# **Curriculum Vitae**

**Complete List of Publications** 

## Atanu Kumar Pati, PhD, FNASc

Professor of Bioscience School of Life Sciences Pt. Ravishankar Shukla University Raipur – 492010, Chhattisgarh

| Diegraphiea     | Dotano    |  |
|-----------------|-----------|--|
| Name:           |           | Atanu Kumar PATI                           |
| Date of birth:  |           | March 26, 1956                             |
| Place of birth: |           | Cuttack                                    |
| Designation:    |           | Professor                                  |
| Marital status: |           | Married; Blessed with two sons             |
| Address:        |           |  |
|                 | Office    | School of Life Sciences                    |
|                 |           | Pt. Ravishankar Shukla University          |
|                 |           | Raipur - 492 010, India                    |
|                 |           | Phone: +91-771-2262631 (O); Ext. 101       |
|                 |           | Mobile: +91-9826654829                     |
|                 |           | Fax: +91-771-2263439; 2262818              |
|                 |           | Email: akpati19@gmail.com                  |
|                 | Residence | House # 2, Neera Extension, Parthivi Nagar |
|                 |           | Hirapur Road, Raipur - 492 099, India      |
|                 |           | Phone: +91-771-4025440                     |
|                 |           | Mobile: +91-9826654829                     |

## Education

- 1. High School Certificate, Board of Secondary Education, Orissa, 1971
- 2. B.Sc., Utkal University, 1975, Biology (Honours in Zoology)
- 3. M.Sc., Banaras Hindu University, 1977, Zoology (Reproduction Biology & Endocrinology)
- 4. Ph.D., Banaras Hindu University, 1982, Zoology (Sub area: Chronobiology)
- 5. Cours de Chronobiologie, L'Université V, Paris, 1986
- 6. Diploma in French, Pt. Ravishankar Shukla University, 2001

## Experience

#### Professional

- 1. Research Associate (UGC), Banaras Hindu University, 1982-83
- 2. Lecturer, Pt. Ravishankar Shukla University, 1983-90
- 3. Post-doctoral Fellow, Hôpital Paul Brousse, Villejuif (L"Université V, Paris), 1985-86
- 4. Reader, Pt. Ravishankar Shukla University, 1990-1998
- 5. Professor, Pt. Ravishankar Shukla University, 1998-present

#### Academic

- 1. Member, Drafting Committee, Chhattisgarh Biodiversity Strategy and Action Plan, 2002
- 2. Member, State Steering Committee, Chhattisgarh Biodiversity Strategy and Action Plan, 2002
- 3. Member, Technical Core Group, Chhattisgarh Biodiversity Strategy and Action Plan: Monitoring and Conservation, 2002
- 4. Member, National Planning Committee for the SERC School in Chronobiology, 2002-2007
- 5. Member, BoS in Bioscience and Biotechnology, Pt. RSU, Raipur, 2003-2005
- 6. Member, Institutional Animal Ethics Committee (IAEC), Pt. RSU, Raipur, 2004-2007

- 7. Member, Quality Advisory Committee (NAAC), Pt. RSU, Raipur, 2004-2010
- 8. Chairman, BoS in Bioscience, Microbiology & Biochemistry, Pt. Ravishankar Shukla University, Raipur, 2005-2008
- 9. Member of Prospectus Committee, Pt. Ravishankar Shukla University, Raipur
- 10. Member, Academic Council, Pt. Ravishankar Shukla University, Raipur, 2005-2008
- 11. Member, Advisory Committee, DRS-SAP sanctioned to School of Life Sciences, Pt. Ravishankar Shukla University, Raipur, 2004-2009
- 12. Member, Project Evaluation Committee, Chhattisgarh Private University Regulatory Commission, Govt. of Chhattisgarh
- 13. Member, Selection Committee for Lecturer in Zoology, G.H. Raisoni National College, Raipur
- 14. Member, Examination Committee, Pt. Ravishankar Shukla University, Raipur
- 15. Expert, Research Project Evaluation Committee, CCOST, Raipur
- 16. Chairman, Brochure Compilation & Printing Committee, XII, XIII, XIV, XV, XVI, XVII Convocations, Pt. Ravishankar Shukla University, Raipur
- 17. Chairman, Citation Committee, XII, XIII, XIV, XV, XVI, XVII Convocations, Pt. Ravishankar Shukla University, Raipur
- 18. Member, BoS in Zoology, Dr. H.S. Gour Vishwavidyalaya, Sagar, from 2007-2010
- 19. Member, BoS in Bioscience, Barkatullaha Vishwavidyalaya, Bhopal, from 2007-2010
- 20. Member, BoS in Zoology, Gurukul Kangri University, Hardwar, from 2007-2009
- 21. Member, BoS in Zoology, Vikram University, Ujjain, from 2007-2010
- 22. Director, Academic Staff College, Pt. Ravishankar Shukla University, Raipur, from 2006-2008
- 23. Member, School Board in Sciences, Nagaland University, Kohima, 2008
- 24. Member, BoS in Zoology, Govt. Science College, Durg, 2007
- 25. Member, BoS in Zoology, D.B. Girls PG College, Raipur, 2007
- 26. Member, Institutional Animal Ethics Committee (IAEC), Shri Rawatpura Sarkar Institute of Pharmacy, Kumhari, Durg, 2007
- 27. Member, Academic Planning and Evaluation Board, Pt. Ravishankar Shukla University, January 2010-2013
- 28. Chairperson, Committee to draft Re-Accreditation Report (RAR) of PRSU, Raipur, submitted to NAAC, Bangalore, 2010
- 29. Member Secretary, Institutional Ethics Committee for Human Research, Pt. Ravishankar Shukla University, Raipur, 2010-2014
- 30. Coordinator, UGC DRS-SAP Phase-II, sanctioned to School of Life Sciences, Pt. Ravishankar Shukla University, Raipur, 2010-2015
- 31. Member, Vision Committee, Pt. Ravishankar Shukla University, Raipur, 2011-Present
- 32 Chairman, BoS in Bioscience, Pt. Ravishankar Shukla University, Raipur, 2011-2014
- 33. Coordinator, National Centre for Natural Resources, sanctioned to Pt. Ravishankar Shukla University, Raipur, by DST, New Delhi, 2012-Present
- 34. Coordinator, UGC DRS-SAP Phase-III, sanctioned to School of Life Sciences, Pt. Ravishankar Shukla University, Raipur, 2016-Present

#### Administrative

- 1. Member, Executive Council, RSU Teachers Association, 1989-91, 1993-1995
- 2. Warden, C.S. Azad Hostel, Pt. Ravishankar Shukla University, Raipur, 1990-92
- 3. Secretary, Ravishankar Shukla University Teachers Association, 1991-93
- 4. Chief Warden, Boys Hostel, Pt. Ravishankar Shukla University, Raipur, 1992-93
- 5. Vice-President, Shikshak Kalyan Sangathan, Pt. RSU, Raipur, 1996-2002
- 6. Assistant Proctor, Pt. Ravishankar Shukla University, Raipur, 2000-2002
- 7. Member, Anti-Ragging Committee, 2000-2001
- 8. Member, Vidyalaya Management Committee, Central School, Raipur, 2003-2006
- 9. Member, Library Committee, Pt. Ravishankar Shukla University, Raipur, 2005-2012
- 10. Coordinator, Flying Squad, 2005-2006
- 11. Coordinator, Question paper distribution at the Distribution center located in Govt. P.G. College, Dhamtari, 2005-2006
- 12. Chairman or member in different Inspection Committees for number of Institutions and Colleges for approval of new courses and for affiliation of Colleges, Institutions to the Pt. Ravishankar Shukla University, Raipur.
- 13. Member, Chhattisgarh Biodiversity Board, Govt. of Chhattisgarh

- 14. Member, Implementation Committee, Chhattisgarh Vyavasaik Pariksha Mandal, Raipur, 2006-2007
- 15. Member, Flying squad, Pt. Ravishankar Shukla University, Raipur, 2005
- 16. Proctor, Pt. Ravishankar Shukla University, Raipur, July 2009-August 2010
- 17. Chairperson, Central Anti-ragging Committee, Pt. RSU, Raipur, for the session 2009-10
- 18. Chairman, Grievance Redress Cell, School of Life Sciences, PRSU, Raipur, 2010-2013
- 19. Chairman, Departmental Research Committee, School of Life Sciences, PRSU, Raipur, 2010-2013
- 20. Chairman, Staff Council, School of Life Sciences, PRSU, Raipur, 2010-2013
- 21. Member, Complaints Committee (Sexual Harassment at Workplace), PRSU, Raipur, 2011-Present

#### Honours

- 1. Secretary, Indian Society for Chronobiology, 1990-2008
- 2. Convener, International Symposium on Current Status of Chronobiology, 1990
- 3. Organizing Secretary, DST Group Monitoring Workshop in Animal Sciences, 1995
- 4. Secretary, Indian Pineal Study Group, 1995-1999
- 5. Organizing Secretary, Silver Jubilee Meetings of Ethological Society of India and National Symposium on Behaviour, 1996
- 6. Member, Executive Body, The Ethological Society of India, Bangalore, 1997-1999
- 7. Vice-President, Indian Pineal Study Group, 1999-2002
- 8. President, Indian Pineal Study Group, 2002-2007
- 9. Council Member, World Federation of Societies of Chronobiology, 2002-2006
- 10. Course Director & Coordinator, Second SERC School in Chronobiology, 2003
- 11. Convener, National Colloquium on Cave Organisms and Adaptation, 2004
- 12. Convener, XVII International Symposium of Biospeleology, November 25-30, 2004
- 13. Council Member, International Society of Subterranean Biology, 2004-present
- 14. President, Society of Speleology and Subterranean Biology, 2004-present
- 15. Member, International Scientific Board, First International Congress of Applied Chronobiology and Chronomedicine, Turkey, 2005
- 16. Member, International Project on the BIOsphere and the COSmos (BIOCOS), April 2005present
- 17. Member, International Scientific Board, Second International Congress of Applied Chronobiology and Chronomedicine, Tunisia, 2007
- 18. Course Director, Multinational Graduate Course on Basic Chronobiology with Reference to Chronomedicine, 2-7 November 2008
- 19. Member, International Scientific Board, Third International Congress of Applied Chronobiology and Chronomedicine, Israel, 2009
- 20. President, Indian Society for Chronobiology, 2008-present
- Chairperson; Work, Every Day Life; Session 4; Section Attention, Performance, Accidents, Sport; The Third International Congress of Applied Chronobiology and Chronomedicine, Akko, Israel, May 17-22, p. V-VI.
- 22. Proctor, Pt. Ravishankar Shukla University, July 2009-2010
- 23. Dean, Faculty of Life Science, Pt. Ravishankar Shukla University, January 2010-2012
- 24. Editor-in-Chief, Journal of Ravishankar University, Part B (Science) from 2009-Present
- 25. Member, Executive Council, Pt. Ravishankar Shukla University, January 2010-2012
- 26. Coordinator, INSPIRE Internship Program, PRSU, Raipur, 2010-2011
- 27. Member, IQAC Coordination Committee, NAAC peer team visit, September 2010
- 28. Director, IQAC, Pt. Ravishankar Shukla University, Raipur, from July 2011-Present

## Scholarships

#### Indian:

- 1. Junior Merit Scholarship (Govt. of India, 1971-72)
- 2. National Scholarship (Govt. of India, 1975-77)
- 3. Junior Research Fellow (UGC, New Delhi, 1977-79)
- 4. Senior Research Fellow (UGC, New Delhi, 1979-82)
- 5. Research Associate (UGC, New Delhi, 1982-1983)
- 6. Research Associate (CSIR, New Delhi, 1983; Not joined)

## Foreign:

1. French Govt. Fellowship Award, 1985-86

## Awards

- 1. UGC Research Award, 2002-2005
- 2. P.P.A.K.S. Minhas Award, Vocational Rotary Award for the session 2007-2008 in the field of Science & Technology

## Fellowship

1. Fellow of the National Academy of Sciences, India (F.N.A.Sc.), Year of election: 2003

## Professional Society Membership

## National:

- 1. Indian Society for Chronobiology (Life)
- 2. Indian Society for Life Sciences (Annual)
- 3. Indian Science Congress Association (Annual)
- 4. Chhattisgarh Botanical Association (Life)
- 5. Indian Society for Comparative Endocrinology (Life; Founder member)
- 6. Journal of Parasitology & Applied Animal Biology (Life)
- 7. Indian Pineal Study Group (Life)
- 8. The Ethological Society of India (Life)
- 9. Indian Society for Environmental Endocrinology (Life)
- 10. Zoo Outreach Organization (Annual)
- 11. Society for Environmental Ecology and Development (Life)
- 12. The National Academy of Sciences, India (Life)
- 13. Society of Speleology and Subterranean Biology, India (Life)

## International:

- 1. International Society for Chronobiology
- 2. Association Conferences Rhythmes Biologiques et Medicaments (Past member)
- 3. International Society of Subterranean Biology, from 2000
- 4. International Association for Research on Time in Biology and Chronotherapy (ARTBC International), Paris, France, 2007-2014
- 5. Biosphere and Cosmos (BIOCOS), Minnesota, USA, from 2005

## **Research Experience**

## Guidance Experience:

- 1. Ph.D. guided: 23\*; Current Ph.D. Students Working: 3 \*Includes 3 Co-guidance
- M.Phil. Guided: 10; Current M.Phil. Students Working: Nil (M.Phil. program of School of Life Sciences discontinued from 1995 till 2007)

## Ph.D. Thesis (with year of Award)

- 1. Mr. Jayant Biswas (1990): Biospeleology: the behavioral and physiologic adaptations in a cavernicole.
- 2. Ms. Satvant Kaur Saini (1991): Some aspects of Chronobiology in chickens relating to the schedule-shift and hormones.
- 3. Ms. Shobha Gupta (1992): Analysis of circadian time structure in shiftworkers and diurnal healthy human subjects.
- 4. Mr. S.A. Dixit (1994): Ecological behaviour of rice hoppers, greenleaf hoppers, Nephotettix virescens (Distant), whitebacked planthopper, Sogatella furcifera (Horvath) and brown planthopper, Nilaparvata lugens (Stal.) in Chhattisgarh area.
- 5. Ms. Maya Shedpure (1995): Extra-reproductive role of pineal in freshwater catfish.

- 6. Ms. Elizabeth Varghese (1997): Behavioral thermoregulation in air-breathing catfish: the role of the pineal and melatonin.
- 7. Mr. Arvind Agrawal (1997): Studies on bagworms (Lepidoptera: Psychidae) of the Chhattisgarh region with special reference to biology, taxonomy, case construction behaviour, and insect plant interaction.
- 8. Ms. Arti Chandrawanshi (1998): Shiftwork: health, physiologic and psychosocial aspects.
- 9. Ms. Seema Gupta (1998): Some aspects of endocrine regulation of surfacing behaviour in an air-breathing catfish, *Clarias batrachus*.
- 10. Ms. Renu Maheshwari (1999): An analysis of air-gulping behaviour of the catfish, *Heteropneustes* fossilis, with reference to hormonal regulation.
- 11. Ms. Seema Tiwari\* (1999): Insect pests scenario of Soybean in Chhattisgarh region of Madhya Pradesh.
- 12. Ms. Kavita Das (2006): Studies on the cerebral neuroendocrine system and the neuroendocrine control of vitellogenesis in the Antheraea mylitta D. (Lepidoptera; Saturniidae).
- 13. Mr. K. Venu Achari (2007). Morningness-eveningness, lifestyle and longevity in shift workers.
- 14. Mr. Omji Gupta\* (2008). Physiological rhythms and performance among sports persons.
- 15. Ms. Shipra Sinha (2009). Behavioural ecology of the crab, Barytelphusa cunicularis.
- 16. Ms. Anjana Kar (2009). Circadian rhythm in cancer and diabetic patients.
- 17. Mr. Anil Ramteke (2010). Circadian time structure (CTS) in locomotor activity of Indian walking catfish, *Clarias batrachus* and the effect of moonlight (ML).
- 18. Ms. Pushpa Poddar (2011). Entrainment characteristics of locomotor activity rhythm in Indian catfish, *Clarias batrachus*.
- 19. Mr. Hrishikesh Patel\* (2011). Study of circadian rhythm in heart rate, physical activity, activity intensity and energy expenditure of sports persons.
- 20. Ms. Razia Sultana (2012). Study of dipping and nondipping patterns in blood pressure in healthy, diabetic and hypothyroidic subjects.
- 21. Ms. Babita Pande (2013). Time estimation (short intervals) in human subjects under free living and constant routine conditions.
- 22. Arati Singh (2015). Foraging and nest-building behavior of Indian cliff swallow, *Hirundo fluvicola* (Blyth, 1855).
- 23. Shrutika Kankariya (2015). The ecology and behavior of Indian swift, *Apus affinis* (Gray, 1830).

## M. Phil. Thesis (with year of Award):

- 1. Ms. Namita Mishra (1988): Some aspects of hormonal control of feather rejuvenation in domestic fowls.
- 2. Ms. Shobha Gupta (1989): Oxidative metabolism and erythropoiesis in Indian garden lizard: circadian stage dependent in vivo and in vitro response to thyroxine and human urinary erythropoietin.
- 3. Ms. Geeta Gupta (1990): Influence of late afternoon administration of melatonin on intermediary and energy metabolism in male house sparrow: is the effects gonad dependent?
- 4. Ms. Swati Jain (1991): Influence of temporal phase relationship of melatonin with thyroxine or testosterone on erythropoiesis and metabolism in a teleost.
- 5. Ms. V Vasanta (1992): Reproduction and metabolic responses in catfish, *Clarias batrachus*: scotophase scanning by 3-hour warm pulse.
- 6. Ms. Suparna Srivastava (1993): Electrolyte regulation in tropical catfish: role of the pineal gland.
- 7. Ms. Ananya Gangopadhyay (1994): Studies on ventilatory functions in shiftworkers.
- 8. Ms. Anuradha Sahu (2008): Circadian rhythm of phototactic behaviour in Indian stinging catfish, *Heteropneustes fossilis* as function of light intensity and feeding regimen.
- 9. Ms. Shalinee Meshram (2009). Effect of thyroxine (T4) hormone on locomotor activity of *Clarias batrachus*.
- 10. Mr. Kaushal Baghel (2012). Behavioural ecology of Achatina fulica.

#### M. Sc. Dissertation:

- 1. Ms. Anjana Kar (2004): Wrist activity and sleep-wake rhythms in day active human subjects.
- 2. Mr. Ravi Shankar Kanoje (2004): Distribution and management of wild ungulates in Kanha National Park with special reference to swamp deer. Supervised with Dr. Andrew J. Lawrence, University of Hull, UK.
- 3. Ms. Razia Sultana (2006): Studies on circadian rhythms in rest-activity, time perception, axillary temperature, random number addition speed, and sleep behaviour in a group of apparently healthy young females.
- 4. Ms. Pratibha Kujur (2007): Circadian rhythm in blood pressure and heart rate as function of age and circadian typology.
- 5. Ms. Anupriya Chandraker (2010): Does obesity alter characteristics of circadian rhythm in energy expenditure and activity of female subjects?
- 6. Ms. Priva Sharma (2014): Comparative study of circadian rhythm of the core and shell temperatures in humans measured at different locations of the body.

Note: Introduced in M.Sc. curricula of the School of Life Sciences from 2004

#### B. Sc. Dissertation:

1. Mr. Arojit Mitra (2005): Circadian phenomenon: Indispensable, yet neglected.

#### Summer Project Dissertation:

- 1. Mr. Priyoneel Basu (2006): Diagnosing delayed sleep-phase syndrome using autorhythmometry, wrist actigraphy and ABPM: A case study.
- 2. Mr. Aditya Sanjay Karkare (2006): Descriptive and inferential biometry: validation of human circadian rhythms.
- 3. Ms. Megha Agrawal (2006): Autorhythmometric measurement of circadian blood pressure rhythm using ambulatory blood pressure monitoring: A review of its clinical and prognostic relevance.

## **Grant Support**

**Project 1:** Evaluation of repeated synchronizer phase-shift effects on growth, circadian rhythm and chronosensitivity to hormones in chickens; Funding agency: CSIR, New Delhi; Tenure: 1986 – 1990.

**Project 2:** Reproductive, Physiological and behavioral adjustments in a cavefish: A study on retrogressive/ constructive evolution; Funding agency: DST, New Delhi; Tenure: 1987-1989.

