellow of the Zoological Society of India (FZSI)

HONOURS:

- 2021 President;** Indian Society for Chronobiology (April 2017 – March 2025)
- 2019 Member,** International Committee, V World Congress in Chronobiology, Suzhou, China
- 2018 Member,** Program Committee for Asian Chronobiology Forum meeting, Sapporo, Japan
- 2018 Convener,** Symp. on Avian clocks and calendars, Int. Ornithological Congr., Vancouver,
- 2017 Co-chair and Invited speaker** at Asia Chronobiology Forum
- 2017 Convener** International Symposium on Biological Timing
- 2016 Chair and invited speaker,** International conference on Chronobiology, China
- 2015 Invited speaker** at the Cold Spring Harbor Symposium on Biological Rhythms, China
- 2015 Chair,** Comparative Clocks, EBRS/ WCC Chronobiology, Manchester, UK.
- 2014 Nodal Principal Investigator,** IndoUS Center for Biological Timing (2014-18)
- 2012 Co-chair,** Session on Photoperiodism, 10th ISAE, Gifu, Japan, June.
- 2010 Co-chair,** Symposium on Biological Clocks in Birds, IOC, Brazil, August 2010.
- 2009 Secretary,** Indian Society for Chronobiology (April 2009 – March 2017)
- 2008 Chair,** Session on Biological Clocks and Seasonal Reproduction 4th ICPB, Kenya
- 2008 Faculty,** Multinational School in Chronobiology, Raipur, India
- 2008 Co-chair,** Session on Biorhythms, 9th ISAE, Leuven, Belgium.
- 2007 Member and Faculty** SERC School in Neuroscience (2007-14)
- 2007 Member and Faculty** SERC School of Herpetology (2007-11)
- 2006 Chair,** Plenary lecture 24th Int. ornithological Congress, Hamburg, Germany
- 2006 IRHPA** Center for Excellence in Biological Rhythm Research (PI, 2006-13)
- 2004 Member,** Program Advisory Committee, Animal Sciences, DST, New Delhi (2004-12)
- 2004 Member,** Executive Committee, Intl Society of Avian Endocrinology (2004-12)
- 2004 Co-Chair,** session on Melatonin, clock genes and seasonality, Int. Avian Endoc. Arizona.
- 2002 Director and Faculty,** SERC/ SRRB Schools in Chronobiology (2002-14)
- 1999 Lecturer,** Erasmus School of Chronobiology, Ferrara, Italy.
- 1984 Treasurer,** Indian Society for Chronobiology (1984-1988)

RESEARCH / TEACHING EXPERIENCE ABROAD

- Approx. 7 years (5 years research; 1.6 years (20 mo) teaching and research; short visits of 2-10 wks)
- 2018** Visiting PI under IndoUS at Salk Institute for Biological Studies, USA
 - 2015** Visiting PI under IndoUS at Salk Institute for Biological Studies, USA
 - 2007** JSPS Senior Visiting Fellow, Nagoya University, Japan
 - 2003** Jan - 2004 Aug: Visiting Professor, Dept. of Biology, Texas A & M University, USA.
 - 2002** May - June: Visiting Fellow. MaxPlanck Inst. for Ornithology, Germany.
 - 2001** June - August: Visiting Fellow, MaxPlanck Inst. for Ornithology, Germany.
 - 2000** May - August: Visiting Fellow, MaxPlanck Inst. for Ornithology, Germany
 - 1999** May - August: Visiting Fellow, MaxPlanck Inst. for Ornithology, Germany.
 - 1997** March - 1998 February: Postdoctoral Fellow, Max Planck Institute for Ornithology, Germany.
 - 1995** March - 1996 March: CIDA-NSERC Associate, Dalhousie University, Halifax, Canada.
 - 1992** March - 1993 March: European Community Postdoctoral Fellow, Edinburgh, U.K.
 - 1991** Feb - December: INSA - The Royal Society UK Exchange Fellow, Bristol & Edinburgh, UK.

EDITORIAL RESPONSIBILITIES

- 2021** Editorial board member, Journal of Experimental Biology, The Company of Biologists, UK
- 2019** Editorial board member, Journal of Neuroendocrinology, Wiley
- 2017** Section Editor, Current Science, Bangalore
- 2017** Review editor, Frontiers in Physiology (Avian Physiology)
- 2017** Guest Editor, Special issue of Biological Rhythm Research
- 2014** Guest Editor Special issue of Indian Journal of Experimental Biology.
- 2010** Editorial Board member, Integrative and Comparative Biology (2010-15)
- 2007** Member, Editorial Board, General and Comparative Endocrinology (USA/UK) (2007-13)

MEMBERSHIP OF SCIENTIFIC SOCIETIES/ ACADEMIC BODIES:

- Life member,** Indian Society for Chronobiology
- Member,** Society for Research in Biological Rhythms (SRBR), USA
- Member,** Board of International Society for Chronobiology

Life member, Indian Society for General and Comparative Endocrinology
Life member, Society for Reproductive Biology and Comparative Endocrinology
Life member, The Ethological Society of India
Life member, Zoological Society of India
Life member, Indian Science Congress Association
Member (Associate), Society for Integrative and Comparative Biology, USA (2010-15).
Member (Corresponding) German Ornithological Society
Member, Indian representative, International Ornithologist's Union
Member, Academic Council, University of Lucknow (2002-2009)
Member, University Court, University of Delhi (2010 - 2021)
Member, Special Committee, JNU, New Delhi (one term of 3 years)
Member, Departmental Research Committee, University of Delhi (2 terms)
Member, Research Degree Committee at the University of Lucknow (1994 – 2009)
Member, Research Degree Committee at CCS University, Meerut
Member, Research Degree Committee at Amity University
Member, Board of Studies, Kurukshetra University
Member, Board of studies in several other Universities

ADMINISTRATIVE EXPERIENCE

Chairman, Governing Body, Shaheed Bhagat Singh College, Univ. of Delhi (one-and-half term)
Chairman, SERB Avian Biology School, Dept. of Science and Technology, New Delhi
Director, SERC/ SERB Schools in Chronobiology, Dept. of Science and Technology, New Delhi
Member, Governing Body, Shaheed Bhagat Singh College, University of Delhi (2 terms)
Member, Governing Body, Ramjas College, University of Delhi (3 terms)
Treasurer, ARSD College, University of Delhi (1 term)
Member, Governing Body, Deen Dayal Upadhyay College, University of Delhi (2 terms)
Member, Governing Body, Shaheed Sukhdev College of Buss. Studies, University of Delhi (1 term)
Member, Governing Body, International Student House, University of Delhi (Since 2009)
Member, Committees constituted by University of Delhi for inquiry, purchases etc.
Assistant Provost, Hostel, University of Lucknow
Nodal PI, IndoUS Center for Biological Timing, University of Delhi
Convener, IRHPA Center for Excellence in Biological Rhythm Research
Member, Uttar Pradesh Wildlife and Biodiversity board (1 term)
Member, Scientific Committee of the International Ornithological Congress, Hamburg.

RESEARCH PROJECTS

Current Major projects

- 2020-2023** Mechanism of seasonal phenotypic plasticity in latitudinal songbird migrants – funded by SERB, New Delhi (Rs. 54 Lacs; Co-PI)
- 2020-2023** Effects of illuminated light environment on metabolism and reproduction in continuously breeding vertebrate: A study on zebra finches (Rs. ~ 50 Lacs; Co-PI).

Completed Major projects

- 2016-2020** Mechanism of food-induced effects on reproduction and metabolism: A study on Zebra finches; funded by SERB, New Delhi
- 2013-2019** Anticipation in genes: Molecular, physiological and behavioral correlates of response of circa-annual clocks to seasons in night-migratory songbirds – funded by Department of Biotechnology, Govt. of India. (**Rs. ~4.8 Crores**, as per sanction)
- 2014-2018** Indo-US Center for Biological Timing, funded by IUSSTF, New Delhi
- 2007-2014** Avian circadian seasonal systems: from behaviour to molecules – funded under IRHPA scheme by the Department of Science and Technology (DST), India (**Rs. ~3.5 Crores**)
- 2011-2014** Circadian brain photoreceptors in birds I: Localization and functional evaluation- funded by Council of Scientific & Industrial Research, India
- 2011-2014** Neurobiology and Understanding the Circadian System Linkage of Cognitive Performance in an Avian Model System- funded under DST-CSI program
- 2012-2014** Mechanism of adaptation to seasonal changes in vertebrates – funded by Department of Science and Technology, India

- 2007-2010** Immunohistochemical study of seasonal system in birds - funded by the Council of Scientific & Industrial Research, India.
- 2005-2009** Role of food in regulation of circadian and seasonal responses in birds- funded by the Department of Science and Technology, India, (Co-PI).
- 2002-2005** An immunohistochemical study of the photoperiodic transduction in birds- funded by the Council of Scientific & Industrial Research, India.
- 2000-2002** DST- DAAD International Collaboration project with Max-Planck Institute of Biological Rhythm Research, Andechs, Germany.
- 1999-2002** Role of melatonin in avian circadian system - funded by the Department of Science and Technology, India.
- 1999-2002** Sensitivity of circadian entrainment pathway in the bunting (*Emberiza sp.*) – funded by the Council of Scientific & Industrial Research, India.
- 1996-1999** Spectral sensitivity of photoreceptors mediating photoperiodic entrainment and induction in the blackheaded bunting - funded by CSIR, India.
- 1992-1995** Light relations of circadian rhythms in the migratory blackheaded bunting, *Emberiza melanocephala* - funded by CSIR, India.
- 1989-1992** Strategies of endogenous programming in Palearctic-Indian migratory birds – funded by the University Grants Commission of India.
- 1988-1991** Properties of biological clocks underlying photoperiodic phenomena in birds – funded by the Department of Science and Technology, India.
- 1989-1990** Photoperiodic control of timing of gonadal regression (refractoriness) in birds - funded by the University Grants Commission of India.