**Project 3:** Circadian time structure of shift workers: optimization for scheduling human shiftwork; Funding agency: Partial support by Pt. R.S.S.U., UGC and CSIR in the form of JRF, SRF & RA to co-investigators working in the project; Tenure: 1992-2002.

**Project 4:** Impact of regressive evolution of circadian behavior: a comparative study of temporal organization in cave-adapted *Nemacheilus evezardi* and its ancestors; Funding Agency: DST, New Delhi; Tenure: 1995-1999

**Project 5:** Determination of Phase Angle Differences ( $\Psi$ ) between the Circadian Locomotor Activity Rhythm and the Zeitgeber in the Cave Loach, *Nemacheilus evezardi*; Funding Agency: UGC (Minor); Tenure: 2000-2002

**Project 6:** Response of circadian clock of cave-dwelling hypogean loach and its epigean ancestor to nonphotic cues; Funding Agency: UGC; Tenure: 2002-2005

**Project 7:** DRS to School of Life Sciences under the Special Assistance Program. Identified Thrust Areas: Chronobiology; Funding Agency: UGC; Tenure: 2004-2009

**Project 8\*:** Investigation of relationship between circadian rhythm type, psycho-physiological state and performance; Funding Agency: UGC; Tenure: 2006-2009

**Project 9\*:** Circadian profile of nitrate reductase activity in *Jatropha curcas*; Funding Agency: CCOST; Tenure: 2008-2010

**Project 10:** Study of circadian rhythm in the cognitive ability to judge short-interval durations in humans and the effect of light at night (LAN); Funding Agency: DST; Tenure: 2010-2013

**Project 11\*\*:** DRS to School of Life Sciences under the Special Assistance Program, Phase II. Identified Thrust Areas: Chronobiology; Funding Agency: UGC; Tenure: 2010-2015.

**Project 12\*\*:** National Center for Natural Resources; Funding Agency: DST; Tenure: 2012-2015

**Project 13:** Inventory on earthworm biodiversity database of Raipur district of Chhattisgarh agro-ecosystems cultivating scented rice; CCOST; Tenure: 2014-2016

**Project 14\*\*:** DRS to School of Life Sciences under the Special Assistance Program, Phase III. Identified Thrust Areas: Chronobiology; Funding Agency: UGC; Tenure: 2016-2021.

\*Co-PI; \*\*Coordinator

## Symposia/Workshops/Meetings Organized

#### International

- 1. Organizing Secretary, International Symposium on Current Status of Chronobiology, November 24-26, 1990.
- 2. Organizing Secretary, XVII International Symposium on Biosepelology, November 25-30, 2004.
- 3. Organizing Secretary, Multinational Graduate Course on Basic Chronobiology with Reference to Chronomedicine, 2-7 November 2008
- 4. Organizing Secretary, 3rd International Congress of the Society for Ethnopharmacology (SFEC 2016), February 19-21, 2016

#### National

- 1. Organizing Secretary, DST Group Monitoring Workshop in Animal Sciences, October 18-20, 1995.
- 2. Organizing Secretary, Silver Jubilee Meetings of ESI and National Symposium on Behaviour, December 28-30, 1996.
- 3. Organizing Secretary, National Seminar cum Workshop on Assessment and Accreditation (NAAC-sponsored), June 7-8, 2002.
- 4. Organizing Secretary, DST (SERC) Planning Committee Meeting for the Second Indian School on Chronobiology, December 13, 2002.
- 5. National Symposium on Innovations and Prospects in Life Sciences, December 14-16, 2002.
- 6. Organizing Secretary, Second SERC School in Chronobiology, October 08-19, 2003.
- 7. Organizing Secretary, XV National Symposium on Chronobiology, October 20-21, 2003.
- 8. Organizing Secretary, National Colloquium on Cave Organisms and Adaptation, May 22-23, 2004.
- 9. National Symposium on Biodiversity: Current Status and Prospects, October 17-18, 2005.
- 10. Convener, Trends & Techniques in Chronobiology: A Workshop, March 20-25, 2006.
- 11. Convener, XX National Symposium on Chronobiology, December 27-29, 2008.
- 12. Convener, Seminar: Environmental Issues & Challenges, March 29, 2010
- 13. Chairman, National Conference on Advances in Biological Sciences, November 5-7, 2011
- 14. Organizing Secretary, Workshop on E-Learning, January 28-30, 2013
- 15. Convener, II National Conference on Recent Advances in Biological Sciences, November 25-27, 2013

- 16. Convener, National Workshop on Trends & Techniques in Chronobiology, January 6-12, 2014.
- 17. Convener, Workshop on h-Index, i10-index & Citations, August 22-23, 2014
- 18. Convener, XXV National Symposium on Chronobiology Time in Biology and Medicine, March 27-29, 2015

#### Publications (Summary)

| 1.  | Review                              | 15 <sup>a</sup>  |
|-----|-------------------------------------|------------------|
| 2.  | Papers in Refereed Foreign Journals | 57               |
| 3.  | Papers in Refereed Indian Journals  | 50               |
| 4.  | Papers in Proceedings               | 23               |
| 5.  | Papers in Other Journals            | 05               |
| 6.  | Book                                | 02               |
| 7.  | Book Chapter                        | 03               |
| 8.  | Mini Review                         | 01               |
| 9.  | Report                              | 13               |
| 10. | View/Opinion                        | 05               |
| 11. | Popular articles                    | 07               |
| 12. | Foreword/Editorial                  | 04               |
|     | Total Publications:                 | 170              |
| 13. | Symposium/Conference Paper          | 261 <sup>b</sup> |

<sup>a</sup>Shown under respective category and not added in the total; <sup>b</sup>not added in the total

## **Teaching Experience**

| PG Teaching in years: | 33+ |
|-----------------------|-----|
| UG Teaching in years: | 4+  |

| Subjects Teaching/Taught                | Class   |
|---|---|
| Animal Physiology*                      | M.Sc. Bioscience  |
| Endocrinology                           | M.Sc. Biochemistry  |
| Developmental Biology                   | M.Sc. Bioscience (Till 2001)  |
| Chronobiology (Special Paper)           | M.Sc. Bioscience  |
| Biostatistics & Computer Awareness      | M.Sc. Bioscience, M.Sc. Microbiology, M.Sc.<br>Biochemistry, M.Sc. Biotechnology (Till 2004, New<br>department created), M.Sc. Forestry (Till 2000, course<br>withdrawn thereafter) |
| Computer Application & Biostatistics    | 5-Year Integrated Course; Major in Bioscience   |
|   | 5-Year Integrated Course; Major in Microbiology   |
| Chronobiology                           | M.Phil. (Till 1995)   |
| Research Methodology & Data<br>Analyses | M.Phil. (From 2007; M.Phil. program resumed from 2007); Ph.D. Course Work [from 2011]   |
| French                                  | Diploma in French, 1991-93; 1998-00   |

\*Includes Chronobiology [till 2007], Endocrinology & Pheromones

## As a Faculty in Other Departments/Universities

- 1. Guest Faculty in Delhi University, Delhi, Session 1993-1994, Subject Taught: Chronobiology.
- 2. Guest Faculty in Jiwaji University, Gwalior, 2000, Subject taught: Biostatistics and Computer in Biology.

- 3. Guest Faculty in the SOS in Linguistics and Languages, Pt. Ravishankar Shukla University, Raipur, 1991-1993, 1998-2000, Subject taught: French.
- 4. Guest Faculty in the SOS in Computer Science, 1999, Subject taught: Statistical Packages.
- 5. Core Faculty, First SERC School in Chronobiology, October 17-27, 2002, Lucknow, Subject taught: Chronobiology, Lab course: Autorhythmometry & Statistical Packages.
- 6. Guest Faculty in Delhi University, Delhi, Session 2002-2003, Subject Taught: Chronobiology, Autorhythmometry & Circadian rhythm in cave organisms.
- Core Faculty, Second SERC School in Chronobiology, October 8-19, 2003, Raipur, Subject taught: Chronobiology, Lab course: Actigraphy.
- 8. Core Faculty, Third SERC School in Chronobiology, December 29, 2004 January 07, 2005, Gulbarga, Subject taught: Chronobiology, Lab course: Actigraphy & Actogram construction.
- 9. Core Faculty, Fourth SERC School in Chronobiology, December 24, 2005 January 04, 2006, Chidambaram, Subject taught: Chronobiology, Lab course: Actigraphy, Ambulatory blood pressure monitoring & autorhythmometry.
- 10. Core Faculty, Trends & Techniques in Chronobiology: A Workshop, March 20-25, 2006, Raipur, Subject taught: Chronobiology, Lab course: Actigraphy, Ambulatory blood pressure monitoring & autorhythmometry.
- 11. Guest Faculty, Gurukul Kangri University, Hardwar, October 13-14, 2007.
- 12. Core Faculty, Fifth SERC School in Chronobiology, February 1-11, 2007, Meerut, Subject taught: Chronobiology, Lab course: Actigraphy, Ambulatory blood pressure monitoring & autorhythmometry.
- 13. Core Faculty, SERC School in Chronobiology, 24 December 7 January 2011, University of Delhi, Delhi

## **Editorial Experience**

- 1. Past Editor, Ravishankar University Newsletter, Raipur
- 2. Past Editor, Biome (Quarterly), Journal in the areas of Life Sciences (Official organ of Chhattisgarh Botanical Association, Raipur)
- 3. Past Associate Editor, Journal of Ravishankar University
- 4. Past Editorial Board Member, Bioscience Research Bulletin, Modinagar
- 5. Associate Editor, Journal of Parasitology and Applied Animal Biology
- 6. Editor-in-Chief, Newsletter, Indian Society for Chronobiology, 1995-1997, 2000-2008
- 7. Expert, Selection/Assessment Committee, 1998-2000, NISCOM, CSIR, New Delhi
- 8. Editor-in-Chief, Society for Ecological and Environmental Development, Bhilai, 1999-2000
- 9. Reviewer of many national and foreign journals
- 10. Ph.D. thesis reviewer of about twenty Indian Universities
- 11. Reviewer of grant proposals (research projects) submitted to different funding agencies
- 12. Editor-in-Chief, Journal of Ravishankar University, Part B (Science) from 2009-Present

## Areas of Interest

Chronobiology, Shift work optimization, Animal Behaviour, Subterranean Biology, Ecology, Comparative Physiology, Endocrinology, Biodiversity and Biostatistics

## **Countries Visited**

France, UK, Germany, Switzerland, Brazil, Italy, Romania, Tunisia and Israel

## Complete List of Publications of Atanu Kumar Pati

## **Review Articles**

- 1. Pati AK, Pradhan RK, Pathak VK, Saini SK and Biswas J (1987). Circadian rhythms in nonmammalian vertebrates. Biome 2, 58-69.
- 2. Lévi F, Canon C, Depres-Brummer P, Adam R, Bourin P, Pati AK, Florentin I, Misset JL and Bismuth H (1992). The rhythmic organization of the immune network: implications for the chronopharmacologic delivery of the interferons, interleukins and cyclosporin. Adv. Drug Deliver. Rev. 9, 85-112.
- 3. Shedpure M and Pati AK (1995). The pineal gland: structural and functional diversity. Indian J. Exp. Biol. 33, 625-640.
- 4. Varghese E and Pati AK (1996). Thermoregulatory spectrum in vertebrates. Indian J. Exp. Biol. 34, 1053-1070.
- 5. Pati AK and Shedpure M (1998). Temporal relationship between circannual reproductive cycle and infradian rhythms in physiologic functions in lower vertebrates. In: Comparative Endocrinology and Reproduction (KP Joy, A Krishna and C Haldar, Eds.), pp. 433-461. Narosa Publishing House, New Delhi.
- 6. Pati AK (2000). An introduction to chronobiology. In: Chronophysiology (M Shedpure, Ed.), pp. 1-61. RSU, Raipur.
- 7. Pati AK, Chandrawanshi A and Reinberg A (2001). Shift work: Consequences and management. Curr. Sci. 81, 32-52.
- 8. Pati AK (2001). Chronobiology: The dimension of time in biology and medicine. Proc. Indian Natn. Sci. Acad. (PINSA) B67, 323-372 (by invitation).
- 9. Pati AK and Agrawal A (2002). Studies on the behavioural ecology and physiology of a hypogean loach, *Nemacheilus evezardi*, from the Kotumsar Cave, India. Curr. Sci. 83, 1112-1116.
- 10. Pati AK (2004). Chronobiology: Implications of circadian rhythms. Natl. Acad. Sci. Lett. 27, 233-248 (Invited Review).
- 11. Pati AK and Parganiha A (2005). Shift work: Circadian rhythm disruption and beyond. Proc. Indian Natn. Sci. Acad. (PINSA) B71, 229-255.
- 12. Sultana R and Pati AK (2014). Blood pressure and heart rate variability and diagnosis Biological Rhythm Research, 45, 477-494.
- 13. Senapati BK, Parganiha A, Pati AK and Panigrahi PK (2015). Sustainable management of agriculture with low entropy strategy: apropos earthworm. Journal of Ravishankar University 28, 1-10.
- 14. Baghel KK and Pati AK (2015). Pheromones as time cues for circadian rhythms in fish. Biological Rhythm Research 46, 659–669.
- 15. Singh MM and Pati AK (2016). Effects of radiation emanating from base transceiver station and mobile phone on sleep, circadian rhythm and cognition in humans–a review. Biological Rhythm Research 47, 353-388.

## Published in Refereed Foreign Journals

- 1. Thapliyal JP, Pati AK, Singh VK and Lal P (1982). Thyroid, gonad and photoperiod in the hemopoiesis of the migratory red headed bunting, *Emberiza bruniceps*. Gen. Comp. Endocrinol. 46, 327-332.
- 2. Thapliyal JP, Pati AK and Gupta BBPd (1982). The role of erythropoietin, testosterone and I-thyroxine in the tissue oxygen consumption and erythropoiesis of spotted munia, *Lonchura*

punctulata. Gen. Comp. Endocrinol. 48, 84-88.

- 3. Thapliyal JP, Lal P, Singh VK, Pati AK and Gupta BBPd (1983). Thyroid and gonad in the oxidative metabolism, erythropoiesis, and light response of the migratory red headed bunting, *Emberiza bruniceps*. Gen. Comp. Endocrinol. 51, 444-453.
- 4. Pati AK and Thapliyal JP (1984). Erythropoietin, testosterone and thyroxine in the erythropoietic response of the snake, *Xenochrophis piscator*. Gen. Comp. Endocrinol. 53, 370-374.
- 5. Pati AK and Pathak VK (1986). Thyroid and gonadal hormones in feather regeneration of red headed bunting, *Emberiza bruniceps*. J. Exp. Zool. 238, 175-181.
- 6. Pati AK, Florentin I, Chung V, De Sousa M, Lévi F and Mathé G (1987). Circannual rhythm in natural killer cell activity and mitogen responsiveness of murine splenocytes. Cellular Immunology 108, 227-234.
- 7. Pradhan RK, Pati AK and Agarwal SM (1989). Meal scheduling modulation of circadian rhythms of phototactic behaviour in cave dwelling fish. Chronobiol. International 6, 245-249.
- 8. Pradhan RK, Saini SK, Biswas J and Pati AK (1989). Influence of human urinary erythropoietin and I-thyroxine on blood morphology and energy reserves in two tropical species of fed and starved teleosts. Gen. Comp. Endocrinol. 76, 382-389.
- 9. Saini SK and Pati AK (1989). Influence of repeated synchronizer phase-shifts on growth and circadian rhythm in core temperature of male domestic fowls. J. Interdiscipl. Cycle Res. 20, 289-295.
- 10. Biswas J, Pradhan RK and Pati AK (1990). Studies on burying behaviour in epigean and hypogean fish: an example of behavioural divergence. Mem. Biospeleol 17, 33-41.
- 11. Biswas J, Pati A K and Pradhan R K (1990). Circadian and circannual rhythms in air gulping behaviour of cave fish. J. Interdiscipl. Cycle Res. 21, 257-268.
- 12. Pati AK and Gupta S (1991). Circadian time dependence of erythropoietic and respiratory responses of Indian garden lizard *Calotes versicolor* to mammalian urinary erythropoietin and thyroxine. Gen. Comp. Endocrinol. 82, 345-354.
- 13. Lévi F, Canon C, Depres-Brummer P, Adam R, Bourin P, Pati AK, Florentin I, Misset JL and Bismuth H (1992). The rhythmic organization of the immune network: implications for the chronopharmacologic delivery of the interferons, interleukins and cyclosporin. Adv. Drug Deliver. Rev. 9, 85-112.
- 14. Gupta S and Pati AK (1994). Desynchronization of circadian rhythms in a group of shift working nurses: effects of pattern of shift rotation. Human Ergology 23, 121-131.
- 15. Shedpure M and Pati AK (1994). Synchronization of infradian rhythms in 8 physiological functions with the circannual rhythm of reproduction in female *Clarias batrachus*. Biol. Rhythm Res. 25, 451-463.
- 16. Chandrawanshi A and Pati AK (1996). Impairment of peak expiratory flow rate in shift workers. International J. Industrial Ergonomics 17, 431-435.
- 17. Shedpure M and Pati AK (1996). Reproductive phase dependent annual variation in the effects of melatonin and pinealectomy, with or without iopanoic acid/cyproterone acetate, in the regulation of serum cholesterol in *Clarias batrachus*. Biol. Rhythm Res. 27, 58-71.
- 18. Varghese E and Pati AK (1997). Effect of pineal extirpation on daily and long term variations in thermal tolerance in a tropical catfish, *Clarias batrachus*. Biol. Rhythm Res. 28, 335-347.
- 19. Varghese E and Pati AK (1997). Annual cycle of thermal tolerance in sham-pinealectomized and pinealectomized air-breathing catfish *Clarias batrachus*. Biol. Rhythm Res. 28, 453-459.
- Pati AK, Maheshwari R and Gupta S (1998). Opercular activity and temporal organization of surfacing behaviour in Indian catfishes, *Clarias batrachus* and *Heteropneustes fossilis*. Biol. Rhythm Res. 29, 75-85.
- 21. Gangopadhyay A, Chandrawanshi A and Pati AK (1998). Assessment of pulmonary function in young and elderly shift workers of a steel plant. Biol. Rhythm Res. 29, 272-285.

- 22. Lal B, Singh HN, Singh TP and Pati AK (1999). Diurnal and infradian rhythms in lipid parameters of Indian catfish, *Heteropneustes fossilis*. Biol. Rhythm Res. 30, 371-382.
- 23. Chandrawanshi A and Pati AK (2000). Could externally desynchronized circadian rhythm be resynchronized in shift workers? Biol. Rhythm Res. 31, 160-176.
- 24. Acharia K, Lal B, Singh TP and Pati AK (2000). Circadian phase dependent thermal stimulation of ovarian recrudescence in Indian catfish, *Clarias batrachus*. Biol. Rhythm Res. 31, 125-135.
- 25. Pati AK and Agrawal A (2000). Hierarchical perception of stimuli during case construction in the bagworm moth *Eumeta crameri*. J. Insect Behavior 13, 667-677.
- 26. Pati AK and Chandrawanshi A (2001). Assessment of anxiety level and mental health status in spouses and children of day-working and shift-working men. Biol. Rhythm Res. 32, 45-59.
- 27. Pati AK (2001). Temporal organization in locomotor activity of the hypogean loach, *Nemacheilus evezardi* and its epigean ancestor. Environmental Biology of Fishes 62, 119-129.
- 28. Harikrishnan S, Lal B, Singh TP and Pati AK (2002). Circadian and ultradian variations in the plasma level of maturational gonadotropin (GTH II) in the Indian catfish, *Clarias batrachus*. Biol. Rhythm Res. 33, 223-234.
- 29. Halberg F, Cornélissen G, Wang Z, Wan C, Ulmer W, Katinas G, Singh R, Singh RK, Singh Rajesh K, Gupta, BD, Singh RB, Kumar A, Kanabrocki E, Sothern Robert B, Rao G, Bhatt, Mohan LB, Srivastava M, Rai G, Singh S, Pati AK, Nath P, Halberg Francine, Halberg J, Schwartzkopff O and Bakken E (2003). Chronomics: circadian and circaseptan timing of radiotherapy, drugs, calories, perhaps nutriceuticals and beyond. J. Experimental Therapeutics & Oncology 3, 223-260.
- 30. Dixit V, Pati AK, Gupta AK and Prasad GBKS (2004). Rhythmic behaviour of *W. bancrofti* microfilaraemia in human population at Raipur. Biol. Rhythm Res. 35, 355-366.
- 31. Ghosh S and Pati AK (2004). Circadian variation in phototactic behaviour of walking Indian catfish, *Clarias batrachus*. Biol. Rhythm Res. 35, 367-375.
- 32. Pati AK, Parganiha A, Kar A, Soni R, Roy S and Choudhary V (2006). Implications of the study of rest-activity circadian rhythm in head and neck cancer patients. Biol. Rhythm Res. 37, 497-505.
- 33. Achari KV and Pati AK (2007). Morningness-eveningness preference in Indian school students as function of gender, age and habitat. Biol. Rhythm Res. 38, 1-8.
- 34. Pati AK, Parganiha A, Kar A, Soni R, Roy S and Choudhary V (2007). Alterations of the characteristics of the circadian rest-activity rhythm of cancer in-patients. Chronobiol. Int. 24, 1179-1197.
- 35. Halberg F, Cornélissen G, Otsuka K, Sánchez de la Peňa S, Schwartzkopff O, Watanabe Y, Pati AK, Wall DG, Delmore P, Borer K, Beaty LA, Nolley ES, Adams C, Jarmila Siegelová, Pavel Homolka, Jiří Dušek, Bohumil Fišer, Přikryl P. (2007). Why and how to implement 7day/24 hour blood pressure monitoring? Geronto Geriatrics, Mexico, Instituto Politécnico Nacional (MEX). Volume 2007, number 2007, 1-31.
- 36. Sultana R., Vaidya N., Parganiha A. and Pati AK (2008). Dichotomy in human population based on variability in peak spread of rest-activity rhythm in respect of internal phase reference point. Biol. Rhythm Res. 39, 109-121.
- 37. Sinha S. and Pati A.K. (2008). Circannual rhythm in special distribution of burrows of fresh water crab, *Barytelphusa cunicularis* (Westwood, 1836). Biol. Rhythm Res. 39, 359-368.
- 38. Soni R., Dubey P., Kar A., Parganiha A., Pradhan R.K. and Pati A.K. (2008). Permanent night work alters characteristics of circadian rhythm of rest-activity in human subjects. Biol. Rhythm Res. 39, 481-492.
- Cornelissen G, Muller C, Quadens O, Barreto LM, Wang Z, Wu J, Zhao Z, Dusek J, Fiser B, Homolka P, Prikryl P, Halberg F, Siegelova J, Strestik J, Amory-Mazaudier C, Berger S, Hecht K, Jozsa R, Pati AK, Singh RK, Carandente F, Maggioni C, Singh RB, Laffi G, Perfetto F, Rostagno C, Tarquini R, Salti R, Fujimura A, Kumagai Y, Mitsutake G, Otsuka K,

Watanabe Y, Manukyan L, de la Pena SS, Weydahl A, Chirinos J, Blank M, Denisova O, Breus TK, Blagonravov MB, Chibisov SM, Masalov A, Malkova I, Khalilov E, Mitish M, Syutkina EV, Turti T, Zaslavskaya RM, Gvozdjakova A, Zeman M, Mikulecky Sr M, Revilla M, Ulmer W, Valenzi V, De Prins J, Bogdanov V, Gorgo Y, Delyukov A, Wilson D, Simpson H, Hillman D, Sothern RB, Bingham C, Hawkins D, Holte J, Delcourt A, Johnson D, Adams C, Beaty L, Nolley E, Engebretson M, Bakken E, Holley D, Sundaram S, Deruyck C and Toussaint G. (2008). Unseen space weather also relates to cardiac events. World Heart Journal, 1, 15-21.

- 40. Singh A.K., Lal B. and Pati A.K. (2009). Variability in the characteristics of ultradian and circadian rhythms in plasma levels of growth hormone in the Indian walking catfish, *Clarias batrachus*. Biol. Rhythm Res. 40, 211-221.
- 41. Ramteke A., Poddar P. and Pati A.K. (2009). Circadian rhythms of locomotor activity in Indian walking catfish, *Clarias batrachus*. Biol. Rhythm Res. 40, 201-209.
- 42. Kumar P, Pati AK, Mohan J, Sastry KVH, Tyagi JS and Chaturvedi CM (2009). Effects of simulated hypo- and hyper-reproductive conditions on the characteristics of circadian rhythm in hypothalamic concentration of serotonin, dopamine; plasma levels of T4, T3 and testosterone in Japanese quail. Chronobiol. Int. 26, 28-46.
- 43. Dixit V, Pati AK, Gupta AK, Bisen PS and Prasad GBKS (2009) Filarial infection is resisted differentially by subjects having different blood group phenotypes. J. Clin. Lab. Analysis 23, 186-191.
- 44. Pande B and Pati AK (2010). Overestimation/underestimation of time: concept confusion hoodwink conclusion. Biol. Rhythm Res. 41, 379-390.
- 45. Chaturvedi CM, Singh V P, Singh P, Basu P, Singaravel M, Shukla RK, Dhawan A, Pati AK, Gangwar RK and Singh SP (2011). 2.45 GHz (CW) microwave irradiation alters circadian organization, spatial memory, DNA structure in the brain cells and blood cell counts of male mice, *Mus musculus*. Progress in Electromagnetics Research B, 29, 23-42.
- 46. Gupta O, Patel H, Pati AK and Venugopal R (2011). Sports chronobiology: circadian rhythms in psychological, physiological and physical performances. The Asian Man-An International Journal 5 (1), 40-44.
- 47. Pande B, Rathod G, Vaidya N, Nag C, Parganiha A and Pati AK (2012). Non-auditory effect of community noise on interval timing in humans: an exploration. Biol. Rhythm Res. 43, 585-601.
- 48. Achari KV, Pati AK and Parganiha A (2012). Comparison of distributions of morningnesseveningness among populations of shift workers on varied work patterns in different organizations. Biol. Rhythm Res. 43, 235-248.
- 49. Vaidya N, Pati AK and Parganiha A (2012). Circadian variability and nocturnal dipping pattern in blood pressure in young normotensive subjects. Biol. Rhythm Res. 43, 485-496.
- 50. Pande B, Shindey RD, Parganiha A and Pati AK (2013). Interval timing as function of methods of estimation a study on cohorts of young Indians. Biol. Rhythm Res. 44, 469-483
- 51. Sultana R and Pati AK (2014). Blood pressure and heart rate variability and diagnosis. Biol. Rhythm Res. 45, 477-494.
- 52. Singh A, Kankariya S, Pati AK and Parganiha A (2015). Day length and evening temperature predict circannual variation in activity duration of the colony of the Indian cliff swallow, *Hirundo fluvicola*. Biol. Rhythm Res. 46, 69-79.
- 53. Sharma P, Pande B, Chandrakar P and Pati AK (2015). Comparative study of circadian variation in oral, tympanic, forehead, axillary and elbow pit temperatures measured in a cohort of young university students living their normal routines. Biol. Rhythm Res. 46, 103-112.
- 54. Singh A, Tripathi MK, Singh R, and Pati AK (2015). Circadian rhythmicity in leucocytes immune responses in the fresh water snake, *Natrix piscator*. Biol. Rhythm Res. 46, 181-194.
- 55. Tripathi MK, Singh R and Pati AK (2015). Daily and seasonal rhythms in immune responses

of splenocytes in the freshwater snake, *Natrix piscator*. PLoS ONE 10(2).

- 56. Baghel KK and Pati AK (2015). Pheromones as time cues for circadian rhythms in fish. Biol. Rhythm Res. 46, 659–669.
- 57. Singh MM and Pati AK (2016). Effects of radiation emanating from base transceiver station and mobile phone on sleep, circadian rhythm and cognition in humans–a review. Biol. Rhythm Res. 47, 353-388.

## Published in Refereed Indian Journals

- 1. Thapliyal JP and Pati AK (1979). Thymectomy and changes in blood morphology of the adult male chequered water-snake, *Natrix piscator*. Indian J. Exp. Biol. 17, 1242-1244.
- 2. Thapliyal JP, Gupta BBPd and Pati AK (1981). Thyroid and circadian rhythm in oxygen consumption of the spotted munia, *Lonchura punctulata*. Indian J. Exp. Biol. 19, 422-424.
- 3. Pati AK, Gupta BBPd and Thapliyal JP (1981). Circadian rhythm in oxidative metabolism of Indian garden lizard, *Calotes versicolor*. Proc. Nat. Acad. Sci., India 51 (B), 250-256.
- 4. Thapliyal JP, Lal P, Singh VK, Pati AK and Gupta BBPd (1983). Triiodothyronine and thyroxine in the physiology of migratory red headed bunting, *Emberiza bruniceps*. Indian J. Exp. Biol. 21, 177-179.
- 5. Haldar-Mishra C, Pati AK and Thapliyal JP (1984). Effects of pinealectomy and melatonin administration on body lipid, water content and plasma lipids of the lizard, *Calotes versicolor*. J. Reprod. Biol. Comp. Endocrinol. 4, 1-5.
- Pradhan RK, Pati AK, Agrawal AK and Agarwal SM (1989). Time dependent effects of hormones on rate of protein synthesis in lymphoid organs of chickens. Indian J. Exp. Biol. 27, 193-195.
- 7. Saini SK and Pati AK (1989). Effects of repeated eastward and westward synchronizer phase-shifts on growth, blood morphology and biochemical variables in male domestic fowls. Indian J. Exp. Biol. 27, 895-898.
- 8. Pati AK (1989). Circannual modulation of circadian mesor of circulating eosinophil in an ophid. J. Ravishankar Univ. 2B, 18-22.
- 9. Saini SK and Pati AK (1990). Effects of zeitgeber shifts on gonadal function in male domestic fowls. Indian J. Exp. Biol. 28, 739-741.
- 10. Pati AK and Saini SK (1991). Desynchronization of oral temperature, pulse and performance circadian rhythms in shift working Indian nurses. Indian J. Exp. Biol. 29, 1017-1021.
- 11. Biswas J and Pati AK (1991). Influence of thyroid hormones on muscle tissue respiration in hypogean and epigean populations of loach *Oreonectus evezardi*. Indian J. Exp. Biol. 29, 933-936.
- 12. Pati AK and Saini SK (1992). Age related modulation of circadian time structure of blood, plasma and tissue variables in male domestic fowls. Indian J. Exp. Biol. 30, 276-280.
- 13. Pati AK and Gupta G (1992). Late afternoon administration of melatonin is prosomatotrophic and exerts androgen independent effects on erythropoiesis in male house sparrow *Passer domesticus*. Indian J. Exp. Biol. 30, 173-177.
- Saini SK and Pati AK (1992). Circadian features of carbohydrate metabolism in domestic fowls exposed to weekly 120°-shifts of synchronizer schedule. Indian J. Exp. Biol. 30, 87-89.
- 15. Gupta S and Pati AK (1992). Data analysis methodology in chronobiological studies. J. Parasit. Appl. Anim. Biol. 1, 151-163.
- 16. Shedpure M and Pati AK (1993). Melatonin-induced metabolic changes in a freshwater catfish. J. Ravishankar Univ. 6, 29-36.
- 17. Gupta S and Pati AK (1994). Characteristics of circadian rhythm in six variables of morning active and evening active healthy human subjects. Ind. J. Physiol. Pharmacol. 38, 101-107.
- 18. Chandrawanshi A, Gupta S, Pati AK and Agarwal SS (1994). Interrelationships between

blood glucose and blood pressure vis a vis factors, such as age and sampling time in urban population of Raipur, Madhya Pradesh. J. Human Ecol. 5, 197-200.

- 19. Pati AK and Gupta S (1994). Time estimation circadian rhythm in shift workers and diurnally active humans. J. Biosci. 19, 325-330.
- 20. Agrawal A and Pati AK (1995). Nest architecture of a bagworm species: Rhythmic pattern in the arrangement of sticks. J. Biosci. 20, 409-416.
- 21. Gupta S and Pati AK (1995). Resolving power of modified Engelmann Scale for determining chronotype in human population. J. Human Ecol. 6, 21-26.
- 22. Shedpure M and Pati AK (1995). Internal phase relationship between the high frequency rhythms in blood, serum and tissue variables and circannual rhythm of reproduction in male catfish *Clarias batrachus*. Proc. National Science Academy B61, 79-88.
- 23. Shedpure M and Pati AK (1995). Circannual variation in the effects of melatonin and pinealectomy on erythropoiesis and intermediary metabolism in a catfish. J. Parasit. Appl. Anim. Biol. 4, 55-72.
- 24. Shedpure M and Pati AK (1995). The pineal gland: structural and functional diversity. Indian J. Exp. Biol. 33, 625-640.
- 25. Varghese E and Pati AK (1996). Thermoregulatory spectrum in vertebrates. Indian J. Exp. Biol. 34, 1053-1070.
- 26. Varghese E and Pati AK (1997). Measurement of spatial distribution to gauge behavioral thermoregulatory status in a small colony of ectothermic air-breathing catfish, *Clarias batrachus*. Indian J. Exp. Biol. 35, 250-255.
- 27. Shedpure M and Pati AK (1997). Do thyroid and testis modulate the effects of pineal and melatonin on hemopoietic variables in *Clarias batrachus*? J. Biosci. 21, 797-808.
- 28. Agrawal A, Pati AK and Karkun D (1997). Seasonal variation in infestation characteristics of bagworm (Lepidoptera: Psychidae) in avenue plantation of Acacia and Peltophorum in the Chhattisgarh region. Curr. Sci. 72, 211-214.
- 29. Gupta S, Pati AK and Lévi F (1997). Pattern of shift rota modulates oral temperature circadian rhythm and sleep-wakefulness profiles in shift workers. J. Biosc. 22, 477-488.
- 30. Pati AK, Gupta S and Maheshwari R (1998). Optoelectronic device, an useful tool to record surfacing behaviour in air-breathing fishes. Curr. Sci. 74, 146-149.
- 31. Gupta S and Pati AK (1998). Effects of surfacing prevention and unilateral removal of airbreathing organs on opercular frequency in an Indian air-breathing catfish, *Clarias batrachus* (Linn.). Indian J. Anim. Sci. 68, 997-1000.
- 32. Maheshwari R, Pati AK and Gupta S (1999). Annual variation in air-gulping behaviour in two Indian siluroids, *Heteropneustes fossilis* and *Clarias batrachus*. Indian J. Anim. Sci. 69, 66-72.
- 33. Nair G, Pati AK and Naik ML (1999). Temporal organization in population density of protozoans in septic tank sewage. Curr. Sci. 76, 1128-1134.
- 34. Agrawal A and Pati AK (2000). Host preferences in larvae of the bagworm moth, *E. crameri* (Lepidoptera: Psychidae). Vasundhra The Earth 2&1, 13-16.
- 35. Pati AK, Chandrawanshi A and Reinberg A (2001). Shift work: Consequences and management. Curr. Sci. 81, 32-52.
- 36. Pati AK (2001). Chronobiology: The dimension of time in biology and medicine. Proc. Indian Natn. Sci. Acad. (PINSA) B67, 323-372 (by invitation).
- 37. Agrawal A and Pati AK (2002). Increment in the size of an inanimate object in the case of bagworm moth, *Eumeta crameri* Westwood (Lepidotera: Psychidae) obeys Dyar's law. Curr. Sci. 83, 71-73.
- 38. Pati AK and Agrawal A (2002). Studies on the behavioural ecology and physiology of a hypogean loach, *Nemacheilus evezardi*, from the Kotumsar Cave, India. Curr. Sci. 83, 1112-1116.
- 39. Pati AK and Ghosh S (2003). A dominant-subordinate relationship underlies the phototactic

behaviour in male *Clarias batrachus*. Curr. Sci. 85, 1465-1467.

- 40. Agrawal A and Pati AK (2003). Larval case renovation-a unique behaviour in bagworm moth, *Eumeta crameri* Westwood. Curr. Sci. 85, 1674-1679.
- 41. Pati AK (2004). Chronobiology: Implications of circadian rhythms. Natn. Acad. Sci. Lett. 27, 233-248.
- 42. Parganiha A and Pati AK (2005). The effects of frequent shutdowns of cement factory on circadian rhythms in subjective drowsiness, fatigue and attention of shift workers. Natn. Acad. Sci. Lett. 28, 285-291.
- 43. Pati AK and Parganiha A (2005). Shift work: Circadian rhythm disruption and beyond. Proc. Indian Natn. Sci. Acad. (PINSA) B71, 229-255.
- 44. Pati AK and Achari KV (2007). Shift work adversely affects human longevity. Curr. Sci. 92, 890-891.
- 45. Parganiha A, Soni RK and Pati AK (2010). Covert weakening of circadian organization in a cohort of rotational shift workers. Journal of Ravishankar University 21-23, 50-56.
- 46. Pande B and Pati AK (2013). Prospective judgment of short-intervals in a cohort of university students. Natl. Acad. Sci. Lett. 36, 191-199.
- 47. Pande B, Parganiha A, Patra PK and Pati AK (2014). Short-duration judgment in young Indian subjects under 30 h constant wakefulness. Indian J. Exp. Biol. 52, 559-568.
- 48. Sultana R and Pati AK (2014). Blood pressure variability and pedigree analysis of nocturnal SBP dipping in Kumbas from rural Chhattisgarh, India. Indian J. Exp. Biol. 52, 542-548.
- 49. Kankariya S, Singh A, Pati AK and Parganiha A (2014). Temporal pattern in roosting behavior of the house swift, *Apus affinis* with reference to environmental factors a longitudinal study. Journal of Ravishankar University B 27 (Special Issue), 41-50.
- 50. Senapati BK, Parganiha A, Pati AK and Panigrahi PK (2015). Sustainable management of agriculture with low entropy strategy: apropos earthworm. Journal of Ravishankar University 28, 1-10.

## **Published in National & International Proceedings**

- 1. Pati AK and Thapliyal JP (1983). Eclipse response of water snake, *Natrix piscator*. Proc. Int. Symp. Solar Eclipse 56-63.
- 2. Pati AK and Thapliyal JP (1983). Internal desynchronization of two circadian rhythms of snake, *Xenochrophis piscator*. Chronobiologia 10, 101 (Abstract).
- 3. Gupta BBPd, Pati AK and Thapliyal JP (1983). Circadian and circannual rhythms in oxidative metabolism of Indian garden lizard, *Calotes versicolor*. Chronobiologia 10, 128 (Abstract).
- 4. Pati AK and Thapliyal JP (1984). Comparative physiology of the red cell rhythm in the day active bird, lizard and night active snake. Proc. 1st Int. Symp. Life Sci. 1983, 38-43.
- 5. Pati AK and Thapliyal JP (1984). Circannual variation in the timing of eosinophil circadian rhythm in snakes. In "Chronobiology" 1982-83 (E Haus and HF Kabat, eds.), pp. 245-249. S. Karger, Basel.
- Sharan S, Thapliyal JP and Pati AK (1984). Influence of cooling of the hypothalamus on circadian rhythm of oxygen uptake and blood variables of chequered water-snake, *Natrix piscator*. In "Chronobiology" 1982-83 (E Haus and HF Kabat, eds.), pp. 25-30. S. Karger, Basel.
- 7. Pradhan RK, Pati AK and Agarwal SM (1985). Circadian rhythm of surface activity in cave fish, *Nemacheilus evezardi*. Chronobiologia 12, 265 (Abstract).
- 8. Pradhan RK, Pati AK and Agarwal SM (1985). Phototactic rhythm in cave fish. Chronobiologia 12, 265 (Abstract).
- 9. Pati AK (1986). Circadian stage dependence of sodium pentobarbital induced alterations in the ophidian hemogram. Ann. Review Chronopharmacol. 3, 301-304.