RESEARCH COLLABORATION

- Salk Institute for Biological Studies, San Diego, USA (Dr. Satchidananda Panda)
- University of California, San Diego, USA (Prof. Michael Gorman)
- University of Lucknow, India (Prof. Sangeeta Rani, Dr. Shalie Malik)
- National Institute of Science Education and Research, India (Dr. Praful Singru)
- North-Eastern Hill University, Shillong (Prof. A. S. Dixit)
- CCS University, Meerut, India (Prof. S. K. Bhardwaj)
- University of Mangalore, India (Dr. Monika Sadananda)
- Max-Planck Institute for Ornithology, Germany

LECTURES DELIVERED/ CHAIRED SESSIONS:

ABROAD

- **2022** International Symposium on Avian Endocrinology, Edinburgh
- **2021** 5th Asian Chronobiology Forum symposium, Kaifeng, China (Virtual)
- **2020** Annual Seasonality Symposium, Glasgow, UK (Virtual)
- **2019** V World congress in Chronobiology, Suzhou, China
- **2019** JBR-SAGE symposium on Chronobiology, Suzhou, China
- **2018** 27th International Ornithological Congress, Vancouver, Canada
- **2018** 3rd Asian Chronobiology Forum and Sapporo symposium, Sapporo, Japan
- **2018** The Society for Integrative and Comparative Biology symposium, San Francisco (attended)
- **2017** 2nd Asian Chronobiology Forum, Hohhot, China
- **2017** International Symposium on Biological Timing and Human Health, India
- **2016** International conference on Chronobiology, China
- **2015** Cold Spring Harbor Asia Symposium on Biological Rhythms, China
- **2015** EBRS/ WCC Chronobiology conference, Manchester, UK
- **2015** Neuropeptides & Neurotransmitters: Role of Physiology & Pathophysiology, Bhubaneswar
- **2014** International Congress on Ornithology, Japan
- **2014** International Congress on Chronobiology, Romania
- **2012** International Symposium on Avian Endocrinology, Japan
- **2010** The John Hopkins University, USA
- **2010** University of Kentucky, Kentucky, USA
- **2010** Alabama State University, Alabama, USA

- 2008 IV Intl, Conference in Africa for Comparative Physiology & Biochemistry, Kenya
- 2007 Nogyoa University, Japan
- 2007 Waseda University, Japan
- 2007 Tokyo University, Japan
- 2006 International Ornithological Congress, Hamburg, Germany
- 2005 Max Planck Institute for Ornithology, Andechs, Germany March.
- 2005 Dept. of Func. Genomics & Bioregulation, Inst. Animal Sci. Mar., Neustadt, Germany.
- 2005 Conference on Optimality in Bird Migration, Wilhelmshaven, Germany.
- 2004 International Symposium of Avian Endocrinology, Arizona, USA, June.
- 2004 Texas A& M University (USA), Department of Biology, Seminar series.
- 2000 Gordon Research Conference on Pineal Cell Biology, Oxford (UK).
- 1992 Vth International Symposium on Avian Endocrinology; Edinburgh (UK).
- 1992 Intl. Symp.on Melatonin and Pineal Gland from Basic Sci. to Clinical Appl.; Paris.

INDIA

- 2021 International conference on Chronobiology, JNCASR, Bangalore
- 2021 International Symp. on Advances in Comp. Endocrinology and Behavioral Ecology, Pune
- 2021 National Symposium on Avian Biology, Haridwar
- 2021 Intl colloq/ on Regulatory Mechanisms underlying Behav, Physiol and Development, Delhi
- 2020 6th World Congress of Chronomedicine, Khajuraho
- 2019 2nd National symposium on Avian Biology, Tirupati
- 2019 Sleep conference and workshop, Chennai
- 2019 FIPS congress, Faridabad
- 2019 Society of Neurochemistry, Delhi
- 2019 ICSE conference, Nagpur
- 2019 SRBCE conference, Baroda
- 2019 Two lectures in IISER, Mohali
- 2018 Ethological Society of India meeting and symposium, Calicut
- 2018 Association of bird biologists in India symposium, Aizawl
- 2017 Indian Academy of Neuroscience conference, Cuttack
- 2017 Ethological Society of India meeting and symposium, Bhuj
- 2017 SRBCE conference, Hyderabad
- 2016 XXVI meeting and National Symposium on Chronobiology, June 2016; Mysuru
- 2016 Indian Science Congress Association, January 2016; Mysuru
- 2015 XXV meeting and National Symposium on Chronobiology, Raipur
- 2014 Society for Comparative Endocrinology and Reproductive Biology, Trichi.
- 2013 International conference on Comparative Endocrinology, Nagpur
- 2011 4th National Conference on Nanomaterials and Nanotechnology, Lucknow
- 2011 International Congress of Indian Ornithology, SACON, Coimbatore
- 2011 35th annual conference of Ethological Society of India
- 2008 Indian Society for Chronobiology, Raipur
- 2008 Thematic workshop in Avian Biology
- 2008 Public lecture at IISER, Mohali.
- 2008 Lectures, Wild Life Institute, Dehradun.
- 2008 Invited lecture at Department of Zoology, Pune University.
- 2007 Lecture in SERC School in Herpetology, North-Orissa University, Baripada
- 2007 PAC Animal Science lecture at Delhi University
- 2006 Trends and techniques in Molecular Endocrinology
- 2006 Invited lecture in seminar and workshop in University of Delhi
- 2006 Invited lecture in Symposium of Indian Society for Chronobiology, Shillong.
- 2006 Recent Advance in Appl. Zoology, CCS University, Meerut, (Plenary lecture).
- 2006 Gold medal oration, SRBCE meeting, IIT Roorkee, February.
- 2006 Refresher Course in Zoology, University of Delhi, Delhi, January.

- **2006** 93rd session of ISCA (Animal, Veterinary and Fishery Science), Hyderabad, January.
- **2005** Refresher Course in Zoology, University of Delhi, Delhi; December.
- **2005** National Symposium on Chronobiology; Varanasi.
- **2005** National Sym. on Comp. Endo. and Rep. Physiol.: Retrospect and prospect; Delhi,
- **2005** Critical appraisal & hands-on training on adv. tech. in endocrine research, Aligarh).
- **2005** XXII National Symposium of the SEBCE; Santiniketan.
- **2004** National Symposium on Chronobiology; Chidambaram.
- **2002** Innovations and Prospects in Life Sciences, Raipur.
- **2002** Natl Sem. on Environmental Biology and Fish Biology, Vishwa Bharti, Santiniketan.
- **2002** XX National Symposium of SRBCE; Tiruchirappalli.
- **2002** Refresher course in Zoology, Gorakhpur University.
- **2001** Refresher course in Zoology, Allahabad University.
- **2001** Refresher course in Zoology, Lucknow University.
- **2001** Refresher course in Zoology, Jiwaji University, Gwalior.
- **2000** XIX Natl. Symposium of Soc. for Reprod. Biology and Comp. Endocrinology; Baroda.
- **2000** National Symposium on Chronobiology; Gulbarga.
- **1999** National Symposium on Recent Advances in Pineal Research; Raipur.
- **1994** National Symposium on Ethology; Lucknow.
- **1994** National Symposium on Chronobiology; Lucknow.
- **1993** International Symposium on Recent Trends in Life Sciences; Hyderabad (India).
- **1990** International Symposium on Current Status of Chronobiology; Raipur (India).
- **1990** Seminar on Wildlife and Biotechnology; Ambah (M. P.).
- **1985** Second National Convention of Young Scientists; Meerut.

• **PARTICIPATION IN RESEARCH AND EDUCATIONAL TRAINING**

- **2021** Workshop on Impact of Surrounding Env. on Biology of Animals. CCS University, Meerut
- **2002-15** Faculty, SERB Schools in Chronobiology/ Herpetology/ Neuroscience/ Avian Biology.
- **2000** 37th Natl Workshop on Radiochemistry and Appl. of Radioisotopes; Pantnagar.
- **1995** UGC Refresher Course in Zoology; Ch. Charan Singh University, Meerut.
- **1990** Academic Staff Orientation Program; Aligarh Muslim University, Aligarh
- **1989** UGC Refresher Course in Zoology; Kashmir University, Srinagar.
- **1989** 2-week Intl workshop on Methods and Concepts in Chronobiology; Madurai
- **1985** 2-week training on Chronobiological techniques; M K University, Madurai.

TEACHING: Both undergraduate and post-graduate teaching since 01 January 1983. Have taught many courses in 5 different Indian universities, and in a US university (Texas A&M University, courses marked by an asterisk). Animal Behaviour; Animal Physiology; Biology of Reproduction; Chronobiology; Comparative Endocrinology*; Endocrine Physiology; Environmental Biology; Neuroendocrinology, Human Anatomy and Physiology*; Regulatory and Behavioral Neuroscience*; General Zoology (Vertebrates and Invertebrates)

SERVICE TO PROFESSION

Advisory member to Special Assistance Program of UGC in various universities; Member of Board of Studies of different Universities; Member of Research Degree committee of different Universities; Member of various committees of the University.

Peer review of research proposals: Department of Science and Technology; Council of Scientific and Industrial Research; Department of Biotechnology; National Science Foundation (USA); Rufford Sarnam Grant (UK); Israel Science Foundation (Israel), Polish Science Academy

Peer review of scientific journals: Animal Behavior; BMC Ecology; BMC Genetics; Cell and Tissue Research; Chronobiology International; Comparative Biochemistry and Physiology A; Comparative Biochemistry and Physiology D; Current Science; Evolution and Development; Frontiers in Physiology; Experimental Eye Res.; Frontiers in Neuroendocrinology; Functional

Ecology; Gene; Genomics; General and Comparative Endocrinology, Hormones and Behaviour; Indian J. Experimental Biology; Journal of Comparative Physiology; Journal of Circadian Rhythms, Journal of Experimental Biology, Journal of Ornithology, Journal of Neuroendocrinology; J. Field Ornithology; J. Pineal Research; Molecular Ecology; Molecular Neurobiology; Naturwissenschaften; New Zealand J. Zoology; Photochemistry and Photobiology; Physiology and Biochemical Zoology; PLoS One; Proc. Indian National Science Academy (PINSAs); Poultry Science; Royal Society Open Science; Scientific Reports; Theriogenology;

Scientific activity organized

- 2021** Intl. colloq. on Regulatory Mechanisms underlying Behav., Physiol. and Dev., Delhi (Joint)
- 2019** Workshop on Time, Brain and Behaviour (Joint)
- 2017** International Symposium on Biological Timing and Human Health
- 2012** International Congress on Chronobiology
- 2011** Meeting of Bird Biology core group.
- 2010** Ninth SERC School in Chronobiology
- 2002** First SERC School in Chronobiology
- 1994** National Symposium of Indian Society for Chronobiology.

BOOKS AUTHORED/ EDITED (includes special journal volume)

- 2017** Biological Timekeeping: Clocks, Rhythms and Behavior, edited (Springer)
- 2017** Special issue on Rhythms, Calendar & Biological Processes. Biological Rhythm Research, 2017
- 2014** Special volume on Chronobiology, Indian J. Experimental Biology. May 2014.
- 2002** Biological Rhythms, edited (Narosa Publishing House, New Delhi/ Springer-Verlag, Germany).
- 1996** Animal Behaviour (Himalaya Publishing House, Bombay).

ARTICLES PUBLICATION MATRIX	
Category	Number
Original Research Articles (ORA)	176
Books edited/ authored	03
Special volume of Journals edited	02
Reviews	24
Book Chapters	11
General articles	06
SCIENTIFIC ACHIEVEMENT INDEX (in terms of ORA)	
Total Impact Factor Accrued (based on 5-year IF)	510
Average impact factor	2.8
<i>h</i> -index	33
i-10 index (Google Scholar)	102
RG Score (Research Gate score)	41.08
Total citations	3587

Research Interest						2499
Reads						42755
LIST OF JOURNALS IN WHICH ORIGINAL RESEARCH ARTICLES HAVE APPEARED						
S. No.	Journal Name	Publisher	Impact Factor (5-year average)	No. of articles	Total IF	
1	Journal of Pineal Research	Wiley	15.2	3	45.6	
2	Proceedings of the National Academy of Sciences USA	National Academy of Sciences USA	10.6	1	10.6	
3	Environmental Pollution	Elsevier	8.0	2	16	
4	Experientia (Cellular and Molecular Life Sciences)	Birkhäuser Verlag AG	6.8	1	6.8	
5	The FASEB Journal	FASEB	5.4	1	5.4	
6	Proceeding of Royal Society B	Royal Society, UK	5.4	4	21.6	
7	Microbial Research	Elsevier	4.9	1	1	
8	Scientific Reports	Nature	4.6	2	9.2	
9	BMC Genomics	BMC	4.1	1	4.1	
10	Journal of Photochemistry and Photobiology B	Elsevier	4.0	2	8.0	
11	Hormones and Behaviour	Elsevier Publ. House	4.0	3	12.0	
12	Journal of Sleep Research	Wiley	4.0	1	4.0	
13	Frontiers in Physiology	Frontiers Journals	3.9	1	3.9	
14	Molecular and Cellular Endocrinology	Elsevier	3.8	4	15.2	
15	Brain Structure and Function	Springer	3.8	1	3.0	
16	Cell and Tissue Research	Springer	3.5	1	3.5	
17	Journal of Biological Rhythms	SAGE Publications	3.5	3	10.5	
18	Neurobiology of Learning and Memory	Elsevier	3.4	1	3.4	
19	Journal of Experimental Biology	The Company of Biologists	3.4	12	40.8	
20	Neuroscience	Elsevier	3.3	1	3.3	
21	BMC Frontiers in Zoology	BMC	3.3	1	3.3	
22	J. of Comparative Neurology	Wiley	3.1	2	6.2	
23	Behavioral Brain Research	Elsevier	3.1	3	9.3	
24	Molecular reproduction and development	Wiley	3.1	1	3.1	
25	Journal of Neuroendocrinology	Wiley	3.1	5	15.5	
26	European Journal of Neuroscience	Wiley	3.1	3	9.3	
27	Molecular Brain Research	Elsevier	3.0	1	3	
28	PLoS One	PloS	3.0	2	6	
29	Animal Behaviour	Elsevier	3.0	1	3	

30	Chronobiology International	Taylor & Francis	3.0	12	36
31	Physiology and Behaviour	Elsevier	2.9	10	29
32	Photochemistry and Photobiological Sciences	Royal Society of Chemistry	2.8	2	5.6
33	Experimental Physiology	Wiley	2.7	2	5.4
34	Condor	American Ornithological Society	2.6	2	5.2
35	General and Comparative Endocrinology	Elsevier	2.4	9	21.6
36	Journal of Chemical Neuroanatomy	Elsevier	2.4	1	2.4
37	Neuroscience Letters	Elsevier	2.3	1	2.3
38	Comparative Biochemistry Physiology A Molecular & Integrative Physiology	Elsevier	2.2	3	6.6
39	Journal of Comparative Physiology B	Springer	2.1	2	4.2
40	BMC:Reproductive Biology and Endocrinology	BMC	2.1	1	2.1
41	Ibis	Wiley	2.1	2	4.2
42	Physiological and Biochemical Zoology	University of Chicago Press	2.1	2	4.2
43	Animal Reproduction Science	Elsevier	2	4	8
44	Journal of Comparative Physiology A	Springer	1.9	4	7.6
45	Reproduction, Nutrition and Development		1.9	4	7.6
46	Naturwissenschaften	Springer	1.8	2	3.6
47	Journal of Biosciences	Indian Academy of Science	1.8	5	9
48	Experimental Brain Research	Springer	1.8	1	1.8
49	Journal of Zoology (London)	Wiley	1.7	2	3.4
50	Journal of Ornithology	Springer	1.5	5	7.5
51	Animal Biology	Brill	1.5	1	1.5
52	Journal of Experimental Zoology A	Wiley	1.4	7	9.8
53	Indian Journal of Experimental Biology	NISCAIR	0.9	16	14.4
54	Environmental Control in Biology	JASBEES	0.8	2	1.6
55	Current Science	Current Science Asso.	0.8	8	6.4
56	Biological Rhythm Research	Taylor & Francis	0.8	7	5.6
57	Acta Physiologica Hungarica	Hungarian Academy of Sciences	0.6	1	0.6
58	Sleep and Vigilance	Springer		1	
59	Birds	MDPI		1	
60	Indian Journal of Zoology			1	
61	Comparative Physiology and Ecology	Jodhpur, India		1	
62	Pavo	Society of Animal Morphologists and		1	

BOOKS PUBLISHED

1. **V. Kumar** (Editor). 2017. Biological Timekeeping: Clocks, Rhythms and Behaviour. Springer (Germany/ India)
2. **V. Kumar** (Editor). 2002. Biological Rhythms. Springer-Verlag, Germany/ Narosa Publishing House (India)
3. **V. Kumar** (author). 1996. Animal Behaviour. Himalaya Publishing House (India).

SPECIAL VOLUME OF JOURNALS EDITED

1. **V. Kumar** (Editor). Indian Journal of Experimental Biology: Special Issue on Chronobiology (Time, Clocks and Calendars). 2014, volume 52
2. **V. Kumar** (Editor). Biological Rhythm Research: Special Issue on Rhythms, Calendar and Biological Processes, 2017, volume 48.

ORIGINAL RESEARCH ARTICLES (impact factor 5-year average)

2022

1. A. Buniyaadi, A. Prabhat, S. K. Bhardwaj and **V. Kumar** (2022) Night melatonin levels affect cognition in diurnal animals: Molecular insights from a corvid exposed to an illuminated night environment. Environmental Pollution, doi.org/10.1016/j.envpol.2022.119618 **IF 8.07**
2. T. Batra, A. Buniyaadi and **V. Kumar** (2022) Daytime restriction of feeding prevents illuminated night-induced impairment of metabolism and sleep in diurnal zebra finches. Physiology & Behavior 253, doi.org/10.1016/j.physbeh.2022.113866 **IF: 2.9**
3. A. Sharma, S. Das, D. Singh, S. Rani and **V. Kumar** (2022) Differences in transcription regulation of diurnal metabolic support to physiologically contrasting seasonal life-history states in migratory songbirds. Journal of Ornithology doi.org 10.1007/s10336-021-01926-5. **IF 1.5**

2021

4. N. A. Jha, S. K. T. Taufique and **V. Kumar** (2021) Born without night: The consequence of the no-night environment on reproductive performance in diurnal zebra finches. Journal of Experimental Biology doi: 10.1242/jeb.242996. **IF 3.4**
5. A. Sharma, S. Das, S. Sur, J. Tiwari, K. Chaturvedi, N. Agarwal, S. Malik, S. Rani and **V. Kumar** (2021) Photoperiodically driven transcriptome-wide changes in the hypothalamus reveal transcriptional differences between physiologically contrasting seasonal life-history states in migratory songbirds. Scientific Reports, doi: 10.1038/s41598-021-91951-4 **IF 4.6**
6. M. Korman, V. Tkachev, C. Reis, Y. Komada, S. Kitamura, D. Gubin, **V. Kumar**, T. Roenneberg (2021) Outdoor light exposure and longer sleep promote wellbeing under COVID-19 mandated restrictions. Journal of Sleep Research. **IF 3.98**
7. A. Sharma, D. Singh, P. Gupta, S. K. Bhardwaj, I. Kaur and **V. Kumar** (2021) Molecular changes associated with migratory departure from wintering areas in obligate songbird migrants. Journal of Experimental Biology doi:10.1242/jeb.242153. **IF 3.4**

8. S. Sur, A. Sharma, I. Malik, S. K. Bhardwaj and V. Kumar (2021) Daytime light spectrum affects photoperiodic induction of vernal response in obligate spring migrants. *Comparative Biochemistry and Physiology, Part A: Molecular & Integrative Physiology* doi.org/10.1016/j.cbpa.2021.111017 **IF 2.2**
9. N. Singh, N. A. Jha, S. Rani and V. Kumar (2021) The association of internet overuse with sleep and mood in Indian female students. *Sleep and Vigilance* doi: 10.1007/s41782-021-00129-5
10. A. Prabhat, M. Kumar, A. Kumar, **V. Kumar** and S. K. Bhardwaj (2021) Effects of Night Illumination on Behavior, Body Mass and Learning in Male Zebra Finches. *Birds* 2: 381–394.

2020

11. I. Malik, T. Batra, S. Das and **V. Kumar** (2020) Light at night affects gut microbial community and negatively impacts host physiology in diurnal animals: Evidence from captive zebra finches. *Microbiological Research* 241: 126597 **IF 4.86**
12. S. Sur, K. Chaturvedi, A. Sharma, S. Malik, S. Rani and V. Kumar (2020) Ambient temperature affects multiple drivers of physiology and behaviour: Adaptation for timely departure of obligate spring migrants. *Journal of Experimental Biology* **IF 3.4**
13. G. Majumdar, G. Yadav, S. Malik, S. Rani, J. Balthazart and **V. Kumar** (2020) Hypothalamic plasticity in response to changes in photoperiod and food quality: an adaptation to support pre-migratory fattening in songbirds? *European Journal of Neuroscience* doi:10.1111/ejn.14994 **IF: 3.1**
14. M. Korman, V. Tkachev, C. Reis, Y. Komada, S. Kitamura, D. Gubin, **V. Kumar**, T. Roenneberg (2020) COVID-19-mandated social restrictions unveil the impact of social time pressure on sleep and body clock. *Scientific Reports* **10**, 22225 (2020). <https://doi.org/10.1038/s41598-020-79299-7>. **IF: 4.6**
15. O. P. Singh, N. Agarwal, A. Yadav, S. Basu, S. Malik, S. Rani, V. Kumar*, P. S. Singru* (2020) Concurrent changes in photoperiod-induced seasonal phenotypes and hypothalamic CART peptide-containing systems in night-migratory redheaded buntings. (* Co-corresponding authors). *Brain Structure and Function* 225(9), 2775-2798 doi.org/10.1007/s00429-020-02154-y **IF 3.8**
16. Khyati, I. Malik, N. Agrawal and **V. Kumar** (2020) Melatonin and curcumin reestablish disturbed circadian gene expressions and restore locomotion ability and eclosion behavior in *Drosophila* model of Huntington's disease. *Chronobiology International*. doi:10.1080/07420528.2020.1842752. **IF 3.0**
17. T. Batra, I. Malik, A. Prabhat, S. K. Bhardwaj and **V. Kumar** (2020) Sleep in unnatural times: Illuminated night negatively affects sleep and associated hypothalamic gene expressions in diurnal zebra finches. *Proceedings of Royal Society B*. **287**: 20192952. doi.org/10.1098/rspb.2019.2952 **IF 5.4**
18. A. Prabhat, T. Batra and **V. Kumar** (2020) Effects of timed food availability on reproduction and metabolism in zebra finches: Molecular insights into homeostatic adaptation to food-restriction in diurnal vertebrates. *Hormones & Behavior* **125**: doi.org/10.1016/j.yhbeh.2020.104820. **IF 4.0**
19. A. Prabhat, I. Malik, N.A. Jha, S. K. Bhardwaj and **V. Kumar** (2020) Developmental effects of constant light on circadian behaviour and gene expressions in zebra finches: Insights into mechanisms of metabolic adaptation to aperiodic environment in diurnal animals. *Journal of Photochemistry & Photobiology, B: Biology* (doi.org/10.1016/j.jphotobiol.2020.111995. **IF 4.0**