- 10. Touitou Y, Motohashi Y, Pati AK, Lévi F, Reinberg A and Ferment O (1986). Comparison of cortisol circadian rhythms documented in samples of saliva, capillary (finger tips) and venous blood from healthy subjects. Ann. Review Chronopharmacol. 3, 297-299.
- 11. Canon C, Lévi F, Bennaceur M, Touboul JP, Pati AK, Reinberg A and Mathe G (1986). Alterations of circadian rhythms in lymphocyte subpopulations of patients with hematologic malignancies. Cancer Chemother. Pharmacol. 18, Suppl 1 (Abstract).
- 12. Pati AK, Saini SK, Biswas J and Pradhan RK (1988). Circadian rhythms in self-measured variables of eight women, M Phil students 21-25 years of age. Chronobiologia 15, 272 (Abstract).
- 13. Saini SK and Pati AK (1988). Repeated eastward synchronizer phase-shifts improve health of poultry bird. Chronobiologia 15, 272 (Abstract).
- 14. Pati AK, Florentin I, Lemaigre G, Mechkouri M and Lévi F (1988). Chronopharmacologic optimization of oral ciclosporine A in mice: a search for a compromise between least renal toxicity and highest immunosuppressive effects. Ann. Review Chronopharmacol. 3, 43-44.
- 15. Gupta S and Pati AK (1993). Internal clock undergoes acceleration in healthy nurses on night shift. In "Chronobiology" (AK Pati, ed.), pp. 93-95. RSU, Raipur.
- 16. Gupta S and Pati AK (1993). On job sleep availability: The performance of nurses on night shift. In "Chronobiology" (AK Pati, ed.), pp. 97-104. RSU, Raipur.
- 17. Gupta S and Pati AK (1993). Circadian time structure of shift workers. Occupational & Environmental Ergonomics 179-183.
- Pati AK (1998). Faunal diversity in Kotumsar cave: Is there a need for conservation? Proc. Nat. Symp. Trends Res. Hormones, Reproduction & Animal Productivity. New Delhi, October 10-12, pp. 43-45.
- 19. Pati AK (2000). An Introduction to Chronobiology. In "Chronophysiology" (M Shedpure, ed.), pp. 1-61. Pt. RSU, Raipur.
- 20. Chandrawanshi A and Pati AK (2000). Shift work and sleep disorders. In "Chronophysiology" (M Shedpure, ed.), pp. 85-98. Pt. RSU, Raipur.
- Gupta S and Pati AK (2000). Effect of metabolic hormones on surfacing behaviour in an Indian Catfish, *Clarias batrachus*. In "Chronophysiology" (M Shedpure, ed.), pp. 123-148. Pt. RSU, Raipur.
- 22. Maheshwari R and Pati AK (2000). Do metabolic hormones modulate air-gulping behaviour in *Heteropneustes fossilis*? In "Chronophysiology" (M Shedpure, ed.), pp. 149-174. Pt. RSU, Raipur.
- 23. Pati AK, Parganiha A, Pradhan RK, Agrawal A, Cornelissen G and Halberg F (2006). Compliance with monitoring needed after switching treatment timing to eliminate vascular disease risks. International Conference on the Frontiers of Biomedical Science: Medical Chronobiology. pp. 55-57.

## Papers Published in Other Journals

- 1. Pati AK (1983). Circannual circadian interaction in ophidian biological rhythm. Oriental Zoologist 3, 23-28.
- 2. Pati AK and Thapliyal JP (1983). Chronosusceptibility of ophidian blood variables to pentobarbital. Adv. Biol. Res. 1, 37-44.
- 3. Pati AK, Lévi F, Roulon A, Lemaigre G, Ferment O, Touitou Y, Reinberg A and Mathe G (1986). Ciclosporine-induced renal damage in mice and circadian rhythm in drug toxicity. Biome 1, 27-33.
- 4. Pati AK, Pradhan RK, Pathak VK, Saini SK and Biswas J (1987). Circadian rhythms in nonmammalian vertebrates. Biome 2, 58-69.
- 5. Biswas J, Pati AK, Pradhan RK and Kanoje RS (1990). Comparative aspects of reproductive phase dependent adjustments in behavioural circadian rhythms of epigean and hypogean fish. Comp. Physiol. Ecol. 15, 134-139.

## Book

- 1. Ali SS, Rai V, Mishra SK and Pati AK (1988). Biostatistics. In "Graduate Botany", Adeeb Educational, Raipur.
- 2. Pati AK, ed. (1993). CHRONOBIOLOGY, RSU, Raipur. Reviewed in IJEB, Vol. 32, January 1994, p.72 by AV Ramachandran and IJBB, Vol. 31, February 1994, pp. 81-82 by MK Chandrashekaran.

## **Book Chapter**

- 1. Pati AK and Shedpure M (1999). Temporal relationship between circannual reproductive cycle and infradian rhythms in physiologic functions in lower vertebrates. In Comparative Endocrinology and Reproduction, K.P. Joy, A. Krishna and C. Haldar (eds.), pp. 433-461. Narosa Publishing House, New Delhi.
- 2. Pati AK (2008). Circadian rhythms in hypogean fish: with special reference to the cave loach, *Nemacheilus evezardi*. In: Fish Life in Special Environments, P. Sébert, D.W. Onyango and B.G. Kapoor (eds.), pp. 83-130. Science Publishers, New Hampshire, USA.
- 3. Pati AK and Parganiha A (2010). Biology of Subterranean Fishes of India. In: The Biology of Subterranean Fishes. (E. Trajano, M.E. Bichuette & B.G. Kapoor, eds.), pp. 415-440, Science Publishers and CRC Press, Taylor & Francis Group, USA.

## **Mini Review**

1. Parganiha A and Pati AK (2010). Circadian rhythm research in humans: Past, present & future. Samay, Newsletter of Indian Society for Chronobiology, 13, 2-3.

## Report

- 1. Pati AK (1989). Reproductive, Physiological and Behavioural Adjustments in a Cave Fish: A Study on Retrogressive/Constructive Evolution. Submitted to DST, New Delhi.
- 2. Pati AK (1990). Evaluation of Repeated Synchronizer Phase-Shifts Effects on Growth, Circadian Rhythm and Chronosensitivity to Hormones in Chickens. Submitted to CSIR, New Delhi.
- 3. Pati AK (1995). National Symposium on Comparative Endocrinology. Curr. Sci. 54, 359.
- 4. Pati AK (1996). X National Symposium on Chronobiology. Indian J. Exp. Biol. 34, 823-824.
- 5. Pati AK and Maheshwari R (1999). National Symposium on Recent Advances in Pineal Research: A report. Biol. Rhythm Res. 31, 117-119.
- 6. Pati AK (2000). Impact of regressive evolution of circadian behavior: a comparative study of temporal organization in cave-adapted *Nemacheilus evezardi* and its ancestors. Submitted to DST, New Delhi.
- 7. Pati AK (2002). Determination of Phase Angle Differences ( $\psi$ ) between the Circadian Locomotor Activity Rhythm and the Zeitgeber in the Cave Loach, *Nemacheilus evezardi*. Submitted to Grant Cell (UGC Unassigned), Pt. RSU, Raipur.
- 8. Pati AK (2004). Second SERC School in Chronobiology: A Report. Submitted to DST, New Delhi.
- 9. Pati AK (2004). XV National Symposium on Chronobiology A report. Submitted to ICMR, New Delhi; CSIR, New Delhi; DST, New Delhi; CCOST, Raipur.
- 10. Pati AK (2004). National Colloquium on Cave Organisms and Adaptation A Report. Submitted to DST, New Delhi; and Chhattishgarh Tourism Board, Raipur.
- 11. Pati AK and Agrawal A (2004). Meeting Report: National Symposium on Chronobiology. Curr. Sci. 87, 421-422.

- 12. Pati AK, Joshi BN and Parganiha A (2005). Current Status of Biospeleology in India. Subterranean Biology 3, 99-100.
- 13. Pati AK and Parganiha A (2006). A report on the XVII International Symposium of Biospeleology, Raipur, India, 2004. Sibios Newsletter 6, 5-6. http://www.fi.cnr.it/sibios/newslett.htm.

## View/Opinion

- 1. Pati AK (1982). Cancer treatment. Indian Express L (52), April 5.
- 2. Pati AK (1984). Live clock. M.P. Chronicle XXVI (292), 3.
- 3. Saini SK, Pradhan RK and Pati AK (1987). The Salamander Trail. Indian Express.
- 4. Pati AK (1995). The proposal of National Science University more comments. Curr. Sci. 68, 237-238.
- 5. Pati AK (1995). The academy document: a perceptive appraisal of science education in India. Curr. Sci. 69, 87.

## **Popular Articles**

- 1. Pati AK (1981). Shiftworkers and occupational health hazards. Science Reporter 18, 88-90.
- 2. Pati AK (1982). Time sense in human welfare. Students Time 3, 10-11.
- 3. Pathak VK and Pati AK (1984). Bird migration: Origin and ecological significance. Science Reporter 21, 54-58.
- 4. Pathak VK and Pati AK (1984). The enigmatic thyroid hormones. Science Reporter 21, 525-529.
- 5. Pati AK (1987). Chronobiology: with special reference to rhythms in plants. Topics in Botany 2, 38-43.
- 6. Pati A K (1998). Jet lag. Souvenir 1998, Bengalee Kalibadi Samity, Raipur.
- 7. Pati AK and Agrawal a (1999). Folk stories on bagworms. Zoos" Print 14, 7.

## Foreword/Editorial

- 1. Pati AK (1999). Vasundhara -The Earth 1(1), June 1999.
- 2. Pati AK (1999). Vasundhara -The Earth 1-2 (2-1), December 1999 June 2000.
- 3. Pati AK (2000). In: Chronophysiology (M Shedpure, ed.), RSU, Raipur.
- 4. Pati AK (2004). Newsletter, Indian Society for Chronobiology, Vol. 9 (1 & 2), March 2004.

## Symposium/Conference Paper

- 1. Thapliyal JP and Pati AK (1978). Induced shifts in blood parameters by 180 degree rotation of the light axis. 4th All India Congress of Zoology, Bodh Gaya, pp. 134-135.
- 2. Pati AK, Singh VB and Thapliyal JP (1979). Chronosusceptibility in liver and blood variables of red headed bunting and Indian garden lizard to pentobarbital. 3rd Conference of the Indian Society for Chronobiology, Varanasi, p. 52.
- 3. Pati AK and Thapliyal JP (1980). Hormones and ophidian erythropoiesis. 5th All India Congress of Zoology, Bhopal, p. 68.
- 4. Pati AK, Gupta BBPd and Thapliyal JP (1980). Circadian rhythm in oxidative metabolism of Indian garden lizard, *Calotes versicolor*. Symp. Recent Advances Expt. Zool., Allahabad, p. 35.

- 5. Thapliyal JP, Gupta BBPd and Pati AK (1980). Thyroid and the circadian rhythm in BMR of spotted munia. Symp. Gen. Comp. Endocrinol., New Delhi, pp. 20-21.
- 6. Pati AK, Gupta BBPd and Thapliyal JP (1981). Hormones: avian erythropoiesis and oxidative metabolism. 68th Session of Indian Science Congress, Varanasi.
- 7. Pati AK and Thapliyal JP (1981). Lability of eosinophil circadian rhythm as a consequence of exposure of LD: 12/12 acclimated snakes under LD: 24/0 schedule. 4th Conf. Indian Society Chronobiol., Bombay.
- 8. Pati AK and Thapliyal JP (1981). Circannual variations in the timing of eosinophil circadian rhythm in snakes. Int. J. Chronobiol. 7, 287. XV International Conf. International Society Chronobiol., Minnesota, September 13-18.
- Sharan S, Pati AK and Thapliyal JP (1981). Influence of cooling of the hypothalamus on circadian oxygen uptake of the brain and blood morphology of the chequered water-snake. Int. J. Chronobiol. 7, 315. XV International Conf. International Society Chronobiol., Minnesota, September 13-18.
- 10. Pati AK (1982). Chronobiology: with special reference to circadian system of a reptile. 70th session of Indian Science Congress, Tirupati, p. 57.
- 11. Pati AK and Thapliyal JP (1983). Comparative physiology of the circadian red cell rhythm in day active bird, lizard and night-active snake. 1st International Symposium of Life Sciences of the Indian Society of Life Sciences, Bodh Gaya.
- 12. Pati AK, Agrawal AK, Pradhan RK and Agarwal SM (1984). Circadian stage-dependent effects of hormones on growth rate in the chicken. Symp. Comp. Endocrinology, Varanasi, p. 76.
- 13. Touitou Y, Motohashi Y, Pati AK, Levi F, Reinberg A and Ferment O (1986). Comparison of cortisol circadian rhythms documented in samples of saliva, capillary (finger tips) and venous blood from healthy subjects. 2nd Montreux Conf. Chronopharmacology, Montreux, Switzerland, March 10-14.
- 14. Pati AK (1986). Circadian stage dependence of sodium pentobarbital induced alterations in the ophidian hemogram. 2nd Montreux Conf. Chronopharmacology, Montreux, Switzerland, March 10-14.
- 15. Pati AK (1986). Circannual modulation of circadian rhythm in circulating eosinophils. 8th Conference of the European Society for Comparative Physiology and Biochemistry, Strasbourg, France, August 31-September 2, p. 147.
- 16. Pradhan RK, Pati AK and Agarwal SM (1986). Phototactic behaviour in cave fish: Synchronizing effect of meal scheduling. 8th Conference of the European Society for Comparative Physiology and Biochemistry. Strasbourg, France, August 31-September 2, p. 159.
- 17. Saini SK and Pati AK (1988). Effects of repeated synchronizer phase shifts on body weight, comb height and gonadal recrudescence in male chicks. All India Symposium on Comparative Endocrinology, Nagpur, January 23-25, p. 52.
- 18. Pradhan RK, Pati AK and Agarwal SM (1988). Circadian variations in some biochemical variables of a cavernicole. 75th Session of Indian Science Congress, Pune, January 7-12.
- 19. Biswas J, Pati AK, Pradhan RK and Kanoje RS (1988). Reproductive phase dependent adjustments in behavioural circadian rhythm characteristics: An example of constructive evolution in the hypogean fish. Symposium on Recent Trends in Comparative Endocrinology, Varanasi, March 11-13, p. 18.
- 20. Saini SK and Pati AK (1988). The influence of repeated synchronizer phase-shifts on comb height, gonadal development and circadian rhythm of core temperature in domestic fowl, *Gallus domesticus*. Symposium on Recent Trends in Comparative Endocrinology, Varanasi, March 11-13, p. 84.
- 21. Pradhan RK, Saini SK, Biswas J and Pati AK (1988). The effects of starvation on energy reserves and erythropoietic response in the teleosts to human urinary erythropoietin

andthyroxine. Symposium on Recent Trends in Comparative Endocrinology, Varanasi, March 11-13, p. 74.

- 22. Pati AK, Florentin I, Lemaigre G, Mechkouri M and Lévi F (1988). Chronopharmacologic optimization of oral ciclosporine A in mice: A search for least renal toxicity and highest immunosuppressive effects. 3rd International Conf. Chronopharmacol., Nice, France, March 14-17.
- Lévi F, Pati AK, Florentin I, Chung V, Lemaigre G, De Sousa M, Berardet M and Mechkouri M (1988). Chronopharmacologic optimization of oral ciclosporine A in mice. Annual Congress of the American Association for Cancer Research, New Orleans, USA, Abstract No. 7125.
- 24. Saini SK and Pati AK (1988). Gonadal maturation in domestic fowls as a function of the zeitgeber shifts. Proc. National Symp. Current Status Gen. & Comp. Endocrinol., New Delhi, November 25-27, pp. 16-18.
- 25. Pati AK and Saini SK (1988). Comparison of the effects of equimolar quantity of thyroxine and triiodothyronine in the development of male domestic fowls. Proc. National Symp. Current Status Gen. & Comp. Endocrinol, New Delhi, November 25-27, pp. 87-88.
- 26. Kanoje RS, Pati AK and Biswas J (1989). Sunset related timings of flight activity rhythm of tropical bats in Kanger Valley National Park. Proc. 76th Session of Indian Science Congress, Madurai, p. 160.
- 27. Saini SK and Pati AK (1989). Circadian features of carbohydrate metabolism in domestic fowls exposed to weekly 120 degree shifts of synchronizer schedule. Symp. Chhattisgarh Agricultural Systems, Raipur, January 20-23.
- 28. Pati AK and Saini SK (1989). Synchronizer phase-shift effects on growth and circadian rhythms in male domestic fowls. Symp. Chhattisgarh Agricultural Systems, Raipur, January 20-23.
- 29. Saini SK and Pati AK (1989). Schedule shifts and biological rhythms. Proc. 7th National Symp. Chronobiology, Dharwad, March 27-29, p. 8.
- 30. Pati AK and Saini SK (1989). Shiftwork and human circadian rhythms. Proc. 7th National Symposium on Chronobiology, Dharwad, March 27-29, p. 17.
- 31. Gupta S and Pati AK (1990). In vivo and in vitro effects of human urinary erythropoietin on erythropoiesis and oxidative metabolism are circadian stage dependent. 4th International Conf. Chronopharmacol. Chronotherapeutics, Nice-Acriopolis, March 12-15.
- 32. Pati AK and Saini SK (1990). Eastward shift of the zeitgeber is gonadostimulatory in male domestic fowls: Further substantiation by RIA for circulating lutropin and follitropin. International Symp. Current Status Chronobiol. and VIII Biennial Meeting of Indian Soc. Chronobiol., Raipur, November 24-26, p. 60.
- Gupta S and Pati AK (1990). Internal clock undergoes acceleration in healthy nurses on night shifts. International Symp. Current Status Chronobiol. and VIII Biennial Meeting of Indian Soc. Chronobiol., Raipur, November 24-26, p. 48.
- 34. Gupta S and Pati AK (1990). On job sleep availability: The performance of nurses on night shift. International Symp. Current Status Chronobiol. and VIII Biennial Meeting of Indian Soc. Chronobiol. Raipur, November 24-26, p. 49.
- Gupta S and Pati AK (1991). Circadian time structure of shift workers. International Symp. Ergonomics, Occupational Health, Safety and Environment. IIT Bombay, January 2-6, p. 11-13.
- 36. Gupta S and Pati AK (1991). Sleep quantity and quality: Performance of shift workers. International Congress on Chronobiology: Mechanisms and Therapeutic Applications. Villejuif, France, October 17-18.
- 37. Chandrawanshi A, Gupta S, Pati AK and Agrawal SS (1993). Interrelationship between blood pressure and blood glucose vis a vis factors, such as age, sex and sampling time. Meeting of the National Academy of Sciences, India, Udaipur, February 9-11, p. 18.

- 38. Shedpure M and Pati AK (1993). Metabolic response to melatonin in a fresh water catfish. International Workshop on Pineal Gland: Its Molecular Signals, Varanasi, October 10-12.
- 39. Pati AK (1993). Circadian time structure of shiftworkers. International Symp. Recent Trends in Life Sciences, Hyderabad, November 19-22.
- 40. Pati AK (1994). Human time perception: Chronobiological aspects. Proc. Nat. Symp. Chronobiology, Lucknow, February 21-23, p. 15. (Plenary lecture).
- 41. Pati AK and Gupta S (1994). Circadian rhythms in shiftworkers: effect of pattern of rotation. Proc. Nat. Symp. Chronobiology, Lucknow, February 21-23, p. 29.
- 42. Chandrawanshi A and Pati AK (1994). Impairment of ventilatory functions in elderly shiftworkers. Proc. Nat. Symp. Chronobiology, Lucknow, February 21-23, p. 31.
- 43. Shedpure M and Pati AK (1994). Temporal strategies in an annually breeding catfish, *Clarias batrachus*. Proc. Nat. Symp. Chronobiology, Lucknow, February 21-23, p. 41.
- 44. Pati AK (1995). Shiftwork and Health. Proc. Nat. Symp. Chronobiology, Pune, August 21-22, p. 16. (Plenary lecture).
- 45. Agrawal A and Pati AK (1996). Nest renovation behaviour of a bagworm species: Factors controlling resource utilization. National Symposium on Animal Behaviour, Dharwad, January 18-20, p. 43.
- 46. Pati AK (1996). Biological Clock and Chronotherapy. Lecture delivered during the Refresher Course, October, 1996, Organized by the Department of Zoology, Jiwaji University, Gwalior.
- 47. Pati AK (1996). Case construction behaviour in bagworms: Optimal utilization of the environment. Lecture delivered during the DST Workshop on Methods in Behavioural Ecology, October, 1996, Organized by the Centre for Ecological Sciences, Indian Institute of Science, Bangalore.
- 48. Pati AK (1996). Is there a rhythm in our sense of time? Proc. Nat. Symp. Chronobiology, New Delhi, November 25-26. (Plenary lecture).
- 49. Pati AK, Agrawal A and Karkun D (1996). Cost effectiveness of nest design in an epigean and a cavernicolous moth. Proc. Nat. Symp. Behaviour, Raipur, December 28-30, p. 19.
- 50. Pati AK (1997). Circadian rhythm in human time estimation. Proc. Nat. Symp. Comp. Physiol. Endocrinol., Raipur, January 27-28, p. 2. (Plenary lecture).
- 51. Pati AK (1998). Has the biological clock regressed in the cave loach? Lecture delivered during the Refresher Course (March, 1998) Organized by the Department of Zoology, Jiwaji University, Gwalior.
- 52. Pati AK (1998). Case construction behaviour in bagworms: optimal resource utilization. Lecture delivered during the Refresher Course (March, 1998) organized by the Department of Zoology, Jiwaji University, Gwalior.
- 53. Pati AK (1998). Time in Biology. National seminar on Interdisciplinary Areas of Science and Technology: Present and Future, Dept. of Zoology, Dr. H.S. Gour University, Sagar. (Plenary lecture).
- 54. Pati AK (1998). Faunal diversity in Kotumsar cave: is there a need for conservation? National Symposium on Trends in Research on Hormones, Reproduction and Animal Productivity, October 10-12, Department of Zoology, University of Delhi. (Plenary lecture).
- 55. Pati AK (1998). Faunal diversity in Kotumsar cave. Institute of Microbiology & Biotechnology, Barkatullah University, Bhopal, October 14. (Guest Lecture).
- 56. Pati AK (1998). Faunal diversity in Kotumsar cave. 3rd National Workshop on Biostatistics and Biometry, Center for Advanced Study in Zoology, Banaras Hindu University, Varanasi, December 25-30. (Invited Lecture).
- 57. Pati AK (1999). Rhythmic behaviours in animals. Nat. Sem. Biological Bases of Behaviour, Centre of Advanced Study in Psychology, Utkal University, Bhubaneswar, January 11-13. (Plenary lecture).