20. S. Sur, A. Sharma, S. K. Bhardwaj and V. Kumar (2020) Involvement of steroid and antioxidant pathways in spleen-mediated immunity in migratory birds. *Comparative Biochemistry and Physiology, Part A: Molecular & Integrative Physiology* 250: doi.org/10.1016/j.cbpa.2020.110790 **IF 2.2**
21. I. Mishra, N. Agarwal, A. Prabhat, T. Batra, S. K. Bhardwaj and **V. Kumar** (2020) Changes in brain peptides associated with reproduction and energy homeostasis: Putative roles of GnRH-II and TH in determining the reproductive performance in response to daily food availability times in diurnal zebra finches. *Journal of Neuroendocrinology* doi: 10.1111/jne.12825. **IF 3.1**
22. A. Sharma, S. das, R. Komal, S. Malik, S. Rani and **V. Kumar** (2020) Seasonal reproductive state determines gene expression in the hypothalamus of a latitudinal migratory songbird during the spring and autumn migration. *Molecular and Cellular Endocrinology* doi.org/10.1016/j.mce.2020.110794. **IF 3.8**
23. V. Shuka, S. Rani, S. Malik, V. Kumar and M. Sadananda (2020) Neuromorphometric changes associated with photostimulated migratory phenotype in the Palaearctic-Indian male redheaded bunting. *Experimental Brain Research* (in press). **IF 1.8**
24. I. Mishra, A. Sharma, A. Prabhat, T. Batra, I. Malik and **V. Kumar** (2020) Changes in DNA methylation and histone modification gene expression in response to daily food times in zebra finches: Epigenetic implications. *Journal of Experimental Biology* doi: 10.1242/jeb.217422. **IF 3.4**
25. I. Mishra, T. Batra, A. Prabhat, N. Agarwal, S. K. Bhardwaj and **V. Kumar** (2020) Developmental effects of daily food availability times on song behaviour and neuronal plasticity of song-control system in male zebra finches. *Behavioral Brain Research* doi.org/10.1016/j.bbr.2020.112497 **IF: 3.1**
- 2019**
26. A. Sharma and **V. Kumar** (2019) Metabolic plasticity mediates differential responses to spring and autumn migrations: Evidence from gene expression patterns in migratory buntings. *Experimental Physiology*, 104: 1841-1857. **IF: 2.7**
27. A. Buniyaadi, S. K. T. Taufique and **V. Kumar** (2019) Self-recognition in corvids: Evidence from the mirror-mark test in Indian house crows (*Corvus splendens*). *Journal of Ornithology*, 161: 341-350. **IF: 1.5**
28. T. Batra, I. Malik and **V. Kumar** (2019) Illuminated night alters behaviour and negatively affects physiology and metabolism in diurnal zebra finches. *Environmental Pollution*, 254: 112916. **IF. 7**
29. S. Sur, A. Sharma, A. K. Trivedi, S. K. Bhardwaj and **V. Kumar** (2019) Temperature affects liver and muscle metabolism in photostimulated migratory redheaded buntings (*Emberiza bruniceps*). *Journal of Comparative Physiology B*, 189: 623-635. **IF: 2.1**
30. N. Agarwal, R. Komal, Y. Kumari, S. Malik, S. Rani and **V. Kumar** (2019) Development of vernal migration in redheaded buntings: Concurrent behavioral, physiological and neural changes under stimulatory photoperiods. *Photochemical & Photobiological Sciences*, 18: 2509-2520. **IF: 2.8**
31. A. Prabhat, N. A. Jha, S. K. T. Taufique and **V. Kumar** (2019) Dissociation of circadian activity and singing behavior from gene expression rhythms in the hypothalamus, song control nuclei and cerebellum in diurnal zebra finches. *Chronobiology International*, 36: 1268-1284. **IF 3.0**
32. A. Sharma, S. Das and **V. Kumar** (2019) Transcriptome-wide changes in testes reveal molecular differences in photoperiod-induced seasonal reproductive life-history states in migratory songbirds. *Molecular Reproduction and Development*, 86: 956-963. **IF: 3.1**

33. A. K. Trivedi, S. Sur, A. Sharma, S. K. T. Taufique, N. J. Gupta and **V. Kumar** (2019) Temperature alters the hypothalamic transcription of photoperiod responsive genes in induction of seasonal response in migratory redheaded buntings. *Molecular and Cellular Endocrinology*, 493: 110454. **IF: 3.8**
34. A. K. Trivedi, I. Mishra and **V. Kumar** (2019) Temporal expression of genes coding for arylalkamine-N-acetyltransferase and melatonin receptors in circadian clock tissues: Circadian rhythm dependent role of melatonin in seasonal responses. *Physiology & Behavior*, 207: 167-178. **IF: 2.9**
35. I. Mishra and **V. Kumar** (2019) The quantity-quality trade-off: Differential effects of daily food times on reproductive performance and offspring quality in diurnal zebra finches. *Journal of Experimental Biology*, 222: jeb196667. **IF: 3.4**
- 2018**
36. D. Singh, V. Swarup. H. Le and **V. Kumar** (2018) Transcriptional signatures in liver reveal metabolic adaptations to seasons in migratory blackheaded buntings. *Frontiers in Physiology*, 9: 1568. **IF: 3.9**
37. S. K. T. Taufique, A. Prabhat and **V. Kumar** (2018) Illuminated night alters hippocampal gene expressions and induces depressive-like response in diurnal corvids. *European Journal of Neuroscience*, 48: 3005-3018. **IF: 3.1**
38. S. K. T. Taufique, A. Prabhat and **V. Kumar**. Light at night affects hippocampal and nidopallial cytoarchitecture: Implication for an impairment of brain function in diurnal corvids. *Journal of Experimental Zoology A*, 331: 149-156. **IF: 1.4**
39. A. Sharma, D. Singh, S. Malik, N. J. Gupta, S. Rani and **V. Kumar** (2018) Difference in control between spring and autumn migration in birds: Insight from seasonal changes in hypothalamic gene expression in captive buntings. *Proceedings of Royal Society B*, 285: 20181531. **IF: 5.4**
40. I. Mishra, N. Agarwal, S. Rani and **V. Kumar** (2018) Scotostimulation of reproductive neural pathways and gonadal maturation are not correlated with hypothalamic expression of deiodinases in subtropical spotted munia. *Journal of Neuroendocrinology*, 30: e12627. **IF: 3.1**
41. A. Sharma, D. Singh, S. Das and **V. Kumar** (2018) Hypothalamic and liver transcriptome from two critical life-history stages in a migratory songbird. *Experimental Physiology*, 103: 556-569. **IF: 2.7**
42. I. Mishra, D. Singh and **V. Kumar** (2018) Temporal expression of c-fos and genes coding for neuropeptides and enzymes of amino acid and amine neurotransmitter biosynthesis in retina, pineal and hypothalamus of a migratory songbird: Evidence for circadian rhythm dependent seasonal responses. *Neuroscience* 371:309-324. **IF: 3.3**
43. S. K. T. Taufique, A. Prabhat and **V. Kumar** (2018) Constant light environment suppresses maturation and reduces complexity of new born neuron processes in the hippocampus and caudal nidopallium of a diurnal corvid: Implication for impairment of the learning and cognitive performance. *Neurobiology of Learning and Memory* 147: 120-127. **IF: 3.4**
44. N. Agarwal, I. Mishra, S. Rani and **V. Kumar** (2018) Temporal expression of clock genes in central and peripheral tissues of spotted munia under varying light conditions: evidence for circadian regulation of daily physiology in a non-photoperiodic circannual songbird species. *Chronobiology International* 35: 617-632. **IF: 3.0**