- 58. Pati AK and Varghese E (1999). Pineal and thermal tolerance in a tropical ectotherm. Nat. Sym. Recent Advances in Pineal Research, Department of Zoology, Govt. College of Science, Raipur, February 5-7, pp. 30-32.
- 59. Pati AK (1999). Clock regression in a cave loach, *Nemacheilus evezardi*. National Seminar on Environmental Biology and Fish Biology, Department of Zoology, Visva-Bharti University, Santiniketan, April 6-7, p. 7. (Plenary lecture).
- 60. Pati AK (2000). Bagworm biology. Refresher Course (October, 2000) Organized by the Department of Zoology, Gulbarga University, Gulbarga.
- 61. Pati AK (2000). Does hypogean loach, *Nemacheilus evezardi*, possess a functional circadian clock? Nat. Symp. Chronobiology, Department of Zoology, Gulbarga University, Gulbarga, October 13-14. (Keynote address)
- 62. Pati AK (2000). An introduction to chronobiology (Keynote address). Nat. Symp. Chronobiology, Department of Zoology, Gulbarga University, Gulbarga. October 13-14.
- 63. Pati AK (2000). Visiting Fellow in the Department of Biotechnology, Jiwaji University, Gwalior, Delivered 10 lectures on various aspects of Biostatistics & Software Packages relevant to Biology, October.
- 64. Pati AK (2000). Faunal diversity in Kotumsar Cave. Refresher Course, Department of Zoology, Dr. H.S. Gour University, Sagar, October-November, pp. 1-9.
- 65. Pati AK (2000). Application of chronobiological principles in biology and medicine. Refresher Course, Department of Microbiology, Rani Durgavati University, Jabalpur, November.
- 66. Pati AK (2001). Biodiversity of Kotumsar Cave. National Workshop and Exhibition, "Chhattisgarh-Culture and Development", April 28-30, Raipur. (Invited lecture).
- 67. Pati AK and Agrawal A (2001). Is larval choice of components for case construction a consequence of selection? Positive evidence from a cavernicolous moth. XVth International Symposium of Biospeleology, São Paulo, Brazil, July 8 15, p. 40.
- 68. Pati AK and Agrawal A (2001). Similarities and differences in the characteristics of locomotor activity rhythm between the hypogean loach and its epigean ancestor. 25th Conference of the International Society for Chronobiology, Gazi University, Faculty of Medicine, Ankara, Turkey, October 9-13.
- 69. Pati AK and Chandrawanshi A (2001). Distribution of morningness-eveningness and variation in behaviour of a human population. 25th Conference of the International Society for Chronobiology, Gazi University, Faculty of Medicine, Ankara, Turkey, October 9-13.
- 70. Pati AK and Chandrawanshi A (2001). Circadian time structure of subjective variables in shift workers of a cement factory. 25th Conference of the International Society for Chronobiology, Gazi University, Faculty of Medicine, Ankara, Turkey, October 9-13.
- 71. Pati AK (2001). Conservation of biodiversity in Chhattisgarh. Session: Unlocking natural wealth, Symposium Chhattisgarh: Vision 2010, India International Center, New Delhi, November 19. (Invited lecture).
- 72. Pati AK (2001). Chronobiology in India: an overview. Nat. Symp. Chronobiology, Department of Zoology, K.S. Saket P.G. College, Ayodhya, Faizabad, December 27-28, p. 10. (Plenary lecture).
- 73. Pati AK and Chandrawanshi A (2001). Prevalence of morningness and eveningness in a local human population. Nat. Symp. Chronobiology, Department of Zoology, K.S. Saket P.G. College, Ayodhya, Faizabad, December 27-28, p. 17.
- 74. Pati AK and Agrawal A (2001). Are all caves cue less? Nat. Symp. Chronobiology, Department of Zoology, K.S. Saket P.G. College, Ayodhya, Faizabad, December 27-28, p. 27.
- 75. Pati AK (2002). Circadian rhythm in subterranean fishes. XVI International Symposium of Biospeleology, Museo Civico di Storia Naturale di Verona, September 8-15, p. 57.

- 76. Agrawal A and Pati AK (2002). Feeding schedule modulates phototactic responses in cave populations of *Nemacheilus evezardi*. XVI International Symposium of Biospeleology, Museo Civico di Storia Naturale di Verona, September 8-15, p. 27.
- 77. Pati AK and Agrawal A (2002). Circadian rhythm in phototactic behavior in cave loach *Nemacheilus evezardi*. XVI International Symposium of Biospeleology, Museo Civico di Storia Naturale di Verona, September 8-15, p. 58.
- 78. Pati AK (2002). Why do biologists want them arrhythmic? Circadian rhythm in hypogean fish. National Colloquium on Catfish Physiology, Banaras Hindu University, Varanasi, November 19-20, p. 13.
- 79. Pati AK (2002). Kotumsar Cave a mine of information: Prospectus for biospeleological research in Chhattisgarh. National Conference on Innovations and Prospects in Life Sciences, School of Life Sciences, Pt. Ravishankar Shukla University, Raipur, December 14-16, p. 72.
- 80. Pati AK (2002). Introduction to biological rhythms. First SERC School in Chronobiology, Department of Zoology, University of Lucknow, Lucknow, October 17-27. (Core faculty).
- 81. Pati AK (2002). Life in Kotumsar cave, Bastar, India. First SERC School in Chronobiology, Department of Zoology, University of Lucknow, Lucknow, October 17-27. (Core faculty).
- Pati AK (2002). How to validate rhythmicity in biological data? First SERC School in Chronobiology, Department of Zoology, University of Lucknow, Lucknow, October 17-27. (Core faculty).
- Pati AK (2002). Chronobiological approaches to shift workers. First SERC School in Chronobiology, Department of Zoology, University of Lucknow, Lucknow, October 17-27. (Core faculty).
- Pati AK (2003). Introduction to biological rhythms. Second SERC School in Chronobiology, School of Life Sciences, Pt. Ravishankar Shukla University, Raipur, October 8-19, p. 76. (Core faculty).
- 85. Pati AK (2003). Daily activity of a trogloxene could act as a cue for many cavernicoles. XV National Symposium on Chronobiology, School of Life Sciences, Pt. Ravishankar Shukla University, Raipur, October 20-21, p. 28. (Plenary lecture).
- 86. Pati AK (2003). Temporal organization in hypogean fishes. National Symposium on Current Trends in Comparative Endocrinology, Nagpur University, Nagpur, November 27-29, pp. 70-71. (Plenary lecture).
- 87. Pati AK (2004). Perspectives on biospeleology in India. National Colloquium on Cave Organisms and Adaptation, Jagdalpur, May 22-23, p. 2.
- 88. Pati AK (2004). Circadian rhythm in hypogean fishes. XVI National Symposium on Chronobiology, Annamalai University, Annamalainagar, October 30-31, p. 3. (Plenary lecture).
- 89. Sinha S and Pati AK (2004). Study of distribution ecology of fresh water crab, *Barytelphusa cunicularis*: a chronobiological approach. XVI National Symposium on Chronobiology, Annamalai University, Annamalainagar, October 30-31, p. 16.
- 90. Dixit V, Pati AK, Katariya OM, Gupta AK and Prasad GBKS (2004). Rhythmic behaviuor of *W. bancrofti* microfilaraemia in human population at Raipur. XVI National Symposium on Chronobiology, Annamalai University, Annamalainagar, October 30-31, p. 21.
- 91. Pati AK, Agrawal A and Parganiha A (2004). Update on circadian timing system (CTS) in *Nemacheilus evezardi*. XVII International Symposium on Biospeleology, Raipur, India, November 25-30, p. 52.
- 92. Pati AK (2004). Biological rhythms: an introduction. Third SERC School in Chronobiology, Gulbarga University, Gulbarga, December 29 January 07, pp. 19-20. (Core faculty).
- 93. Pati AK (2004). Analysis of time series with reference to circadian rhythm studies. Third SERC School in Chronobiology, Gulbarga University, Gulbarga, December 29 January 07, pp. 21-22. (Core faculty).

- 94. Parganiha A and Pati AK (2005). Circadian rhythm in subjective variables of shift workers following shutdowns. First International Congress of Applied Chronobiology and Chronomedicine, Antalya, Turkey, June 1-5, p. 96.
- 95. Pati AK, Parganiha A, Kar A, Soni R and Choudhary V (2005). Sleep-wakefulness rhythm in patients with head and neck cancer. First International Congress of Applied Chronobiology and Chronomedicine, Antalya, Turkey, June 1-5, p. 108.
- 96. Pati AK and Parganiha A (2005). Sleep-wakefulness rhythm in human subjects of subtropical India as function of chronotype and sex. First International Congress of Applied Chronobiology and Chronomedicine, Antalya, Turkey, June 1-5, pp. 108-109.
- 97. Pati AK (2005). Conservation of biodiversity in India: Unknown values of unknown species of known and unknown habitats make it a daunting task. National Seminar on Biodiversity, Conservation-Issues, Future Perspectives and Strategies, Hindu College, Guntur, July 9-10, pp. 5-11. (Keynote address).
- 98. Pati AK (2005). Equations of ignoring human circadian rhythms: Cost = Very high; Benefit = Zero. XVII National Symposium on Chronobiology, Banaras Hindu University, Varanasi, October 1-3, p. 9. (Keynote address).
- 99. Pati AK and Achari KV (2005). Shift work might produce negative effects on human longevity. XVII National Symposium on Chronobiology, Banaras Hindu University, Varanasi, October 1-3, p. 29.
- 100. Kar A, Soni R, Parganiha A, Choudhary V and Pati AK (2005). Implications of the study of rest-activity circadian rhythm in cancer patients. XVII National Symposium on Chronobiology, Banaras Hindu University, Varanasi, October 1-3, p. 30.
- 101. Mitra A and Pati AK (2005). Do human have better mental processing ability when their circadian rhythm in wrist activity and body temperature peaks? XVII National Symposium on Chronobiology, Banaras Hindu University, Varanasi, October 1-3, p. 31.
- 102. Dubey P, Parganiha A and Pati AK (2005). Permanent night workers differ from rotating shift workers on job satisfaction and social/domestic situation. XVII National Symposium on Chronobiology, Banaras Hindu University, Varanasi, October 1-3, p. 33.
- 103. Soni R, Kar A, Parganiha A, Pradhan RK and Pati AK (2005). Why do chronobiologists presume shift workers arrhythmic? XVII National Symposium on Chronobiology, Banaras Hindu University, Varanasi, October 1-3, p. 34.
- Sultana R and Pati AK (2005). Ten-second interval timer seems to be faster in females. XVII National Symposium on Chronobiology, Banaras Hindu University, Varanasi, October 1-3, p. 35.
- 105. Pradhan RK, Parganiha A and Pati AK (2005). The influence of age on sleep behaviour in shift workers of CSEB. XVII National Symposium on Chronobiology, Banaras Hindu University, Varanasi, October 1-3, p. 36.
- 106. Pati AK, Parganiha A, Pradhan RK, Kar A and Soni R (2005). Should we always expect disruption of biological clock in shiftworkers? Meeting on Civilization disease in the spirit of V.I. Vernadsky, People's Friendship University of Russia, Moscow, Russia, October 10-12.
- 107. Pati AK (2005). How do stygobites measure passage of time? National Seminar on Biodiversity Studies on Zooplankton, Acharya Nagarjuna University, Nagarjuna Nagar, November 11-12, pp. 60-61. (Keynote address).
- 108. Pati AK (2006). Measurement and analysis of time series: Transverse vs. longitudinal approach. Fourth SERC School in Chronobiology, Annamalai University, Annamalainagar, Chidambaram, December 24 January 04, 2006. (Core faculty).
- 109. Pati AK (2006). Circadian timing system (CTS) in the cave loach, *Nemacheilus evezardi*. Fourth SERC School in Chronobiology, Annamalai University, Annamalainagar, Chidambaram, December 24 - January 04, 2006. (Core faculty).
- 110. Pati AK (2006). Chronopharmacology and chronotherapy. Fourth SERC School in Chronobiology, Annamalai University, Annamalainagar, Chidambaram, December 24 January 04, 2006. (Core faculty).

- 111. Pati AK (2006). Chronopharmacology & chronotherapy. Staff Development Programme on Current Trends in Pharmaceutical Analytical Techniques, Institute of Pharmacy, Pt. Ravishankar Shukla University, Raipur, February 24 March 10. (Guest lecture).
- 112. Pati AK (2006). Chronobiology: An introduction. Trends & Techniques in Chronobiology: A Workshop, School of Life Sciences, Pt. Ravishankar Shukla University, Raipur, March 20-25, (Core faculty).
- 113. Pati AK (2006). Measurement and analysis of time series: Transverse vs. longitudinal approach. Trends & Techniques in Chronobiology: A Workshop, School of Life Sciences, Pt. Ravishankar Shukla University, Raipur, March 20-25. (Core faculty).
- 114. Pati AK (2006). Suprachiasmatic nucleus: role in circadian organization in mammals. Trends & Techniques in Chronobiology: A Workshop, School of Life Sciences, Pt. Ravishankar Shukla University, Raipur, March 20-25. (Core faculty).
- 115. Pati AK (2006). Chronopharmacology & chronotherapy. Trends & Techniques in Chronobiology: A Workshop, School of Life Sciences, Pt. Ravishankar Shukla University, Raipur, March 20-25. (Core faculty).
- 116. Pati AK and Agrawal A (2006). Differences in the response of circadian rhythm parameters in LD-acclimated hypogean and epigean populations of the loach, *Nemacheilus evezardi*, to complete darkness. 18th International Symposium of Biospeleology, Cluj-Napoca, Romania, July 10 15, pp. 52-53.
- 117. Parganiha A, Ramteke A, Kar A and Pati AK (2006). Background light intensity modulates circadian rhythm in phototactic behaviour in the cave loach, *Nemacheilus evezardi*. 18th International Symposium of Biospeleology, Cluj-Napoca, Romania, July 10 15, pp. 51-52.
- 118. Pati AK (2006). Chronotherapy. Why? A Symposium on Biotechnology in Future Medicine, Pt. JNM Medical College, Raipur, July 25. (Invited lecture).
- 119. Kar A, Soni R, Parganiha A, Roy S, Choudhary V and Pati AK (2006). Circadian changes in the rest-activity, temperature and heart rate of cancer patients. A Symposium on Biotechnology in Future Medicine, Pt. JNM Medical College, Raipur, July 25, p. 8.
- 120. Pati AK (2006). Omics, interdisciplinarity, transdisciplinarity and beyond should be the hallmark of our university. Vision 2020: A Workshop, School of Studies in Mathematics, Pt. Ravishankar Shukla University, Raipur, September 5-8. (Invited lecture).
- 121. Pati AK, Parganiha A, Pradhan RK, Agrawal A, Cornélissen G and Halberg F (2006). Compliance with monitoring needed after switching treatment timing to eliminate vascular disease risks. International Conference on the Frontiers of Biomedical Science: Chronobiology, Chengdu, China, September 24-26, pp. 55-57.
- 122. Pati AK (2006). An introduction to biostatistics. Seminar-cum-Workshop on Comparative Endocrinology and Reproductive Physiology, Department of Zoology, Delhi University, New Delhi, October 04-13 (Guest Lecture).
- 123. Pati AK (2006). Summarizing and Describing Data. Seminar-cum-Workshop on Comparative Endocrinology and Reproductive Physiology, Department of Zoology, Delhi University, New Delhi, October 04-13 (Guest Lecture).
- 124. Pati AK (2006). The Normal Distribution. Seminar-cum-Workshop on Comparative Endocrinology and Reproductive Physiology, Department of Zoology, Delhi University, New Delhi, October 04-13 (Guest Lecture).
- 125. Pati AK (2006). Hypothesis testing. Seminar-cum-Workshop on Comparative Endocrinology and Reproductive Physiology, Department of Zoology, Delhi University, New Delhi, October 04-13 (Guest Lecture).
- 126. Pati AK (2006). ANOVA. Seminar-cum-Workshop on Comparative Endocrinology and Reproductive Physiology, Department of Zoology, Delhi University, New Delhi, October 04-13 (Guest Lecture).
- 127. Pati AK (2006). Measurement and analysis of time series: Transverse vs. longitudinal approach. Seminar-cum-Workshop on Comparative Endocrinology and Reproductive

Physiology, Department of Zoology, Delhi University, New Delhi, October 04-13 (Guest Lecture).

- 128. Pati AK (2006). Behavioral Biology. Gurukul Kangri University, Hardwar, October 13-14 (Guest Lecture).
- 129. Pati AK (2006). Circadian Clock Evidence in favor of Social Synchronization. Gurukul Kangri University, Hardwar, October 13-14 (Guest Lecture).
- Pati AK (2006). Applied chronobiology: A bridge between biological rhythms and human welfare. XVIII National Symposium on Chronobiology, North-Eastern Hill University, Shillong, November 8-10, p. 3. (Invited lecture).
- 131. Soni R, Kar A, Parganiha A, Pradhan RK and Pati AK (2006). Shift workers of Raipur alloys experience difficulty in resetting their biological clock. XVIII National Symposium on Chronobiology, North-Eastern Hill University, Shillong, November 8-10, p. 18.
- 132. Dubey P, Parganiha A and Pati AK (2006). Flexibility of sleeping habits, languidness and anxiety in shift workers. XVIII National Symposium on Chronobiology, North-Eastern Hill University, Shillong, November 8-10, p. 19.
- 133. Vaidya N, Parganiha A and Pati AK (2006). Characteristics of rest-activity rhythm in apparently healthy human subjects: Analyses of time series at different epoch length. XVIII National Symposium on Chronobiology, North-Eastern Hill University, Shillong, November 8-10, p. 20.
- 134. Sultana R and Pati AK (2006). In search of the best phase reference point for estimation of peak in rest-activity rhythm in human subjects. XVIII National Symposium on Chronobiology, North-Eastern Hill University, Shillong, November 8-10, p. 21.
- 135. Kujur P, Parganiha A and Pati AK (2006). Circadian rhythms in blood pressure and heart rate as function of age and circadian typology. XVIII National Symposium on Chronobiology, North-Eastern Hill University, Shillong, November 8-10, p. 22.
- 136. Karkare A and Pati AK (2006). Data collected using ambulatory blood pressure monitoring, wrist actigraphy, and self-measurement of PEFR complemented subject<sup>s</sup> circadian typology. XVIII National Symposium on Chronobiology, North-Eastern Hill University, Shillong, November 8-10, p. 24.
- 137. Kar A, Soni R, Parganiha A, Pati AK, Roy S and Choudhary V (2006). Assessment of characteristics of circadian rhythm in cancer patients by using wrist actigraphy. XVIII National Symposium on Chronobiology, North-Eastern Hill University, Shillong, November 8-10, p. 25.
- 138. Achari KV and Pati AK (2006). Study of personality, social satisfaction/ disruption and job satisfaction in shift workers: assessment of tolerance. XVIII National Symposium on Chronobiology, North-Eastern Hill University, Shillong, November 8-10, p. 29.
- 139. Mishra R, Pradhan RK and Pati AK (2006). The relationship between excessive daytime sleepiness (EDS) and sickle cell anemia. XVIII National Symposium on Chronobiology, North-Eastern Hill University, Shillong, November 8-10, p. 30.
- 140. Nag C, Pradhan RK and Pati AK (2006). Association of excessive daytime sleepiness (EDS) with chronotype in urban, semi-urban and rural populations of Chhattisgarh. XVIII National Symposium on Chronobiology, North-Eastern Hill University, Shillong, November 8-10, p. 31.
- 141. Gupta O, Venugopal R and Pati AK (2006). Study on circadian variation in performance (50yard dash) in judo players supports afternoon as the best period. XVIII National Symposium on Chronobiology, North-Eastern Hill University, Shillong, November 8-10, p. 32.
- 142. Poddar P and Pati AK (2006). Characteristics of locomotor activity rhythm in female *Clarias batrachus*: effect of background light intensities. XVIII National Symposium on Chronobiology, North-Eastern Hill University, Shillong, November 8-10, p. 34.
- 143. Ramteke AK and Pati AK (2006). Locomotor activity rhythm in Indian walking catfish, *Clarias batrachus*. XVIII National Symposium on Chronobiology, North-Eastern Hill University, Shillong, November 8-10, p. 35.
- 144. Biswas J, Ramteke AK and Pati AK (2006). Hunt for alternative Zeitgeber for the biological clock of the cave fish, *Nemacheilus evezardi*. XVIII National Symposium on Chronobiology,

North-Eastern Hill University, Shillong, November 8-10, p. 38.

- 145. Sharma G, Parganiha A and Pati AK (2006). Circadian variations in human blood pressure and heart rate with age: a longitudinal study. XVIII National Symposium on Chronobiology, North-Eastern Hill University, Shillong, November 8-10, p. 40.
- 146. Sinha S and Pati AK (2006). Circadian locomotor activity in freshwater crab, *Barytelphusa cunicularis*. XVIII National Symposium on Chronobiology, North-Eastern Hill University, Shillong, November 8-10, p. 45.
- 147. Pati AK (2007). Analysis of time series. Fifth SERC School in Chronobiology, February 1- 11, Meerut. (Core faculty).
- 148. Pati AK (2007). Shift work: Consequences and management. Fifth SERC School in Chronobiology, February 1-11, Meerut. (Core faculty)
- 149. Pati AK (2007). Blood pressure variability in Human subjects (Lecture-cum-lab course). Fifth SERC School in Chronobiology, February 1-11, Meerut. (Core faculty)
- 150. Pati AK, Parganiha A and Pradhan RK (2007). Circadian variability disorders gauged by ambulatory monitoring of blood pressure and heart rate among young Indians. Second International Congress of Applied Chronobiology and Chronomedicine (ICACC-2007), Tunis, Tunisia, March 23-28, p. 96.
- 151. Soni R, Kar A, Ramteke A, Pradhan RK, Parganiha A and Pati AK (2007). Timings of work shift and natures of work modulate phase angle of the rest-activity circadian rhythm in shift workers. Second International Congress of Applied Chronobiology and Chronomedicine (ICACC-2007), Tunis, Tunisia, March 23-28, p. 67.
- 152. Parganiha A, Kar A, Soni R, Pradhan RK, and Pati AK (2007). Assessment of Circadian rhythm in rest-activity by wrist actigraphy in shift workers. Second International Congress of Applied Chronobiology and Chronomedicine (ICACC-2007), Tunis, Tunisia, March 23-28, p. 68.
- 153. Kar A, Soni R, Roy S, Choudhary V, Parganiha A, and Pati AK (2007). Characteristics of circadian clock undergo alterations in subjects suffering from diabetes and cancer. Second International Congress of Applied Chronobiology and Chronomedicine (ICACC-2007), Tunis, Tunisia, March 23-28, p. 93.
- 154. Parganiha A, Soni R, Kar, A, Pradhan RK and Pati AK (2007). Why does circadian rhythm in rest-activity profile of shift workers of the Chhattisgarh State Electricity Board (CSEB) remain synchronized? 18th International Symposium on Shiftwork and Working Time, Yeppoon QLD, Australia, August 27-31.
- 155. Pati AK, Soni R, Kar A, Pradhan RK and Parganiha A (2007). Does nature of work influence sleep behaviour and circadian rhythm of rest-activity in shift workers? 18th International Symposium on Shiftwork and Working Time, Yeppoon QLD, Australia, August 27-31.
- 156. Pati AK (2007). Circadian clock: Evidence in favour of social synchronization. Gurukul Kangri University, Hardwar, September 28-29 (Guest Lecture).
- 157. Pati AK (2007). Behavioural biology. Gurukul Kangri University, Hardwar, October 28-29 (Guest Lecture).
- 158. Pati AK (2007). UGC Academic Staff College: Objectives and mandate. Workshop on Challenges and Quality Assurance in Higher Education, October 31, Pt. Ravishankar Shukla University, Raipur.
- 159. Pati AK, Parganiha A and Pradhan RK (2007). Ambulatory monitoring of circadian variability in BP and HR has immense prognostic and prophylactic values. XIX National Symposium on Chronobiology, Madurai Kamaraj University, Madurai, December 7-9, p. 35.
- 160. Pande B and Pati AK (2007). Accuracy in prospective judgment of time in young adults as function of objective time interval. XIX National Symposium on Chronobiology, Madurai Kamaraj University, Madurai, December 7-9, p. 29.
- 161. Kar A, Soni R, Choudhary V, Pati AK and Parganiha A (2007). Status of circadian rhythm in rest-activity in diabetic and cancer patients. XIX National Symposium on Chronobiology, Madurai Kamaraj University, Madurai, December 7-9, p. 30.

- 162. Soni R, Kar A, Dubey P, Parganiha A, Pradhan RK and Pati AK (2007). Status of circadian rhythm in rest-activity in diabetic and cancer patients. XIX National Symposium on Chronobiology, Madurai Kamaraj University, Madurai, December 7-9, p. 43.
- Pati AK (2007). UGC Academic Staff College: Objectives and mandate. Refresher Course (RC-07) Exploratory Data Analyses, December 1 – 21, Pt. Ravishankar Shukla University, Raipur.
- 164. Pati AK (2008). Course components of the Orientation Program (OP-01), 21.1.2008, Pt. Ravishankar Shukla University, Raipur.
- 165. Pati AK (2008). Objectives and components of Refresher Course (RC-06) on Values, 28.1.2008, Pt. Ravishankar Shukla University, Raipur.
- 166. Soni RK, Kar A, Ramteke AK, Parganiha A, Pradhan RK and Pati AK (2008). Irregular rotational shift workers are vulnerable to negative health consequences. Proust, "Genes at work on time", Turin, Italy, October 15-18, p. 35.
- 167. Kar A, Soni RK, Ramteke AK, Parganiha A and Pati AK (2008). Circadian rhythms of axillary temperature, blood pressure and heart rate in cancer and diabetic patients. Proust, "Genes at work on time", Turin, Italy, October 15-18, p. 38.
- 168. Soni RK, Kar A, Dubey P, Ramteke A, Parganiha A, Pradhan RK and Pati AK (2008). Weakening of circadian clock in rotational shift workers availing "on-job sleep". The National Academy of Sciences, India, Seventy-Eight Annual Session and Symposium on Novel Approaches for Bio-medical Research, Section: Biological Sciences, Panjab University, Chandigarh, November 21-23, p. 4.
- 169. Vaidya N, Parganiha A and Pati AK (2008). Gender-linked variability in dipping pattern in diastolic blood pressure. The National Academy of Sciences, India, Seventy-Eight Annual Session and Symposium on Novel Approaches for Bio-medical Research, Section: Biological Sciences, Panjab University, Chandigarh, November 21-23, p. 17.
- 170. Pande B and Pati AK (2008). Prospective judgment of short-time intervals in young adults. The National Academy of Sciences, India, Seventy-Eight Annual Session and Symposium on Novel Approaches for Bio-medical Research, Section: Biological Sciences, Panjab University, Chandigarh, November 21-23, p. 18.
- 171. Pati AK (2008). Shift work. Multinational Graduate Course on Basic Chronobiology with Reference to Chronomedicine. Raipur, India, November 2-7, pp. 36-37.
- 172. Chaturvedi CM, Kumar P and Pati AK (2008). Circadian rhythms in hypothalamic concentration of serotonin and dopamine always exhibit negative phase angles with reference to peak timing of plasma testosterone rhythm in male Japanese quail, Coturnix coturnix japonica, administered with 5-HTP and L-DOPA at 8- and 12-h phase relationships under LL. XX National Symposium on Chronobiology, Pt. Ravishankar Shukla University, Raipur, December 27-29, p. 3.
- 173. Achari KV and Pati AK (2008). Morningness eveningness preference in Central Indian shift workers as function of shift patterns. XX National Symposium on Chronobiology, Pt. Ravishankar Shukla University, Raipur, December 27-29, p. 16.
- 174. Gupta O, Patel H, Venugopal R and Pati AK (2008). Study on circadian variation in performance (grip strength) in Judo players supports afternoon as the best period. XX National Symposium on Chronobiology, Pt. Ravishankar Shukla University, Raipur, December 27-29, p. 22.
- 175. Kar A, Ramteke A, Soni RK and Pati AK (2008). Health issues, circadian timing system and psychophysiological status of the patients suffering from cancer and diabetes. XX National Symposium on Chronobiology, Pt. Ravishankar Shukla University, Raipur, December 27-29, p. 27.
- 176. Pande B and Pati AK (2008). Variability in perception of 10 s interval as function of paradigms and methods of estimation in a cohort of young subjects. XX National Symposium on Chronobiology, Pt. Ravishankar Shukla University, Raipur, December 27- 29, p. 33.
- 177. Sultana R and Pati AK (2008). Absence of nighttime dipping and dampening of circadian rhythm in blood pressure variables of apparently healthy young women. XX National Symposium on Chronobiology, Pt. Ravishankar Shukla University, Raipur, December 27-29,

р. 43.

- 178. Taj S, Jain V, Pande B, Parganiha A and Pati AK (2008). Circadian variations in lipid profile in a cohort of eight human subjects under 30-h sustained wakefulness. XX National Symposium on Chronobiology, Pt. Ravishankar Shukla University, Raipur, December 27- 29, p. 44.
- 179. Vaidya N, Parganiha A and Pati AK (2008). Circadian rhythm and dipping pattern in blood pressure in human subjects. XX National Symposium on Chronobiology, Pt. Ravishankar Shukla University, Raipur, December 27-29, p. 45.
- 180. Babita P, Arti P and Pati AK (2008). Circadian variation in 60 s interval production in apparently healthy human subjects in 30-h constant routine. XX National Symposium on Chronobiology, Pt. Ravishankar Shukla University, Raipur, December 27-29, p. 46.
- 181. Patel H, Gupta O, Venugopal R and Pati AK (2008). Temporal pattern in physiological variables of sports person. XX National Symposium on Chronobiology, Pt. Ravishankar Shukla University, Raipur, December 27-29, p. 47.
- 182. Ramteke AK, Kar A, Soni RK and Pati AK (2008). Influence of moonlight on the characteristics of locomotor activity rhythm in Indian walking catfish, *Clarias batrachus*. XX National Symposium on Chronobiology, Pt. Ravishankar Shukla University, Raipur, December 27-29, p. 48.
- 183. Soni RK, Kar A, Ramteke A, Parganiha A, Pradhan RK and Pati AK (2008). Assessment of behavioral and psychological health issues in shift workers from Chhattisgarh state electricity board. XX National Symposium on Chronobiology, Pt. Ravishankar Shukla University, Raipur, December 27-29, p. 51.
- 184. Pande B, Parganiha A and Pati AK (2009). Circadian variation in 10- and 60-s interval production in young subjects in 30-h constant routine. The Third International Congress of Applied Chronobiology and Chronomedicine, Akko, Israel, May 17-22, p. 15.
- 185. Patel H, Gupta O, Venugopal R and Pati AK (2009). Comparison of the characteristics of circadian rhythm in physiological variables between national level volleyball players of school games federation of India exhibiting different life style patterns. The Third International Congress of Applied Chronobiology and Chronomedicine, Akko, Israel, May 17-22, p. 17.
- 186. Soni RK, Kar A, Pradhan RK, Parganiha A and Pati AK (2009). Availability of nap during night shifts offers protection against deterioration of the clock function in shift workers. The Third International Congress of Applied Chronobiology and Chronomedicine, Akko, Israel, May 17-22, p. 20.
- 187. Kar A, Ramteke A, Soni RK, Parganiha A and Pati AK (2009). Quality of life and anxiety & depression levels in a mixed cohort of cancer-in-patients: Relationship with circadian rhythm parameters. The Third International Congress of Applied Chronobiology and Chronomedicine, Akko, Israel, May 17-22, p. 40.
- 188. Pati AK, Kar A, Sultana R, Vaidya N and Parganiha A (2009). Long sleepers tend to be nondippers: Is it a paradox? The Third International Congress of Applied Chronobiology and Chronomedicine, Akko, Israel, May 17-22, p. 76.
- 189. Parganiha A, Soni RK and Pati AK (2009). Adjustment in the pattern of activity during leisure, sleep and work as function of shift in rotational shift workers. The Third International Congress of Applied Chronobiology and Chronomedicine, Akko, Israel, May 17-22, p. 83.
- 190. Ramteke A and Pati AK (2009). Influence of moonlight on the characteristics of locomotor activity in Indian walking catfish, *Clarias batrachus*. The Third International Congress of Applied Chronobiology and Chronomedicine, Akko, Israel, May 17-22, p. 90.
- 191. Pati AK (2009). Shift work. UGC-NRCBS School on Animal Behaviour & Chronobiology, Madurai Kamaraj University, Madurai, August 29-September 11, pp.27-29.
- 192. Pati AK (2009). Chronotherapy. UGC-NRCBS School on Animal Behaviour & Chronobiology, Madurai Kamaraj University, Madurai, August 29-September 11, pp.29-31.
- 193. Pati AK (2010). Human chronobiology. XXI National Symposium on Chronobiology. February 2-4, Jamshedpur Co-Operative College, Jamshedpur, p. 5.
- 194. Pati AK and Ramteke A (2010). The influence of moonlight on locomotor activity rhythm in *Clarias batrachus*. XXI National Symposium on Chronobiology. February 2-4, Jamshedpur

Co-Operative College, Jamshedpur, p. 15.

- 195. Kar A, Soni RK, Parganiha A and Pati AK (2010). Characteristics of sleep-wake cycle and nap in diabetic subjects. XXI National Symposium on Chronobiology. February 2-4, Jamshedpur Co-Operative College, Jamshedpur, p. 16.
- 196. Pande B, Parganiha A and Pati AK (2010). Cognitive ability of short-interval judgment in humans under free-living conditions and constant routine: Aspects of rhythm, accuracy and gender. XXI National Symposium on Chronobiology. February 2-4, Jamshedpur Co-Operative College, Jamshedpur, p. 20.
- 197. Patel H, Gupta O, Venugopal R and Pati AK (2010). Circadian variation in performance (dribble) and oral temperature of basketball players. XXI National Symposium on Chronobiology. February 2-4, Jamshedpur Co-Operative College, Jamshedpur, p. 29.
- 198. Achari KV, Parganiha A and Pati AK (2010). Morningness-eveningness preference in central Indian shift workers as function of shift pattern. XXI National Symposium on Chronobiology. February 2-4, Jamshedpur Co-Operative College, Jamshedpur, p. 31.
- 199. Vaidya N, Parganiha A and Pati AK (2010). Circadian blood pressure and heart rate variability in young Southeast Indian population. XXI National Symposium on Chronobiology. February 2-4, Jamshedpur Co-Operative College, Jamshedpur, p. 35.
- Gupta O, Patel H, Venugopal R and Pati AK (2010). Judo players perform at their best between midday and late afternoon. XXI National Symposium on Chronobiology. February 2-4, Jamshedpur Co-Operative College, Jamshedpur, p. 36.
- 201. Soni RK, Kar A, Pradhan RK, Parganiha A and Pati AK (2010). Rotational shift workers exhibit bimodality prominently in the rest-activity rhythm during night shift. XXI National Symposium on Chronobiology. February 2-4, Jamshedpur Co-Operative College, Jamshedpur, p. 47.
- 202. Sultana R and Pati AK (2010). Comparison of blood pressure obtained during sleep and wakefulness among normotensive subjects. XXI National Symposium on Chronobiology. February 2-4, Jamshedpur Co-Operative College, Jamshedpur, p. 50.
- 203. Taj S, Jain V, Pande B, Parganiha A, Patra PK and Pati AK (2010). Assessment of circadian variations in thyroid hormones in young human subjects in 30-h constant routine. XXI National Symposium on Chronobiology. February 2-4, Jamshedpur Co-Operative College, Jamshedpur, p. 52.
- 204. Singh A, Parganiha A and Pati AK (2010). The daily foraging pattern of Indian Cliff Swallow, *Hirundo fluvicola* with reference to sunrise and sunset. XXI National Symposium on Chronobiology. February 2-4, Jamshedpur Co-Operative College, Jamshedpur, p. 59.
- 205. Kankariya S, Parganiha A and Pati AK (2010). Roosting behaviour of Indian swift, *Apus affinis* in relation to environmental factors. XXI National Symposium on Chronobiology. February 2-4, Jamshedpur Co-Operative College, Jamshedpur, p. 64.
- 206. Sinha S and Pati AK (2010). Characteristics of locomotor activity rhythm of freshwater crab, *Barytelphusa cunicularis*. 26th Conference of the International Society for Chronobiology. July 5-9, Vigo, Spain, p. 27.
- 207. Pande B and Pati AK (2010). Seasonal variability in 60-s production in young humans. 26th Conference of the International Society for Chronobiology. July 5-9, Vigo, Spain, p. 37.
- 208. Patel H, Gupta O, Venugopal R and Pati AK (2010). Circadian variations in physiological variables in all India inter-university players. 26th Conference of the International Society for Chronobiology. July 5-9, Vigo, Spain, p. 38.
- 209. Gupta O, Patel H, Venugopal R and Pati AK (2010). Circadian rhythm in physiological and performance variables of national level Inter-University judo and basketball players. 26th Conference of the International Society for Chronobiology. July 5-9, Vigo, Spain, p. 39.
- 210. Ramteke AK, Poddar P, Kar A and Pati AK (2010). The effects of long and short light phase paradigms on the characteristics of circadian rhythm in locomotor activity in *Clarias batrachus*. 26th Conference of the International Society for Chronobiology. July 5-9, Vigo, Spain, p. 45.