2017

45. Mishra I, D. Singh and **V. Kumar** (2017) Daily levels and rhythm in circulating corticosterone and insulin are altered with photostimulated seasonal states in night-migratory blackheaded buntings. *Hormones and Behavior* 94: 114-123. **IF: 4.0**
46. N. Agarwal, I. Mishra, R. Komal, S. Rani and **V. Kumar** (2017) Circannual testis and moult cycles persist under photoperiods that disrupt circadian activity and clock gene cycles in spotted munia. *Journal of Experimental Biology*, 220: 4162-4168. **IF: 3.4**
47. N. A. Jha and **V. Kumar** (2017) Effect of no-night light environment on behaviour, learning performance and personality in zebra finches. *Animal Behavior*, 132: 29-47. **IF: 3.0**
48. I. Mishra, D. Singh and **V. Kumar** (2017) Seasonal alterations in the daily rhythms in hypothalamic expression of genes involved in the photoperiodic transduction and neurosteroid-dependent processes in migratory blackheaded buntings. *Journal of Neuroendocrinology*, 29:1-10. **IF: 3.1**
49. N. J. Gupta, **V. Kumar** and S. Panda (2017). A camera-phone based study reveals erratic eating pattern and disrupted daily eating-fasting cycle among adults in India. *PLoS One*, 12: e0172852. **IF: 3.0**
50. D. Singh and **V. Kumar** (2017) Extra-hypothalamic brain clocks in songbirds: Photoperiodic state dependent clock gene oscillations in night-migratory blackheaded buntings, *Emberiza melanocephala*. *Journal of Photochemistry and Photobiology B*, 169: 13-20. **IF: 4.0**
51. N. A. Jha and **V. Kumar** (2017) Female conspecifics restore rhythmic singing behaviour in arrhythmic zebra finches. *Journal of Biosciences*, 42: 139-147. **IF: 1.8**
52. I. Mishra, S. K. Bhardwaj, S. Malik and **V. Kumar** (2017) Concurrent hypothalamic gene expression under acute and chronic long days: Implications for initiation and maintenance of photoperiodic response in migratory songbirds. *Molecular and Cellular Endocrinology*, 439: 81-94. **IF: 3.8**
- 2016**
53. S. K. T. Taufique and **V. Kumar** (2016) Differential activation and tyrosine hydroxylase distribution in the hippocampal, pallial and midbrain brain regions in response to cognitive performance in Indian house crows exposed to abrupt light environment. *Behavioral Brain Research*, 314: 21-29. **IF: 3.1**
54. N. A. Jha and **V. Kumar** (2016) Protein rich food does not affect singing behavior and song quality in adult zebra finches, *Taeniopygia guttata*. *Current Science*, 111: 1693-1696. **IF: 0.8**
55. D. Singh, N. Trivedi, S. Malik, S. Rani and **V. Kumar** (2016) Timed food availability affects circadian behavior but not the neuropeptide Y expression in Indian weaverbirds exposed to atypical light environment. *Physiology & Behavior*, 161: 81-89. **IF: 2.9**
56. Surbhi, A. Rastogi, S. Malik, S. Rani and **V. Kumar** (2016) Seasonal neuronal plasticity in song-control and auditory forebrain areas in subtropical non-migratory and Palearctic-Indian migratory male songbirds. *Journal of Comparative Neurology*, 524: 2914-2929. **IF: 3.1**
57. O. P. Singh, S. Kumar, U. Singh, **V. Kumar**, R. Lechan and P. Singru (2016) Cocaine-and amphetamine regulated transcript peptide (CART) in the brain of zebra finch, *Taeniopygia guttata*: Organization, interaction with neuropeptide Y, and response to changes in energy status. *Journal of Comparative Neurology*, 524: 2914-2929. **IF: 3.1**
58. Surbhi, A. Rastogi, S. Malik, S. Rani and **V. Kumar** (2016) Changes in brain peptides associated with reproduction and energy homeostasis in photosensitive and photorefractory

migratory redheaded buntings. *General and Comparative Endocrinology*, 230-231: 67-75. **IF: 2.4**

- 59.I. Mishra, D. Singh and **V. Kumar** (2016) Daily expression of genes coding for neurotransmitters in central and peripheral tissues of redheaded bunting: implication for circadian regulation of physiology in songbirds. *Chronobiology International*, 33: 280-292. **IF: 3.0**
60. A. K. Trivedi, J. Kumar, S. Rani, **V. Kumar** (2016) Pinealectomy abolishes circadian behavior and interferes with circadian clock gene oscillations in brain and liver but not retina in a migratory songbird. *Physiology & Behavior* 156: 156-163. **IF: 2.9**
61. A. Rastogi, Surbhi, S. Malik, S. Rani and **V. Kumar** (2016) Annual life-history dependent differences in the seasonal change in neural activity of the olfactory system between non-migratory and migratory songbirds. *Behavioral Brain Research*, 296:233-239. **IF: 3.1**
62. S. K. T. Taufique, N. A. Jha and **V. Kumar** (2016) Circadian rhythm determines the timing of activity, and ingestive and grooming behaviours in Indian house crows, *Corvus splendens*. *Current Science*, 110: 897-901. **IF: 0.8**

2015

63. D. Singh, A. K. Trivedi, S. Rani, S. Panda and **V. Kumar** (2015) Circadian timing in central and peripheral tissues in a migratory songbird: Dependence on annual life-history states. *The FASEB Journal*, 29: 4248-4255. **IF: 5.4**
64. G. Majumdar, G. Yadav, S. Rani and **V. Kumar** (2015) Bird eyes distinguish summer from winter: Retinal response to acute photoperiod change in the night-migratory redheaded bunting. *Journal of Chemical Neuroanatomy*, 68: 55-60. **IF: 2.4**
65. G. Majumdar, S. Rani and **V. Kumar** (2015) Hypothalamic gene switches control transitions between seasonal life history states in a night-migratory photoperiodic songbird. *Molecular and Cellular Endocrinology*, 399: 110-121. **IF: 3.8**
66. Surbhi, A. Rastogi, S. Rani and **V. Kumar** (2015) Seasonal plasticity in the peptide neuronal systems: Potential roles of GnRH, GnIH, NPY and VIP in regulation of reproductive axis in subtropical Indian weaver birds. *Journal of Neuroendocrinology*, 27: 357-369. **IF: 3.1**
67. G. Majumdar, A. K. Trivedi, N. J. Gupta and **V. Kumar** (2015) Circadian synchronization determines critical day length for seasonal responses. *Physiology & Behavior*, 147: 282-290. **IF: 2.9**
68. A. K. Trivedi, J. Kumar, S. Rani and **V. Kumar** (2015) Adaptation of oxidative phosphorylation to photoperiod-induced seasonal metabolic states in migratory songbirds. *Comparative Biochemistry Physiology A*, 184C: 34-40. **IF: 2.2**
69. S. Malik, J. Singh, A. K. Trivedi, S. Singh, S. Rani and **V. Kumar** (2015) Nocturnal melatonin levels decode daily light environment and reflect seasonal states in night-migratory blackheaded bunting (*Emberiza melanocephala*). *Photochemical and Photobiological Sciences*, 14: 963-971. **IF: 2.8**
70. G. Yadav, S. Malik, S. Rani and **V. Kumar** (2015) Role of light wavelengths in synchronization of circadian physiology in songbirds. *Physiology & Behavior*, 140:164-171. **IF: 2.9**

2014

71. A. K. Trivedi, J. Kumar, S. Rani, **V. Kumar** (2014) Annual life history-dependent gene expression in the hypothalamus and liver of a migratory songbird: Insights into the molecular regulation of seasonal metabolism. *Journal of Biological Rhythms*, 29: 332-345. **IF: 3.4**

72. P. Budki, S. Malik, S. Rani and **V. Kumar** (2014). Circadian rhythms are not involved in the regulation of circannual reproductive cycles in a sub-tropical bird, the spotted munia. *Journal of Experimental Biology*, 217:2569-2579. **IF: 3.4**
73. Surbhi, Y. Kumari, S. Rani, K. Tsutsui and **V. Kumar** (2014) Duration of melatonin regulates seasonal plasticity in subtropical Indian weaverbird, *Ploceus philippinus*. *General and Comparative Endocrinology*, 220: 46-54. **IF: 2.4**
74. A. Srivastava, N. Trivedi, S. Malik, S. Rani and **V. Kumar** (2014) Molecular basis of photoperiodic control of reproductive cycle in a subtropical songbird, the Indian weaverbird (*Ploceus philippinus*). *General and Comparative Endocrinology*, 220: 41-45. **IF: 2.4**
75. S. Srivastava, S. Rani and **V. Kumar** (2014) Photoperiodic induction of pre-migratory phenotype in a migratory songbird: Identification of metabolic proteins in flight muscles. *Journal of Comparative Physiology B*, 184: 741-751. **IF: 2.1**
76. G. Majumdar, G. Yadav, S. Rani and **V. Kumar** (2014). A photoperiodic molecular response in migratory redheaded bunting exposed to a single long day. *General and Comparative Endocrinology*, 204:104-113. **IF: 2.4**
77. S. Malik, P. Budki, S. Rani and **V. Kumar** (2014). Optimization of circadian adaptation to physical enrichment: Effects on activity behavior in a subtropical songbird. *Journal of Ornithology*, 155: 283-290. **IF: 1.5**
78. A. K. Trivedi, S. Rani and **V. Kumar** (2014) Circadian adaptation to seasons: Effects on activity behavior in subtropical house sparrow, *Passer domesticus*. *Biological Rhythm Research*, 45: 465-475. **IF: 0.8**
79. S. Malik, S. Singh, S. Rani and **V. Kumar** (2014). Life at a different pace: Annual itineraries are conserved in seasonal songbirds. *Journal of Biosciences*, 39: 485-491. **IF: 1.8**
80. S. Malik, G. Yadav, S. Rani and **V. Kumar** (2014) Light wavelength dependent circadian and seasonal responses in blackheaded bunting. *Indian Journal of Experimental Biology*, 52: 448-459. **IF: 0.9**
81. I. Mishra, A. K. Trivedi and **V. Kumar** (2014) Daily behavior can differ between colour morphs of the same species: A study on circadian activity behavior of grey and pied zebra finches. *Indian Journal of Experimental Biology*, 52: 516-520. **IF: 0.9**

2013

82. D. Singh, S. Rani and **V. Kumar** (2013). Daily expression of six clock genes in central and peripheral tissues of a night-migratory songbird: Evidence for tissue specific circadian timing. *Chronobiology International*, 30: 1208-1217. **IF: 3.0**
83. D. Singh, Y. Kumari, A. Rastogi, S. Rani and **V. Kumar** (2013). Neuropeptide Y mRNA and peptide in the night-migratory redheaded bunting brain. *Cell and Tissue Research*, 354: 551-562. **IF: 3.5**
84. Rastogi, Y. Kumari, S. Rani and **V. Kumar** (2013). Neural correlates of migration: Activation of putative hypothalamic clock(s) in and out of migratory state in the night-migratory blackheaded bunting (*Emberiza melanocephala*). *PLoS One*, 8: e70065. **IF: 3.0**
85. N. J. Gupta and **V. Kumar** (2013). Testes play a role in termination but not in initiation of the spring migration in the night-migratory blackheaded bunting. *Animal Biology*, 63:321-329. **IF: 1.5**

2012

86. J. Singh, P. Budki, S. Rani and **V. Kumar** (2012). Temperature alters the photoperiodically controlled phenologies linked with migration and reproduction in a night-migratory songbird. *Proceedings of Royal Society. B*, 279: 509-515. **IF: 5.4**
87. J. Singh, A. Rastogi, S. Rani and **V. Kumar** (2012). Food availability affects circadian clock-controlled activity and zugunruhe in the night migratory male blackheaded bunting (*Emberiza melanocephala*). *Chronobiology International*, 29: 15-25. **IF: 3.0**
88. J. Singh, A. Rastogi, S. Rani and **V. Kumar** (2012) Functional similarity in relation to the external environment between circadian behavioral and melatonin rhythms in the subtropical Indian weaver bird. *Hormones and Behavior*. 61: 527-534. **IF: 4.0**
89. P. Budki, S. Rani and **V. Kumar** (2012). Persistence of Circannual Rhythms under Constant Periodic and Aperiodic Light Conditions: Sex Differences and Relationship with the External Environment. *Journal of Experimental Biology*, 215:3774-3785. **IF: 3.4**