- 211. Vaidya N, Parganiha A and Pati AK (2010). Day-night variation in blood pressure and heart rate as function of age and dipping pattern in human subjects. 26th Conference of the International Society for Chronobiology. July 5-9, Vigo, Spain, p. 73.
- 212. Kar A, Soni RK, Parganiha A and Pati AK (2010). Status of rest-activity circadian rhythm in patients with type 2 diabetes mellitus. 26th Conference of the International Society for Chronobiology. July 5-9, Vigo, Spain, p. 74.
- 213. Achari KV, Pati AK and Parganiha A (2010). Prevalence of extraversion-neuroticism in Indian shift workers as function of shift pattern. 26th Conference of the International Society for Chronobiology. July 5-9, Vigo, Spain, p. 113.
- 214. Soni RK, Kar A, Pradhan RK, Parganiha A and Pati AK (2010). Assessment of sleep/ wake behavior in permanent night workers and rotational shift workers. 26th Conference of the International Society for Chronobiology. July 5-9, Vigo, Spain, p. 114.
- 215. Pande B, Pati AK and Parganiha A (2010). Circadian and seasonal variation in manifestation of biological stopwatch for 60-s interval. The National Academy of Sciences, India, 80th Annual Session and National Symposium on Climate Change – Research, Awareness and Capacity Building: Biological Sciences, Jaipur National University, Jaipur, December 2-4, p. 26.
- 216. Vaidya N, Pati AK and Parganiha A (2010). Ambulatory blood pressure monitoring: An essential tool for assessment of day-night blood pressure variations among young normotensive subjects. The National Academy of Sciences, India, 80th Annual Session and National Symposium on Climate Change Research, Awareness and Capacity Building: Biological Sciences, Jaipur National University, Jaipur, December 2-4, pp. 26-27.
- Pati AK (2010). Human Circadian Rhythms: Methods and Protocols. SERC School in Chronobiology. 24 December 2010 - 07 January 2011, Department of Zoology, University of Delhi, Delhi.
- 218. Pati AK (2010). Shift work. SERC School in Chronobiology. 24 December 2010 07 January 2011, Department of Zoology, University of Delhi, Delhi.
- 219. Pati AK (2010). Chronotherapy. SERC School in Chronobiology. 24 December 2010 07 January 2011, Department of Zoology, University of Delhi, Delhi.
- 220. Pati AK (2011). Human circadian rhythms: The Raipur agenda. XXII National Symposium on Chronobiology. March 15-17, Kurukshetra University, Kurukshetra, p. 3.
- 221. Pande B, Rathod G, Parganiha A, Vaidya N, Nag C and Pati AK (2011). Non-auditory effect of noise on human interval timing. XXII National Symposium on Chronobiology. March 15-17, Kurukshetra University, Kurukshetra, p. 21.
- 222. Kujur P, Pande B, Pati AK and Parganiha A (2011). Circadian rhythms in core body temperature and short-interval time estimates in humans. XXII National Symposium on Chronobiology. March 15-17, Kurukshetra University, Kurukshetra, pp. 29-30.
- 223. Singh A, Kankariya S, Parganiha A and Pati AK (2011). Environmental factors affecting the roosting behavior of Indian Cliff Swallow Hirundo fluvicola. 3rd World Congress of Chronobiology. May 5-9, Puebla, Mexico, p. 139.
- 224. Kankariya S, Singh A, Pati AK and Parganiha A (2011). Roosting behaviour of Indian house swift, Apus affinis with reference to environmental factors. 3rd World Congress of Chronobiology. May 5-9, Puebla, Mexico, p. 140.
- 225. Pande B, Pati AK, Parganiha A and Patra PK (2011). Circadian variation in short-time estimation and thyroid hormones levels in young humans during 30 h constant routine. 3rd World Congress of Chronobiology. May 5-9, Puebla, Mexico, p. 144.
- 226. Vaidya N, Pati AK and Parganiha A (2011). Circadian blood pressure variability among southeast Indian population as function of age, gender and dipping pattern. 3rd World Congress of Chronobiology. May 5-9, Puebla, Mexico, p. 152.
- 227. Pande B, Rathod G, Vaidya N, Nag C, Parganiha A and Pati AK (2011). Estimation of 60-s interval under ambient noise condition in humans. National Conference on Advances in Biological Sciences. November 5-7, Pt. Ravishankar Shukla University, Raipur, p. 85.
- 228. Vaidya N, Pati AK and Parganiha A (2011). Circadian blood pressure and heart rate

variability in hypertensive human subjects. National Conference on Advances in Biological Sciences. November 5-7, Pt. Ravishankar Shukla University, Raipur, p. 115.

- 229. Pati AK (2012). Chronobiology: Apropos of human health issues. XXIII National Symposium on Chronobiology and Seminar on Diversity and Physiology of Desert Fauna (23rd NSC&SDPDF). March 1-3, Jai Narain Vyas University, Jodhpur, pp. 21.
- 230. Sultana R and Pati AK (2012). Is nocturnal dipping heritable? Effects of social interaction on 24-h blood pressure variability. XXIII National Symposium on Chronobiology and Seminar on Diversity and Physiology of Desert Fauna (23rd NSC&SDPDF). March 1-3, Jai Narain Vyas University, Jodhpur, pp. 23-24.
- 231. Pande B, Shinde RD, Parganiha A and Pati AK (2012). Methodological differences in shortinterval estimation in young humans. XXIII National Symposium on Chronobiology and Seminar on Diversity and Physiology of Desert Fauna (23rd NSC&SDPDF). March 1-3, Jai Narain Vyas University, Jodhpur, pp. 24-25.
- 232. Patel H, Gupta O, Venugopal R and Pati AK (2012). Sports persons exhibit stable circadian rhythm in physiological variables. XXIII National Symposium on Chronobiology and Seminar on Diversity and Physiology of Desert Fauna (23rd NSC&SDPDF). March 1-3, Jai Narain Vyas University, Jodhpur, pp. 27.
- 233. Gupta O, Patel H, Venugopal R and Pati AK (2012). Circadian rhythm in physiological and performance variables of national level inter-university judo and basketball players. XXIII National Symposium on Chronobiology and Seminar on Diversity and Physiology of Desert Fauna (23rd NSC&SDPDF). March 1-3, Jai Narain Vyas University, Jodhpur, pp. 27-28.
- 234. Pande B, Patel H, Parganiha A and Pati AK (2012). Circannual variation in 60-s time eatimates reveals a relationship with body temperature and sleep length in a cohort of university students. International Congress on Chronobiology (ICC 2012), Delhi, India, October 3-7, p. 59.
- 235. Sultana R and Pati AK (2012). Variability and heritability of nocturnal blood pressure dipping in natives of rural Chhattisgarh, India. International Congress on Chronobiology (ICC 2012), Delhi, India, October 3-7, p. 97.
- 236. Pande B, Parganiha A and Pati AK (2013). Short-interval time estimation accuracy as a function of gender, age and body temperature. National Seminar on 'Human Brain A Mystery Organ', Organized jointly by Rajiv Gandhi Institute of Information Technology, Amethi and National Brain Research Center, Manesar. Rajiv Gandhi Institute of Information Technology, Amethi. August 20-21.
- 237. Kankariya S, Singh A, Parganiha, A and Pati AK (2013). Different components of activity rhythm in house swift, *Apus affinis* may vary as function of day length. Il National Conference on Recent Advances in Biological Sciences. November 25-27, Pt. Ravishankar Shukla University, Raipur, p. 54.
- 238. Pande B, Parganiha A and Pati AK (2013). Rhythm detection in short-interval time estimation (SITE) is less probable in humans under free-living conditions: Reasons are unknown. II National Conference on Recent Advances in Biological Sciences. November 25-27, Pt. Ravishankar Shukla University, Raipur, p. 65.
- 239. Singh A, Kankariya S, Parganiha A and Pati AK (2013). Circannual rhythm in activity of Indian cliff swallow, *Hirundo fluvicola*. II National Conference on Recent Advances in Biological Sciences. November 25-27, Pt. Ravishankar Shukla University, Raipur, p. 80.
- 240. Pati AK (2014). Time in Biology and Medicine. 60<sup>th</sup> Annual Conference of Physiologists and Pharmacologists of India. Organized by SCB Medical College, Cuttack, in Puri, Odisha, November 20-22, pp. 13- 14.
- 241. Pati AK (2014). Do cavernicoles possess a clock? National Seminar Recent Advances in Biological Sciences, Govt. RD College, Wadrafnagar, November 29-30, p. 7.
- 242. Parganiha A and Pati AK. (2015). Costs and benefits of human shift optimization. National Seminar on Prospects of Life Science for Human Welfare with Special Reference to Chhattisgarh, Govt. VYTPG Autonomous College, Durg, February 7-8, 2015.

- 243. Chandrakar P, Pande B and Pati AK (2015). Individual propensity for specific chronotype as function of use of social networking sites and place of residence in a population of school students from chattisgarh. XXV National Symposium on Chronobiology-Time in Biology and Medicine, March 27-29, Pt. Ravishankar Shukla University, Raipur, p.50.
- 244. Kankariya S, Singh A, Pati AK and Parganiha A (2015). Bi and multi-modal patterns in daytime nest visitation of house swift, *Apus affinis* as function of season. XXV National Symposium on Chronobiology-Time in Biology and Medicine, March 27-29, Pt. Ravishankar Shukla University, Raipur, p.58.
- 245. Pande B, Patra PK, Patel H, Pati AK and Parganiha A (2015). Blood pressure and heart rate rhythms in young university students under 30-h constant routine. XXV National Symposium on Chronobiology-Time in Biology and Medicine, March 27-29, Pt. Ravishankar Shukla University, Raipur, p.66.
- 246. Singh A, Kankariya S, Parganiha A and Pati AK (2015). Nest visitation rate of Indian Cliff Swallow, *Hirundo fluvicola*, during different phases of nest construction. XXV National Symposium on Chronobiology-Time in Biology and Medicine, March 27-29, Pt. Ravishankar Shukla University, Raipur, p.72.
- 247. Jadhav SK, Pati AK, Naik ML, Quraishi A, Bhushan S, Sharma DK and Nishad CK (2016). Phyto-Sociology and diversity of tree in the forest of Jashpur district, Chhattisgarh, India. 3rd International Congress of Society of Ethenopharmacology, *Ethenopharmacology & Evaluation of Medicinal Plants - Global Perspectives*, February 19-21 [published in Journal of Ravishankar University - Special issue], Volume 29 (1), p.68.
- 248. Jadhav SK, Pati AK, Naik ML, Quraishi A, Nishad CK, Sharma DK and Bhushan S (2016). Mushrooms and rare plants of Surguja and Baster districts of Chhattisgarh state. 3rd International Congress of Society of Ethenopharmacology, *Ethenopharmacology & Evaluation of Medicinal Plants - Global Perspectives*, February 19-21 [published in Journal of Ravishankar University - Special issue], Volume 29 (1), p.128-129.
- 249. Kalyani G, Singh R, Vaidya N, Dwivedi R, Dadsena K, Verma NK, Parihar AS, Pati AK and Mitra M (2016). Quest for bioactive phytomolecules against Psoriasis based on traditional healing practices in Chhattisgarh, India. 3rd International Congress of Society of Ethenopharmacology, *Ethenopharmacology & Evaluation of Medicinal Plants Global Perspectives*, February 19-21 [published in Journal of Ravishankar University Special issue], Volume 29 (1), p.170-171.
- 250. Dadsena KK, Verma NK, Vaidya N, Singh R, Kalyani G, Dwivedi R, Pati AK and Mitra M (2016). Documentation of conventional knowledge for curing Rheumatoid Arthritis in Mainpat region of Surguja district of Chhattisgarh, India. 3rd International Congress of Society of Ethenopharmacology, *Ethenopharmacology & Evaluation of Medicinal Plants Global Perspectives*, February 19-21 [published in Journal of Ravishankar University Special issue], Volume 29 (1), p.171-172.
- 251. Verma NK, Dadsena KK, Kalyani G, Dwivedi R, Vaidya N, Singh R, Pati AK and Mitra M (2016). Medicinal plants used for the treatment of Diabetes among the populations of Chhattisgarh, India. 3rd International Congress of Society of Ethenopharmacology, *Ethenopharmacology & Evaluation of Medicinal Plants Global Perspectives*, February 19-21 [published in Journal of Ravishankar University Special issue], Volume 29 (1), p.172.
- 252. Vaidya N, Dwivedi R, Kalyani G, Singh R, Dadsena KK, Verma NK, Pati AK and Mitra M (2016). Socio-demographic profile and Ethnomedicinal practices with special reference to Rheumatoid Arthritis and Psoriasis among the inhabitants of Jashpur district. 3rd International Congress of Society of Ethenopharmacology, *Ethenopharmacology & Evaluation of Medicinal Plants Global Perspectives*, February 19-21 [published in Journal of Ravishankar University Special issue], Volume 29 (1), p.173.
- 253. Singh R, Kalyani G, Verma NK, Dadsena KK, Dwivedi R, Vaidya N, Pati AK and Mitra M (2016). Herbal formulation of plants used for Rheumatoid Arthritis in Mahasamund district, Chhattisgarh, India. 3rd International Congress of Society of Ethenopharmacology, *Ethenopharmacology & Evaluation of Medicinal Plants Global Perspectives*, February 19-21 [published in Journal of Ravishankar University Special issue], Volume 29 (1), p.174.
- 254. Dwivedi R, Vaidya N, Singh R, Kalyani G, Verma NK, Dadsena KK, Pati AK and Mitra M (2016). A study of Ethnomedicinal plants used for curing Rheumatoid Arthritis in Raigarh

district of Chhattisgarh, India. 3rd International Congress of Society of Ethenopharmacology, *Ethenopharmacology & Evaluation of Medicinal Plants - Global Perspectives*, February 19-21 [published in Journal of Ravishankar University - Special issue], Volume 29 (1), p. 175.

- 255. Pande B, Parganiha A, Patra PK and Pati AK. (2016). Temporal profiles of serum inorganic ions in young human subjects under 30-h constant routine. International Symposium on Integrative Physiology and Comparative Endocrinology (ISIPCE-2016), February 12-14, Department of Zoology, Institute of Science, Banaras Hindu University, Varanasi. p. 57.
- 256. Pati AK (2016). Research under constraints: Good or Bad? National Conference on Prospects of Life Sciences: Paradigm Shift in Teaching and Research in Zoological Sciences, March 02-03, Department of Zoology, Govt. Nagarjuna P.G. College of Science, Raipur. p.27.
- 257. Pande B, Randler C and Pati AK. (2016). What do we think of non-human animals? in National Conference on Prospects in Life Sciences: Paradigm Shift in Teaching and Research in Zoological Sciences, March 02-03, Department of Zoology, Govt. Nagarjuna P.G. College of Science, Raipur. p. 89.
- 258. Pati AK (2016).Chronobiology: Implications for Human Health and Welfare. XXVI National Symposium on Chronobiology, June 02-03, Department of Zoology, University of Mysore, Mysuru. P. 03.
- 259. Pande B, Parveen N, Parganiha A and Pati AK. (2016). Chronotype distribution and sleep wake quality among teenagers of the south-eastern India. XXVI National Symposium on Chronobiology, June 02-03, Department of Studies in Zoology, University of Mysore, Mysuru. p. 28-29.
- 260. Singh MM, Pande B and Pati AK (2016). Advancement in the timings of mid sleep on work days and free days in the population of street vendors in urban India. XXVI National Symposium on Chronobiology, June 02-03, Department of Zoology, University of Mysore, Mysuru. p.55.
- 261. Pati AK (2016). An introduction to Actigraphy. Proceedings of 62nd Annual Conference of Physiologists and Pharmacologists of India APPICON 2016, All India Institute of Medical Sciences (AIIMS), Patna, October 21-24. [Abstract published in Indian Journal of Physiology and Pharmacology (Supplement) Volume 60(5), p.20.]

# *Summary of Citations to papers, downloaded from Google Scholar, November 2016*

🔛 Follow 👻

Year

2001

Cited by

85



Shift work: consequences and management AK Pati, A Chandrawanshi, A Reinberg Current science 81 (1), 32-52

Title 1-20

#### Atanu Kumar Pati

Chronomics\*†: circadian and circaseptan timing of radiotherapy,

Professor, School of Life Sciences, Pt. Ravishankar Shukla University Chronobiology, Biological rhythms, Comparative endocrinology, Animal behaviour, Cave biology Verified email at prsu.org.in - Homepage Google Scholar

|     | Q,              |
|-----|-----------------|
| All | Since 2011      |
| 864 | 350             |
| 15  | 8               |
| 31  | 8               |
|     |                 |
|     | 2014 2015 2016  |
|     | 864<br>15<br>31 |

-

| Ghronomics 'T: circadian and circaseptan timing of radiotherapy,<br>drugs, calories, perhaps nutriceuticals and beyond<br>F Halberg, G Cornélissen, Z Wang, C Wan, W Ulmer, G Katinas, R Singh,<br>Journal of Experimental Therapeutics and Oncology 3 (5), 223-260 | 51       | 2003     | Co-authors View all  |    |      |
|---|----------|----------|--|----|------|
| Circannual rhythm in natural killer activity and mitogen<br>responsiveness of murine splenocytes<br>AK Pati, I Florentin, V Chung, M De Sousa, F Levi, G Mathe<br>Cellular immunology 108 (1), 227-234  | 44       | 1987     | Alok Dhawan<br>P S Bisen<br>Nicky Clayton<br>Ben C Sheldon |    |      |
| Alterations of the characteristics of the circadian rest-activity rhythm<br>of cancer in-patients<br>AK Pati, A Parganiha, A Kar, R Soni, S Roy, V Choudhary<br>Chronobiology International 24 (6), 1179-1197   | 35       | 2007     |  |    |      |
| The pineal gland: structural and functional diversity.<br>M Shedpure, AK Pati<br>Indian journal of experimental biology 33 (9), 625-640   | 30       | 1995     |  |    |      |
| Time estimation circadian rhythm in shift workers<br>active humans<br>AK Pati, S Gupta<br>Journal of Biosciences 19 (3), 325-330  | s and di | urnally  |  | 30 | 1994 |
| Temporal organization in locomotor activity of the<br>Nemacheilus evezardi, and its epigean ancestor<br>AK Pati<br>The biology of hypogean fishes, 119-129  |          | ean loa  | ach,   | 25 | 2001 |
| Meal scheduling modulation of circadian rhythm<br>behaviour in cave dwelling fish<br>RK Pradhan, AK Pati, SM Agarwal<br>Chronobiology international 6 (3), 245-249  | of photo | otactic  |  | 24 | 1989 |
| Desynchronization of circadian rhythms in a grou<br>nurses: effects of pattern of shift rotation.<br>S Gupta, AK Pati<br>Journal of human ergology 23 (2), 121-131  | up of sh | ift work | king   | 23 | 1994 |
| Could externally desynchronized circadian rhythi<br>resynchronized in shift workers?<br>A Chandrawanshi, A Kumar Pati<br>Biological Rhythm Research 31 (2), 160-176   | m be     |          |  | 19 | 2000 |
| Data analysis methodology in chronobiological s<br>S Gupta, AK Pati<br>J Parasitol Appl Anim Biol 1, 151-163  | tudies   |          |  | 18 | 1992 |
| Morningness-eveningness preference in Indian<br>function of gender, age and habitat<br>KV Achari, AK Pati<br>Biological Rhythm Research 38 (1), 1-8   | school s | student  | is as  | 17 | 2007 |

| Circadian phase dependent thermal stimulation of ovarian  |      |      |
|---|------|------|
| recrudescence in Indian catfish, Clarias batrachus<br>K Acharia, B Lal, TP Singh, AK Pati<br>Biological Rhythm Research 31 (2), 125-135   | 17   | 2000 |
| Circadian and circannual rhythms in air gulping behaviour of cave<br>fish<br>J Biswas, AK Pati, RK Pradhan<br>Biological Rhythm Research 21 (4), 257-268  | 16   | 1990 |
| Thyroid and gonad in the oxidative metabolism, erythropoiesis, and<br>light response of the migratory redheaded bunting, Emberiza<br>bruniceps<br>JP Thapliyal, P Lal, AK Pati, BBP Gupta<br>Gen. Comp. Endocrinol 51 (3), 444-453  | 16 * | 1983 |
| Erythropoietin, testosterone, and thyroxine in the erythropoietic<br>response of the snake, Xenochrophis piscator<br>AK Pati, JP Thapliyal<br>General and comparative endocrinology 53 (3), 370-374   | 15   | 1984 |
| The rhythmic organization of the immune network: implications for<br>the chronopharmacologic delivery of interferons, interleukins and<br>cyclosporin<br>F Levi, C Canon, P Depres-Brummer, R Adam, P Bourin, A Pati, I Florentin,<br>Advanced drug delivery reviews 9 (1), 85-112                  | 13   | 1992 |
| 2.45 GHz (Cw) microwave irradiation alters circadian organization,<br>spatial memory, DNA structure in the brain cells and blood cell<br>counts of male mice, Mus musculus<br>CM Chaturvedi, VP Singh, P Singh, P Basu, M Singaravel, RK Shukla,<br>Progress In Electromagnetics Research 29, 23-42 | 12   | 2011 |
| Assessment of anxiety level and mental health status in spouses<br>and children of day-working and shift-working men<br>AK Pati, A Chandrawanshi<br>Biological Rhythm Research 32 (1), 45-59  | 12   | 2001 |
| Chronobiology: the dimension of time in biology and medicine<br>AK Pati<br>PROCEEDINGS-INDIAN NATIONAL SCIENCE ACADEMY PART B 67 (6), 323-<br>372   | 12   | 2001 |
| Pattern of shift rota modulates oral temperature circadian rhythm<br>and sleep-wakefulness profiles in shift workers<br>S Gupta, AK Pati, F Levi<br>Journal of biosciences 22 (4), 477-488  | 12   | 1997 |
| Desynchronization of oral temperature, pulse and performance<br>circadian rhythms in shift working Indian nurses.<br>AK Pati, SK Saini<br>Indian journal of experimental biology 29 (11), 1017-1021   | 12   | 1991 |
| Overestimation/underestimation of time: concept confusion<br>hoodwink conclusion<br>B Pande, AK Pati<br>Biological Rhythm Research 41 (5), 379-390  | 11   | 2010 |