2011

90. A. Rastogi, Y. Kumari, S. Rani and **V. Kumar** (2011). Phase inversion of neural activity in the olfactory and visual systems of a night-migratory bird during migration. *European Journal of Neuroscience*, 34: 99-109. **IF: 3.1**

2010

91. J. Singh, S. Rani, and **V. Kumar** (2010) Presence of a conspecific renders survival advantages in the migratory redheaded bunting: test through the effects of restricted feeding on activity pattern and survivorship. *Chronobiology International*, 27: 111-127. **IF: 3.0**

2009

92. S. Rani, S. Singh, S. Malik, J. Singh, and **V. Kumar** (2009) Synchronization of Indian weaverbird circadian rhythms to food and light zeitgebers: Role of pineal. *Chronobiology International*, 26: 653-665. **IF: 3.0**
93. P. Budki, S. Rani, and **V. Kumar** (2009) Food deprivation during photosensitive and photorefractory life history stages affects reproductive cycle in the migratory redheaded bunting (*Emberiza bruniceps*). *Journal of Experimental Biology*, 212:225-230. **IF: 3.4**

2008

94. S. P. Karaganis, **V. Kumar**, P. D. Beremand, M. J. Baliey, T. L. Thomas, V. M. Cassone (2008) Circadian genomics of the chick pineal gland in vitro. *BMC Genomics*, 9: 206. **IF: 4.1**
95. V. M. Cassone, P. A. Bartell, B. J. Earnest, **V. Kumar** (2008) Duration of Melatonin Regulates Seasonal Changes in Song Control Nuclei of the House Sparrow *Passer domesticus*: Independence from Gonads and Circadian Entrainment. *Journal of Biological Rhythms*, 23: 49-58. **IF: 2.5**

2007

96. **V. Kumar**, S. Rani, S. Malik, A. K. Trivedi, I. Schwabl, B. Helm, E. Gwinner (2007) Daytime light intensity affects seasonal timing via changes in the nocturnal melatonin levels. *Naturwissenschaften*, 94: 693-696. **IF: 1.8**
97. **V. Kumar**, T. J. Van't Hof, and Eberhard Gwinner (2007) Circadian behavioral and melatonin rhythms in the European starling under light-dark cycles with steadily changing periods: Evidence for close mutual coupling? *Hormones and Behavior*, 52: 409-416. **IF: 4.0**
98. S. Rani, S. Singh and **V. Kumar** (2007) Photoperiodism, pineal clock and seasonal reproduction in the Indian weaver bird (*Ploceus philippinus*). *Journal of Ornithology*, 148: 601-610. **IF: 1.5**

2006

99. S. Rani, S. Malik, A. K. Trivedi, S. Singh and **V. Kumar** (2006) A circadian clock regulates migratory restlessness in the blackheaded bunting (*Emberiza melanocephala*). *Current Science*, 91: 1093-1095. **IF: 0.8**
100. A. K. Trivedi, S. Rani and **V. Kumar** (2006) Natural light restricted to twilight delays the timing of testicular regression but does not affect the timing of the daily activity rhythm of the house sparrow (*Passer domesticus*). *BMC: Journal of Circadian Rhythms*, 4: 5.
101. A. K. Trivedi, S. Rani and **V. Kumar** (2006) Control of annual reproductive cycle in the subtropical house sparrow (*Passer domesticus*): Evidence for conservation of photoperiodic control mechanisms in birds. *BMC: Frontiers in Zoology*, 3: 12. **IF: 3.3**
102. **V. Kumar**, S. Rani and B. P. Singh (2006) Biological clocks help reduce the physiological conflicts in avian migrants. *Journal of Ornithology*, 147: 281-286. **IF: 1.5**

2005

103. S. Rani, S. Singh and **V. Kumar** (2005) The pineal clock affects behavioural circadian rhythms but not photoperiodic induction in the Indian weaver bird (*Ploceus philippinus*). *Journal of Ornithology*, 146: 355-364. **IF: 1.5**
104. A. K. Trivedi, S. Rani and **V. Kumar** (2005) Differential responses of the photoperiodic clock in two passerine birds possessing strongly self-sustained circadian system. *Chronobiology International*, 22: 801-806. **IF: 3.0**
105. **V. Kumar** and E. Gwinner (2005) Pinealectomy shortens resynchronisation times of house sparrow (*Passer domesticus*) circadian rhythms. *Naturwissenschaften*, 92: 419-422. **IF: 1.8**
106. S. Rani, S. Singh, M. Misra, S. Malik, B. P. Singh, and **V. Kumar** (2005) Daily light regulates seasonal responses in the migratory male redheaded bunting (*Emberiza bruniceps*). *Journal of Experimental Zoology A*, 303A: 541-550. **IF: 1.4**

2004

107. A. K. Trivedi, S. Rani and **V. Kumar** (2004) Melatonin blocks inhibitory effects of prolactin on photoperiodic induction of gain in body mass, testicular growth and feather regeneration in the migratory male redheaded bunting (*Emberiza bruniceps*). *BMC: Reproductive Biology and Endocrinology*, 2: 79. **IF: 2.1**
108. M. Misra, S. Rani, S. Singh and **V. Kumar** (2004) Regulation of seasonality in the migratory male blackheaded bunting (*Emberiza melanocephala*). *Reproduction Nutrition Development*, 44: 341-352. **IF: 1.9**
109. S. Malik, S. Rani and **V. Kumar** (2004) Wavelength dependency of light induced effects on photoperiodic clock in the migratory blackheaded bunting (*Emberiza melanocephala*). *Chronobiology International*, 21: 367-384. **IF: 3.0**

2002

110. S. Malik, S. Rani and **V. Kumar** (2002) The influence of light wavelength on phase-dependent responsiveness of the photoperiodic clock in migratory blackheaded bunting. *Biological Rhythm Research*, 33: 65-73 **IF: 0.8**
111. S. Singh, M. Misra, S. Rani and **V. Kumar** (2002) The photoperiodic entrainment and induction of the circadian clock regulating seasonal responses in the migratory blackheaded bunting. *Chronobiology International*, 19: 865-881. **IF: 3.0**
112. **V. Kumar**, S. Singh, M. Misra, S. Malik and S. Rani (2002) Role of melatonin in photoperiodic time measurement in the migratory redheaded bunting (*Emberiza bruniceps*) and the

nonmigratory Indian weaver bird (*Ploceus philippinus*). Journal of Experimental Zoology A, 292: 277-286. **IF: 1.4**

2001

113. **V. Kumar**, S. Singh, M. Misra and S. Malik (2001) Effects of duration and time of food availability on photoperiodic responses in the migratory male blackheaded bunting (*Emberiza melanocephala*). Journal of Experimental Biology, 204: 2843-2848. **IF: 3.4**
114. S. Rani, S. Singh, M. Misra and **V. Kumar** (2001) The influence of light wavelength on reproductive photorefractoriness in migratory blackheaded bunting (*Emberiza melanocephala*). Reproduction Nutrition Development, 41: 277-284. **IF: 1.9**
115. R. Brandstaetter, **V. Kumar**, T. J. Van't Hof and E. Gwinner (2001) Seasonal variations of *in vivo* and *in vitro* melatonin production in a passeriform bird, the house sparrow (*Passer domesticus*). Journal of Pineal Research, 31: 120-126. **IF: 15.2**

2000

116. S. Rani and **V. Kumar** (2000) Phasic response of the photoperiodic clock to wavelength and intensity of light in the redheaded bunting, *Emberiza bruniceps*. Physiology & Behavior, 69: 277-283. **IF: 2.5**
117. **V. Kumar**, S. Rani and S. Malik (2000) Wavelength of light mimics the effects of the duration and intensity of a long photoperiod in stimulation of gonadal responses in the male blackheaded bunting (*Emberiza melanocephala*). Current Science, 79: 508-510. **IF: 0.8**
118. R. Brandstaetter, **V. Kumar**, U. Abraham and E. Gwinner (2000) Photoperiodic information acquired and stored *in vivo* is retained *in vitro* by a circadian oscillator, the avian pineal gland. Proceedings of the National Academy Sciences, 97: 12324-12328. **IF: 10.6**
119. **V. Kumar**, E. Gwinner and T. J. Van't Hof (2000) Circadian rhythms of melatonin in the European starling exposed to different lighting conditions: Relationship with locomotor and feeding rhythms. Journal of Comparative Physiology A, 186: 205-215. **IF: 1.9**

1999

120. **V. Kumar** and S. Rani (1999) Differential responses to complete and corresponding skeleton photoperiods in male blackheaded bunting. Current Science, 77: 283-285. **IF: 0.8**
121. S. Rani and **V. Kumar** (1999) Time course of sensitivity of the photoinducible phase to light in the redheaded bunting (*Emberiza bruniceps*). Biological Rhythm Research, 30: 555-562. **IF: 0.8**
122. **V. Kumar** and S. Rani (1999) Light sensitivity of the photoperiodic response system in higher vertebrates: Wavelength and intensity effects. Indian Journal of Experimental Biology, 37: 1053-1064. **IF: 0.9**

1997

123. **V. Kumar** (1997) Effects of complete and skeleton photoperiods in altering the timing of spontaneous fat depletion and gonadal regression in migratory male blackheaded bunting (*Emberiza melanocephala*). Indian Journal of Experimental Biology, 35: 1161-65. **IF: 0.9**
124. **V. Kumar**, D. Goguen, M. E. Guido and B. Rusak (1997) Melatonin does not influence the expression of *c-fos* in the suprachiasmatic nucleus of rats and hamster. Molecular Brain Research, 52: 242-248. **IF: 3.0**

1996

125. **V. Kumar** and S. Rani (1996) Effects of wavelength and intensity of light in initiation of body fattening and gonadal growth in a migratory bunting under complete and skeleton photoperiods. Physiology & Behavior, 60: 625-631. **IF: 2.9**

- 126. V. Kumar**, N. Jain and B. K. Follett (1996) The photoperiodic clock in blackheaded buntings (*Emberiza melanocephala*) is mediated by a self-sustaining circadian system. *Journal of Comparative Physiology A*, 179: 59-64. **IF: 1.9**
- 127. V. Kumar** (1996) Effects of melatonin in blocking the response to a skeleton photoperiod in the blackheaded bunting. *Physiology & Behavior*, 59: 617-620. **IF: 2.9**
- 128. V. Kumar**, B. S. Kumar and N. Jain (1996) Effect of late afternoon administration of melatonin on photoperiod-induced responses in buntings. *Indian Journal of Experimental Biology* 34: 220-225. **IF: 0.9**

1995

- 129. T. S. Juss**, V. M. King, **V. Kumar** and B. K. Follett (1995) Does unusual entrainment of the circadian system under T36h photocycles reduce the critical daylength for photoperiodic induction in Japanese quail? *Journal of Biological Rhythms*, 10: 17-32. **IF: 3.4**
- 130. V. Kumar** and N. Jain (1995) Circadian regulation of melatonin secretion in blackheaded buntings *Emberiza melanocephala* Scopoli. *Indian Journal of Experimental Biology*, 33: 333-336. **IF: 0.9**
- 131. V. Kumar** and G. A. Lincoln (1995) Effects of a one-hour light pulse on the timing of the circadian rhythm in melatonin secretion in rams. *Journal of Pineal Research*, 18: 21-27. **IF: 15.2**
- 132. N. Jain** and **V. Kumar** (1995) Changes in food intake, body weight, gonads and plasma concentrations of thyroxine, luteinizing hormone and testosterone in captive male buntings exposed to natural daylengths at 29°N. *Journal of Biosciences*, 20: 417-426. **IF: 1.8**
- 133. V. Kumar** and B. S. Kumar (1995) Entrainment of circadian system under variable photocycles (T-photocycles) alters the critical daylength for photoperiodic induction in blackheaded buntings. *Journal of Experimental Zoology A*, 273: 297-302. **IF: 1.4**

1994

- 134. V. Kumar**, N. Jain and B. P. Singh (1994) Nature of circadian rhythm of photoperiodic photosensitivity in the blackheaded buntings (*Emberiza melanocephala*). *Indian Journal of Experimental Biology*, 32: 789-792. **IF: 0.9**

1993

- 135. B. S. Kumar** and **V. Kumar** (1993) Photoperiodic control of annual reproductive cycle in subtropical brahminy myna, *Sturnus pagodarum*. *General and Comparative Endocrinology*, 89: 149-160. **IF: 2.4**
- 136. V. Kumar** and B. K. Follett (1993) The circadian nature of melatonin secretion in Japanese quail (*Coturnix coturnix japonica*). *Journal of Pineal Research*, 14: 192-200. **IF: 15.2**
- 137. V. Kumar**, N. Jain, B. P. Singh and B. S. Kumar (1993) Plasma levels of luteinizing hormone in intact and castrated photosensitive blackheaded bunting (*Emberiza melanocephala*) exposed to stimulatory and nonstimulatory photoperiods. *Reproduction Nutrition Development*, 33: 143-150. **IF: 1.9**
- 138. V. Kumar**, G. A. Lincoln and D. J. Tortorese (1993) Effects of excitatory amino acid receptor agonists and antagonists on the secretion of melatonin, luteinizing hormone and prolactin in the ram. *Journal of Neuroendocrinology*, 5: 649-654. **IF: 3.0**

1992

139. **V. Kumar** and B. S. Kumar (1992) Termination of photorefractoriness in the brahminy myna, *Sturnus pagodarum*: Role of photoperiods and gonadal hormones. Indian Journal of Experimental Biology, 30: 48-53. **IF: 0.9**

140. **V. Kumar**, B. S. Kumar and B. P. Singh (1992) Photostimulation of blackheaded bunting: Subjective interpretation of day and night depends upon both photophase contrast and light intensity. Physiology & Behavior, 51: 1213-1217. **IF: 2.9**

141. T. S. Juss, **V. Kumar** and B. K. Follett (1992) Melatonin secretion in birds: A seasonal calendar not used for photoperiodic time measurement. Neuroscience Letters (supplementary), 45. **IF: 2.3**

142. B. K. Follett, **V. Kumar** and T. S. Juss (1992) Circadian nature of the photoperiodic clock in Japanese quail. Journal of Comparative Physiology A, 171: 533-540. **IF: 1.9**

1991

143. B. S. Kumar and **V. Kumar** (1991) Seasonal reproduction in a tropical myna, *Sturnus pagodarum*: Role of photoperiod. General and Comparative Endocrinology, 83: 354-365. **IF: 2.4**

144. **V. Kumar** and B. S. Kumar (1991) The development of photorefractoriness in termination of the breeding season in the tropical brahminy myna: Role of photoperiod. Reproduction Nutrition Development, 31: 27-36. **IF: 1.9**

145. **V. Kumar**, B. S. Kumar, B. P. Singh and A. Sarkar (1991) A common functional basis for the photoperiodic mechanism regulating reproductive and metabolic responses in the migratory redheaded bunting. Periodicum Biologorum, 93: 169-174. **IF: 0.9**

1990

146. **V. Kumar** and B. S. Kumar (1990) Effects of testosterone on the testes, body weight and plumage regeneration in photorefractory male redheaded bunting, *Emberiza bruniceps*. Indian Journal of Experimental Biology, 28: 417-420. **IF: 0.9**

147. **V. Kumar** and B. S. Kumar (1990) Effects of photoperiod, gonadectomy and testosterone therapy on food intake and body weight in male redheaded bunting, *Emberiza bruniceps*. Journal of Reproductive Biology and Comparative Endocrinology, 2: 80-87.

1989

148. **V. Kumar** and S. Tiwari (1989) Response to experimental photoperiods by an estrilid finch the white throated munia (*Lonchura malabarica*). Journal of Zoological Society of India, 40: 13-20.

1988

149. **V. Kumar** (1988) Investigations of photoperiodically induced fattening in migratory blackheaded bunting (*Emberiza melanocephala*) (Aves). Journal of Zoology (London), 216: 253-263. **IF: 1.7**

1986

150. **V. Kumar** (1986) Carry-over effects of long and short photoperiods on body fattening and gonadal weight of blackheaded bunting, (*Emberiza melanocephala*). Acta Physiologica Hungarica, 67: 193-198. **IF: 0.6**

151. **V. Kumar** (1986) The photoperiodic entrainment and induction of reproductive rhythms in male blackheaded buntings (*Emberiza melanocephala*). Chronobiology International, 3: 165-170. **IF: 3.0**

1985

152. **V. Kumar**, P. D. Tewary and A. S. Dixit (1985) Participation of the circadian component in the photoperiodic mechanism of the blackheaded bunting *Emberiza melanocephala*. *Animal Reproductive Science*, 9: 375-382. **IF: 1.8**

153. **V. Kumar** and P. D. Tewary (1985) The seasonal gonadal and body weight cycles of migratory rosefinch (*Carpodacus erythrinus*) at Varanasi in relation to environmental factors. *Indian Journal of Zoology*, 13: 25-31.

1984

154. **V. Kumar** and P. D. Tewary (1984) Circadian rhythmicity and the termination of photorefractoriness in the blackheaded bunting. *Condor*, 86: 27-29. **IF: 2.6**

155. P. D. Tewary and **V. Kumar** (1984) Control of testes function in blackheaded bunting, *Emberiza melanocephala*. *Current Science*, 53: 113-114. **IF: 0.8**

156. P. D. Tewary, **V. Kumar** and B. K. Tripathi (1984) Response to exogenous prolactin during gonadal photostimulation in blackheaded bunting. *Current Science*, 53: 1307-1308. **IF: 0.8**

157. P. D. Tewary, A. S. Dixit and **V. Kumar** (1984) Circadian rhythmicity and the initiation of reproductive functions in female passerines. *Physiological Zoology*, 57: 563-566. **IF: 2.1**

1983

158. P. D. Tewary, **V. Kumar** and B. N. Prasad (1983) Influence of photoperiod in a subtropical migratory finch, the common Indian rosefinch, *Carpodacus erythrinus*. *Ibis*, 125: 115-120. **IF: 2.1**

159. **V. Kumar** and P. D. Tewary (1983) Response to experimental photoperiods by a migratory bunting, *Emberiza melanocephala*. *Ibis*, 125: 305-312. **IF: 2.1**

160. P. D. Tewary, **V. Kumar** and V. P. Srivastava (1983) Photoperiodically induced ovarian growth in common Indian rosefinch (*Carpodacus erythrinus*). *Comparative Physiology and Ecology*, 8: 234-236.

161. P. D. Tewary and **V. Kumar** (1983) Biochronometry of photoperiodically induced fat deposition in a migratory finch, the blackheaded bunting (*Emberiza melanocephala*) (Aves). *Journal of Zoology (London)*, 200: 421-430. **IF: 1.7**

162. **V. Kumar**, P. D. Tewary and P. M. Tripathi (1983) Photoperiodicity in the male rosefinch. *Experientia*, 39: 1101-1102. **IF: 7.0**

163. P. D. Tewary, B. K. Tripathi and **V. Kumar** (1983) Effects of exogenous prolactin on ovarian growth and fattening in the redheaded bunting, *Emberiza bruniceps*. *General and Comparative Endocrinology*, 52: 315-318. **IF: 2.4**

164. P. D. Tewary and **V. Kumar** (1983) Effect of light on the gonad and body weight in crested bunting (*Melophus lathami*). *Environmental Control in Biology*, 21: 7-10. **IF: 0.8**

1982

165. P. D. Tewary and **V. Kumar** (1982) Photoperiodic responses of a subtropical migratory finch, the blackheaded bunting (*Emberiza melanocephala*). *Condor*, 84: 168-171. **IF: 2.6**

166. **V. Kumar** and P. D. Tewary (1982) Photoperiodic testicular response and photorefractoriness in common Indian rosefinch. *Environmental Control in Biology*, 20: 39-42. **IF: 0.8**

167. P. D. Tewary, B. N. Prasad and **V. Kumar** (1982) Circadian basis of photoperiodically induced testicular growth in redheaded bunting, *Emberiza bruniceps*. *Animal Reproduction Science*, 4: 245-249. **IF: 2.0**

- 168. V. Kumar** and P. D. Tewary (1982) Circadian basis for the photoperiodic response in the male blackheaded bunting (*Emberiza melanocephala*). Proceedings of Indian Academy of Sciences, 91: 357-360.
- 169. P. D. Tewary** and **V. Kumar** (1982) Evidence for a circadian component in the photoperiodic mechanism of the blackheaded bunting, *Emberiza melanocephala*. Animal Reproductive Science, 5: 65-73. **IF: 2.0**
- 170. V. Kumar** and P. D. Tewary (1982) Circadian function in the photoperiodic induction of the testicular growth in common Indian rosefinch, *Carpodacus erythrinus*. Animal Reproductive Science, 5: 223-228. **IF: 2.0**
- 171. BN. Prasad, V. Kumar** and P. D. Tewary (1982) The photogonadal response of a migratory bunting: Evidence of an external coincidence system. Journal of Experimental Zoology, 221: 131-135. **IF: 1.4**
- 172. V. Kumar** and P. D. Tewary (1982) Photoperiodic regulation of the gonadal recrudescence in common Indian rosefinch: Dependence on circadian rhythms. Journal of Experimental Zoology A, 223: 37-40. **IF: 1.4**
- 173. V. Kumar** and P. D. Tewary (1982). The blackheaded bunting at Varanasi: Annual gonadal and body weight cycles. Pavo, 20 (1&2), 10-21

1981

- 174. P. D. Tewary** and **V. Kumar** (1981) Circadian periodicity and the initiation of gonadal growth in male blackheaded buntings (*Emberiza melanocephala*). Journal of Comparative Physiology, 144: 201-203. **IF: 1.9**
- 175. P. D. Tewary** and **V. Kumar** (1981) Involvement of circadian rhythm in photoperiodic response in the male common Indian rosefinch *Carpodacus erythrinus*. Indian Journal of Experimental Biology, 19: 77-79. **IF: 0.9**
- 176. P. D. Tewary** and **V. Kumar** (1981) Effect of castration on photoperiodically induced weight gain in a migratory finch: Blackheaded bunting *Emberiza melanocephala*. Indian Journal of Experimental Biology, 19: 469-471. **IF: 0.9**

REVIEWS

- 1. A. Sharma, V. Tripathi** and **V. Kumar** (2022) Control and adaptability of seasonal changes in behaviour and physiology of latitudinal avian migrants: Insights from laboratory studies in Palaearctic-Indian migratory buntings. Journal of Experimental Zoology Part A doi:10.1002/jez.2631
- V. Kumar, A. Sharma** and V. Tripathi (2022) Physiological effects of food availability times in higher vertebrates. Journal of Experimental Biology 225(3), doi/10.1242/jeb.239004
- V. Kumar** and A. Sharma (2018) Common features of circadian timekeeping in diverse organisms. Current Opinion in Physiology, 5: 58-67.
- V. Kumar** (2017) Introduction: special issue on Rhythms, Calendar and Biological Processes. Biological Rhythm Research, 48: 673-675. **IF: 0.8**
- I. Mishra and **V. Kumar** (2017) Circadian basis of seasonal timing in higher vertebrates. Biological Rhythm Research, 48: 723-738. **IF: 0.8**
- A. Yadav, R. Kumar, J. Tiwari, **V. Kumar** and S. Rani (2017) Sleep in birds: Lying on the

- continuum of activity and rest. *Biological Rhythm Research*, 48: 805-814. **IF: 0.8**
7. T. J. Stevenson and **V. Kumar** (2017) Neural control of daily and seasonal timing of songbird migration. *Journal of Comparative Physiology A*, 203: 399-409. **IF: 1.9**
 8. I. Mishra and **V. Kumar** (2016) Role of pineal and melatonin in the avian circadian and photoperiodic systems. *Journal of Endocrinology and Reproduction*, 20: 100-107.
 9. T. J. Stevenson, M. E. Visser, **V. Kumar**,.... . B. Helm et al. (2015; multi-authored review) Disrupted seasonal biology impacts health, food security and ecosystems. *Proceedings of Royal Society B*, 282: 20151453. **IF: 5.4**
 10. S. Rani and **V. Kumar** (2014) Photoperiodic regulation of seasonal reproduction in higher vertebrates. *Indian Journal of Experimental Biology*, 52: 413-419. **IF: 0.9**
 11. Surbhi and **V. Kumar** (2014) Avian photoreceptors and their role in the regulation of daily and seasonal physiology. *General and Comparative Endocrinology*, 220:13-22. **IF: 2.4**
 12. A.K. Trivedi and **V. Kumar** (2014) Melatonin: An internal signal for daily and seasonal timing. *Indian Journal of Experimental Biology*, 52: 425-437. **IF: 0.9**
 13. S.Rani and **V. Kumar** (2013). Avian circannual systems: persistence and sex differences. *General Comparative Endocrinology*, 190: 61-67. **IF: 2.4**
 14. **V. Kumar**, J. C. Wingfield, A. Dawson, M. Ramenofsky, S. Rani, and P. Bartell (2010). Biological Clocks and Regulation of Seasonal Reproduction and Migration in Birds. *Physiological and Biochemical Zoology*, 83: 827-35. **IF: 2.1**
 15. J. Singh, P. Budki, S. Rani and **V. Kumar** (2008) Regulation of seasonal responses in birds: Role of photoperiod and biological clocks. *Proceedings of the 4th CBP Meeting in Africa: Mara 2008, "Molecules to Migration: The Pressures of Life"* Madimond, pp 487 – 496.
 16. S. Rani, S. Malik, J. Singh, S. Singh and **V. Kumar** (2008) The photoperiodic and circadian control of migratory restlessness (*Zugunruhe*) in Palaearctic Indian migratory bunting: a new model to study migratory physiology. *Proceedings of the 4th CBP Meeting in Africa: Mara 2008, "Molecules to Migration: The Pressures of Life"*, Madimond, pp 551 – 558.
 17. **V. Kumar** and B. P. Singh (2005) The timekeeping system in birds. *Proceedings of Indian National Science Academy B (Biological sciences)*, 5&6: 267-284.
 18. **V. Kumar** (2005) Vertebrate circadian clock research: Do experiments on birds and lower vertebrates promise better insights. *Current Science*, 89: 743-746. **IF: 0.8**
 19. **V. Kumar**, B. P. Singh and S. Rani (2004) The Bird Clock: A complex multi-oscillatory and highly diversified system. *Biological Rhythm Research*, 35: 121-144. **IF: 0.8**
 20. S. Rani, S. Singh, A. K. Trivedi and **V. Kumar** (2002) Photoperiodism in Birds: An Ecological Perspective. Prof. S. B. Singh Commentary Volume Zoological Society of India Publication, pp 65-76.
 21. **V. Kumar** (1997) Photoperiodism in higher vertebrates: An adaptive strategy in temporal environment. *Indian Journal of Experimental Biology*, 35: 427-437. **IF: 0.9**
 22. **V. Kumar** (1997) Neurobiology of circadian rhythms. *Indian Journal of Experimental Biology*, 35: 921-932. **IF: 0.9**

23. **V. Kumar** (1996) Melatonin: a master hormone and a candidate for universal panacea. *Indian Journal of Experimental Biology*, 34: 391-402. **IF: 0.9**
24. **V. Kumar** and B. K. Follett (1993) The nature of the photoperiodic clock in vertebrates. *Proceedings of Zoological Society of Calcutta (J. B. S. Haldane Commemoration Vol.)*, pp 217-227.

BOOK CHAPTERS

1. V. M. Cassone and **V. Kumar** (2022) Circadian Rhythms. In: *Sturkie's Avian Physiology*. 7th Edition (Eds. C. G. Scanes and Sami Dridi). Elsevier (Academic Press), Amsterdam. pp. 1143-1161. DOI: [10.1016/B978-0-12-819770-7.00050-5](https://doi.org/10.1016/B978-0-12-819770-7.00050-5)
2. **V. Kumar**, A. Sharma and N. Agarwal (2019) Circadian timing optimizes seasonal life-history states: Lessons from studies in migratory songbirds. In: *Biological Rhythms* (Eds. Ken-ichi Honma and Sato Honma): Hokkaido University Press, Japan. Pp. 79-96.
3. **V. Kumar** and I. Mishra (2018) Circannual Rhythms. In: *Encyclopedia of Reproduction*. (Ed. M. K. Skinner) vol. 1, pp. 442–450. Academic Press: Elsevier. doi: 10.1016/B978-0-12-801238-364613-5.
4. A. K. Trivedi, D. Singh, A. S. Dixit and **V. Kumar** (2017) Pineal gland, melatonin and timekeeping in nonmammalian vertebrates: Avian Perspective. In: *Biological Timekeeping: Clocks, Rhythms and Behaviour* (Ed. Vinod Kumar). Springer Nature (Springer India), New Delhi. pp. 521-541.
5. S. Rani, S. Singh, S. Malik and **V. Kumar** (2017) Insights into the regulation of spring migration in songbirds. In: *Biological Timekeeping: Clocks, Rhythms and Behaviour* (Ed. Vinod Kumar). Springer Nature (Springer India), New Delhi. pp. 625-642.
6. V. M. Cassone and **V. Kumar** (2015) Circadian Rhythms. In: *Sturkie's Avian Physiology*. 6th Edition (Ed. C. G. Scanes). Elsevier (Academic Press), Amsterdam. pp. 811-828.
7. V. M. Cassone, M. J. Bailey, S. P. Karaganis, **V. Kumar** and P. A. Bartell (2005) Functional Genomics of the Avian Pineal Gland. In: *Avian Endocrinology* (eds. P. Sharp and A. Dawson), Narosa Publ. House. N. Delhi. pp. 11-26.
8. S. Rani, S. Singh and **V. Kumar** (2002) Light sensitivity of the biological clock. *Biological Rhythms* (ed. V. Kumar), Narosa Publ House, N. Delhi/ Springer-Verlag, Germany. pp. 232-243
9. **V. Kumar** (2001) Melatonin and circadian rhythmicity in birds. In: *Avian Endocrinology* (eds. A. Dawson & C. M. Chaturvedi), Narosa Publ. N. Delhi. pp 93-112.
10. **V. Kumar** (1997) Photoperiodism in Vertebrates. In: *Frontiers in Environmental and Metabolic Endocrinology*" (Ed. S. K. Maitra), The Univ. Burdwan Publ. India, pp. 59-66.
11. **V. Kumar**, T. S. Juss and B. K. Follett (1993) Melatonin secretion in quail provides a seasonal calendar but not one used for photoperiodic time-measurement. In: *Melatonin and the Pineal Gland - from Basic Science to Clinical Application* (eds. Y. Touitou, J. Arendt and P. Pevet), Elsevier Science Publ., pp. 163-168.

Other articles

1. **V. Kumar (2020) Book review:** Annual Review of Neuroscience, 2019. Botond Roska and Huda Y. Zoghbi (eds). *Current Science* 119 (3): 569-570.

2. **V. Kumar** and N. K. Subhedar (2017). Obituary: Vijay Kumar Sharma. *Journal of Biological Rhythms* 32: 5-6. <https://doi.org/10.1177/0748730416689505>
3. **V. Kumar** (2017) Report on Indo-US workshop and International Symposium, Delhi. *Connect* 9(1): May 2017
4. M. Singh and **V. Kumar** (2016). Obituary: Vijay Kumar Sharma. *Current Science* 111: 1711-1712.
5. S. Panda and **V. Kumar** (2013) The circadian clock: The time of life. *Connect* 4(3): Jan. 2013 (cover story)
6. **V. Kumar** (1984) Avian calligraphy of nature. *Science Reporter*.