| The role of erythropoietin, testosterone, and-thyroxine in the tissue<br>oxygen consumption and erythropoiesis of spotted munia, Lonchura<br>punctulata<br>JP Thapliyal, AK Pati, BBP Gupta<br>General and Comparative Endocrinology 48 (1), 84-88  | 11 | 1982 |
|---|----|------|
| Effects of Simulated Hypo-and Hyper-Reproductive Conditions on<br>the Characteristics of Circadian Rhythm in Hypothalamic<br>Concentration of Serotonin and Dopamine and in Plasma Levels of<br>Thyroxine, Triiodothyronine, and Testosterone in Japanese Quail,<br>Coturnix coturnix japonica<br>P Kumar, AK Pati, J Mohan, KVH Sastry, JS Tyagi, CM Chaturvedi<br>Chronobiology international 26 (1), 28-46 | 10 | 2009 |
| Studies on the behavioural ecology and physiology of a hypogean<br>loach, Nemacheilus<br>AK Pati, A Agrawal<br>Current Science 83, 112-116  | 10 | 2002 |
| Opercular activity and temporal organization of surfacing behaviour<br>in Indian catfishes, Clarias batrachus and Heteropneustes fossilis<br>AK Pati, R Maheshwari, S Gupta<br>Biological rhythm research 29 (1), 75-85   | 10 | 1998 |
| <u>Studies on burying behaviour in epigean and hypogean fish,</u><br><u>Oreonectus evezardi: an example of behavioural divergence</u><br>J Biswas, RK Pradhan, AK Pati<br>Mem Biospeleol 17, 33-41  | 10 | 1990 |
| Influence of human urinary erythropoietin and L-thyroxine on blood<br>morphology and energy reserves in two tropical species of fed and<br>starved teleosts<br>RK Pradhan, SK Saini, J Biswas, AK Pati<br>General and comparative endocrinology 76 (3), 382-389   | 10 | 1989 |
| Thyroid and gonadal hormones in feather regeneration of the<br>redheaded bunting, Emberiza bruniceps<br>AK Pati, VK Pathak<br>Journal of Experimental Zoology 238 (2), 175-181  | 10 | 1986 |
| Comparison of cortisol circadian rhythms documented in samples of<br>saliva, capillary (finger tips) and venous blood from healthy subjects<br>Y Touitou, Y Motohashi, A Pati, F Lévi, A Reinberg, O Ferment<br>Annu Rev Chronopharmacol 3, 297-299   | 10 | 1986 |
| Impairment of peak expiratory flow rate in shift workers<br>A Chandrawanshi, AK Pati<br>International journal of industrial ergonomics 17 (5), 431-435  | 9  | 1996 |
| Characteristics of circadian rhythm in six variables of morning<br>active and evening active healthy human subjects<br>S Gupta, AK Pati<br>Ind. J. Physiol. Pharmacol 38, 101-107   | 9  | 1994 |
| Circadian rhythms of locomotor activity in Indian walking catfish,<br>Clarias batrachus<br>AK Ramteke, P Poddar, AK Pati<br>Biological Rhythm Research 40 (3), 201-209  | 8  | 2009 |
|   |    |      |

| Synchronization of infradian rhythms in eight physiological functions<br>with the circannual rhythm of reproduction in female Clarias<br>batrachus<br>M Shedpure, AK Pati<br>Biological Rhythm Research 25 (4), 451-463  | 8 | 1994 |
|--|---|------|
| Comparative aspects of reproductive phase dependent adjustments<br>in behavioural circadian rhythms of epigean and hypogean fish.<br>J Biswas, AK Pati, RK Pradhan, RS Kanoje<br>Comp. Physiol. Ecol. 15, 134-139  | 8 | 1990 |
| Thyroid, gonad, and photoperiod in the hemopoiesis of the<br>migratory red-headed bunting, Emberiza bruniceps<br>JP Thapliyal, AK Pati, VK Singh, P Lal<br>General and Comparative Endocrinology 46 (3), 327-332   | 8 | 1982 |
| Diurnal and infradian rhythms in lipid parameters of Indian catfish,<br>Heteropneustes fossilis<br>B Lal, HN Singh, TP Singh, AK Pati<br>Biological rhythm research 30 (4), 371-382  | 7 | 1999 |
| Do thyroid and testis modulate the effects of pineal and melatonin<br>on haemopoietic variables inClarias batrachus?<br>M Shedpure, AK Pati<br>Journal of Biosciences 21 (6), 797-808  | 7 | 1996 |
| Thermoregulatory spectrum in vertebrates.<br>E Varghese, AK Pati<br>Indian journal of experimental biology 34 (11), 1053-1070  | 6 | 1996 |
| Late afternoon administration of melatonin is prosomatotrophic and<br>exerts androgen independent effects on erythropoiesis in male<br>house sparrow Passer domesticus.<br>AK Pati, G Gupta<br>Indian journal of experimental biology 30 (3), 173-177                        | 6 | 1992 |
| Circannual modulation of circadian mesor of circulating eosinophil<br>in an ophid<br>AK Pati<br>Journal of Ravishankar University (JRU), Part-B [Science] 2 (1), 18-22   | 6 | 1989 |
| Chronopharmacologic optimization of oral ciclosporine A in mice: a<br>search for a compromise between least renal toxicity and highest<br>immunosuppressive effects<br>AK Pati, I Florentin, G Lemaigre, M Mechkouri, F Levi<br>Annual Review of Chronopharmacology 3, 43-44 | 6 | 1988 |
| Chronohematological and Chronophysiological Studies in a Reptile:<br>With Special Reference to Environment<br>AK Pati<br>Banaras Hindu University, India   | 6 | 1982 |
| Variability in the characteristics of ultradian and circadian rhythms in<br>plasma levels of growth hormone in the Indian walking catfish,<br>Clarias batrachus<br>AK Singh, B Lal, AK Pati<br>Biological Rhythm Research 40 (3), 211-221                                    | 5 | 2009 |
| Permanent night work alters characteristics of circadian rhythm of<br>rest–activity in human subjects<br>RK Soni, P Dubey, A Kar, A Parganiha, RK Pradhan, AK Pati<br>Biological Rhythm Research 39 (6), 481-492   | 5 | 2008 |

| Why and how to implement 7-day/24 hour blood pressure<br>monitoring?<br>F Halberg, G Cornélissen, K Otsuka, S Sánchez de la Peňa,<br>Geronto Geriatrics, 1-31   | 5 | 2007 |
|---|---|------|
| Circadian rhythms in hypogean fish: with special reference to the cave loach, Nemacheilus evezardi<br>AK Pati<br>Fish Life in Special Environments, 83-130  | 5 | 2007 |
| Implications of the study of rest–activity circadian rhythm in head<br>and neck cancer patients<br>AK Pati, A Parganiha, A Kar, R Soni, S Roy, V Choudhary<br>Biological Rhythm Research 37 (6), 497-505  | 5 | 2006 |
| Larval case renovation-a unique behaviour in bagworm moth,<br>Eumeta crameri Westwood<br>R KUMARI, H KISHAN, YK BHOON, A VARMA<br>Current Science 85 (12), 1674   | 5 | 2003 |
| Annual variation in air-gulping behaviour in two Indian siluroids,<br>Heteropneustes fossilis and Clarias batrachus<br>R MAHESWARI, AK PATI, S GUPTA<br>The Indian Journal of Animal Sciences 69 (1)  | 5 | 1999 |
| Effects of Surfacing Prevention and Unilateral Removal of Air-<br>Breathing Organs on Opercular Frequency in an Indian Air-<br>Breathing Catfish, Clarias batrachus (Linn.)<br>S Gupta, AK Pati<br>Indian Journal of Animal Sciences 68 (9), 997-999    | 5 | 1998 |
| Circadian time dependence of erythropoietic and respiratory<br>responses of Indian garden lizard, Calotes versicolor, to<br>mammalian urinary erythropoietin and thyroxine<br>AK Pati, S Gupta<br>General and comparative endocrinology 82 (3), 345-354 | 5 | 1991 |
| Daily and seasonal rhythms in immune responses of splenocytes in<br>the freshwater snake, Natrix piscator<br>MK Tripathi, R Singh, AK Pati<br>PloS one 10 (2), e0116588   | 4 | 2015 |
| Short-duration judgment in young Indian subjects under 30 h<br>constant wakefulness<br>B Pande, A Parganiha, PK Patra, AK Pati<br>Indian J Exp Biol 52 (5), 559-568   | 4 | 2014 |
| Filarial infection is resisted differentially by subjects having different<br>blood group phenotypes<br>V Dixit, AK Pati, AK Gupta, PS Bisen, GB Prasad<br>Journal of clinical laboratory analysis 23 (3), 186-191                                      | 4 | 2009 |
| Increment in the size of an inanimate object in the case of bagworm<br>moth, Eumeta crameri Westwood (Lepidoptera: Psychidae) obeys<br>Dyar's law<br>A Agrawal, AK Pati<br>CURRENT SCIENCE-BANGALORE- 83 (1), 71-73                                     | 4 | 2002 |
| An introduction to chronobiology<br>AK Pati<br>Chronophysiology, 1-61   | 4 | 2000 |
|   |   |      |

| Internal Phase Relationship between the High Frequency Rhythms<br>in Blood, Serum, and Tissue Variables and<br>M SHEDPURE<br>Proc. Indian nam. Sci Acad B61 No 1, 79-88  | 4 | 1995 |
|--|---|------|
| INFLUENCE OF THYROID HORMONES ON MUSCLE TISSUE<br>RESPIRATION IN HYPOGEAN ANDEPIGEAN POPULATIONS OF<br>LOACH OREONECTUS EVEZARDI<br>J Biswas, AK Pati<br>Indian journal of experimental biology 29 (10), 933-936                           | 4 | 1991 |
| Circadian rhythms in non-mammalian vertebrates<br>AK Pati, RK Pradhan, VK Pathak, SK Saini, J Biswas<br>Biome 2, 58-69   | 4 | 1987 |
| Blood pressure and heart rate variability and diagnosis<br>R Sultana, AK Pati<br>Biological Rhythm Research 45 (3), 477-494  | 3 | 2014 |
| Interval timing as function of methods of estimation–a study on<br>cohorts of young Indians<br>B Pande, RD Shindey, A Parganiha, AK Pati<br>Biological Rhythm Research 44 (3), 469-483   | 3 | 2013 |
| Comparison of distributions of morningness–eveningness among<br>populations of shift workers on varied work patterns in different<br>organizations<br>KV Achari, AK Pati, A Parganiha<br>Biological Rhythm Research 43 (3), 235-248        | З | 2012 |
| Comparison of distributions of morningness–eveningness among<br>populations of shift workers on varied work patterns in different<br>organizations<br>KV Achari, AK Pati, A Parganiha<br>Biological Rhythm Research 43 (3), 235-248        | 3 | 2012 |
| Shift work adversely affects human longevity<br>AK Pati, KV Achari<br>Current Science 92 (7), 890-891  | 3 | 2007 |
| Shift work: Circadian rhythm disruption and beyond<br>AK Pati, A Parganiha<br>PROCEEDINGS-INDIAN NATIONAL SCIENCE ACADEMY PART B 71 (5/6), 229   | 3 | 2005 |
| Circadian and ultradian variations in the plasma level of<br>maturational gonadotropin (GTH II) in the Indian catfish, Clarias<br>batrachus<br>S Harikrishnan, B Lal, TP Singh, A Kumar Pati<br>Biological rhythm research 33 (2), 223-234 | 3 | 2002 |
| Assessment of pulmonary function in young and elderly shift<br>workers of a steel plant<br>A Gangopadhyay, A Chandrawanshi, AK Pati<br>Biological rhythm research 29 (3), 272-285  | 3 | 1998 |
| Effect of pineal extirpation on daily and long-term variations in<br>thermal tolerance in a tropical catfish, Clarias batrachus<br>E Varghese, AK Pati<br>Biological Rhythm Research 28 (3), 335-347                                       | 3 | 1997 |
|  |   |      |

| 43 Circannual Variation in the Timing of Eosinophil Circadian<br>Rhythm in Snakes<br>AK Pati, JP Thapliyal<br>Chronobiology 1982-1983, 245-249  | 3 | 1984 |
|---|---|------|
| Non-auditory effect of community noise on interval timing in<br>humans: an exploration<br>B Pande, G Rathod, N Vaidya, C Nag, A Parganiha, AK Pati<br>Biological Rhythm Research 43 (6), 585-601  | 2 | 2012 |
| The effects of frequent shutdowns of cement factory on circadian<br>rhythms in subjective drowsiness, fatigue and attention of shift<br>workers<br>A PARGANIHA, AK Pati<br>National Academy Science Letters 28 (7-8), 285-291   | 2 | 2005 |
| Circadian variation in phototactic behaviour of walking Indian<br>catfish, Clarias batrachus<br>S Ghosh, AK Pati<br>Biological Rhythm Research 35 (4-5), 367-375  | 2 | 2004 |
| Rhythmic behaviour of W. Bancrofti microfilaraemia in human<br>population at Raipur<br>V Dixit, AK Pati, AK Gupta, G Prasad<br>Biological Rhythm Research 35 (4-5), 355-366   | 2 | 2004 |
| A dominant-subordinate relationship underlies the phototactic<br>behaviour in male Clarias batrachus<br>AK Pati, S Ghosh<br>CURRENT SCIENCE-BANGALORE- 85 (10), 1465-1466   | 2 | 2003 |
| Hierarchical perception of stimuli during case construction in the<br>bagworm moth Eumeta crameri (Lepidoptera: Psychidae)<br>AK Pati, A Agrawal<br>Journal of insect behavior 13 (5), 667-677  | 2 | 2000 |
| Temporal relationship between circannual reproductive cycle and<br>infradian rhythms in physiologic functions in lower vertebrates.<br>AK Pati, M Shedpure<br>Comparative Endocrinology and Reproduction, 433-461   | 2 | 1999 |
| Optoelectronic device, a useful tool to record surfacing behaviour in<br>air-breathing fishes<br>AK PATI, S Gupta, R Maheshwari<br>Current science 74 (2), 146-149  | 2 | 1998 |
| Reproductive Phase-Dependent Annual Variation in the Effects of<br>Melatonin and Pinealectomy, with or without Iopanoic<br>Acid/Cyproterone Acetate, in the Regulation of Serum Cholesterol<br>in Clarias batrachus<br>M Shedpure, A Kumar Pati<br>Biological Rhythm Research 27 (1), 58-71 | 2 | 1996 |

| Nest architecture of a bagworm species: Rhythmic pattern in the<br>arrangement of sticks<br>A Agrawal, AK Pati<br>Journal of Biosciences 20 (3), 409-416  | 2 | 1995 |
|---|---|------|
| Circadian rhythm in oxidative metabolism of Indian garden lizard,<br>Calotes versicolor<br>AK Pati, BBP Gupta, JP Thapliyal<br>Proceedings of National Academy of Sciences, India, 250-256  | 2 | 1981 |
| Effects of radiation emanating from base transceiver station and<br>mobile phone on sleep, circadian rhythm and cognition in humans-<br>a review<br>MM Singh, AK Pati<br>Biological Rhythm Research 47 (3), 353-388   | 1 | 2016 |
| Comparative study of circadian variation in oral, tympanic,<br>forehead, axillary and elbow pit temperatures measured in a cohort<br>of young university students living their normal routines<br>P Sharma, B Pande, P Chandrakar, A Kumar Pati<br>Biological Rhythm Research 46 (1), 103-112 | 1 | 2015 |
| Day length and evening temperature predict circannual variation in<br>activity duration of the colony of the Indian cliff swallow, Hirundo<br>fluvicola<br>A Singh, S Kankariya, AK Pati, A Parganiha<br>Biological Rhythm Research 46 (1), 69-79   | 1 | 2015 |
| Blood pressure variability and pedigree analysis of nocturnal SBP<br>dipping in Kumbas from rural Chhattisgarh, India<br>R Sultana, AK Pati<br>Indian J Exp Biol 52 (5), 542-548  | 1 | 2014 |
| Prospective judgment of short-intervals in a cohort of university<br>students<br>AK Pati, B Pande<br>National Academy Science Letters 36 (2), 191-199   | 1 | 2013 |
| Sports chronobiology: circadian rhythms in psychological,<br>physiological and physical performances<br>O Gupta, H Patel, AK Pati, R Venugopal<br>The Asian Man-An International Journal 5 (1), 40-44   | 1 | 2011 |
| Seasonal variation in infestation characteristics of bag worm<br>(Lepidoptera: Psychidae) in avenue plantation of Acacia and<br>Peltophorum in the Chhattishgarh region.<br>A Agrawal, AK Pati, D Karkun<br>Current Science 72 (3), 211-214   | 1 | 1997 |
| Measurement of spatial distribution to gauge behavioural<br>thermoregulatory status in a small colony of ectothermic air-<br>breathing catfish, Clarias batrachus.<br>E Varghese, AK Pati<br>Indian Journal of Experimental Biology 35 (3), 250-255   | 1 | 1997 |
| Age related modulation of circadian time structure of blood, plasma<br>and tissue variables in male domestic fowls.<br>AK Pati, SK Saini<br>Indian journal of experimental biology 30 (4), 276-280  | 1 | 1992 |

| Circadian features of carbohydrate metabolism in domestic fowls   |   |      |
|---|---|------|
| exposed to weekly 120 degree-shifts of synchronizer schedule.<br>SK Saini, AK Pati<br>Indian journal of experimental biology 30 (2), 87-89  | 1 | 1992 |
| Effects of repeated eastward and westward synchronizer phase-<br>shifts on growth, blood morphology and biochemical variables in<br>male domestic fowls.<br>SK Saini, AK Pati<br>Indian journal of experimental biology 27 (10), 895-898                  | 1 | 1989 |
| TRIIODOTHYRONINE AND THYROXINE IN THE PHYSIOLOGY<br>OF THE MIGRATORY REDHEADED BUNTING, EMBERIZA-<br>BRUNICEPS<br>JP Thapliyal, P Lal, VK Singh, AK Pati, BBP GUPTA<br>INDIAN JOURNAL OF EXPERIMENTAL BIOLOGY 21 (4), 177-179                             | 1 | 1983 |
| Thyroid and circadian rhythm in oxygen consumption of the spotted<br>munia, Lonchura punctulata<br>JP Thapliyal, BBP Gupta, AK Pati<br>Indian Journal of Experimental Biology 19, 422-424   | 1 | 1981 |
| TIME-DEPENDENT CHANGES IN SUSCEPTIBILITY OF<br>OPHIDIAN BLOOD VARIABLES TO PENTOBARBITAL<br>AK Pati, JP Thapliyal<br>Chronobiologia 6 (2), 141-141  | 1 | 1979 |
| Pheromones as time cues for circadian rhythms in fish<br>KK Baghel, AK Pati<br>Biological Rhythm Research 46 (5), 659-669   |   | 2015 |
| Circadian rhythmicity in leukocytes immune responses in the<br>freshwater snake, Natrix piscator<br>A Singh, M Kumar Tripathi, R Singh, A Kumar Pati<br>Biological Rhythm Research 46 (2), 181-194  |   | 2015 |
| Temporal pattern in roosting behavior of the house swift, Apus<br>affinis with reference to environmental factors - a longitudinal study<br>S Kankariya, A Singh, AK Pati, A Parganiha<br>Journal of Ravishankar University - B 27 (Special Issue), 41-50 |   | 2014 |
| Proceedings of the Second National Conference on Recent<br>Advances in Biological Sciences<br>A Parganiha, B Pande, AK Pati, [Editors]<br>Il National Conference on Recent Advances in Biological Sciences, 1-96  |   | 2013 |
| Circadian variability and nocturnal dipping pattern in blood pressure<br>in young normotensive subjects<br>N Vaidya, AK Pati, A Parganiha<br>Biological Rhythm Research 43 (5), 485-496   |   | 2012 |
| Biology of subterranean fishes of India<br>AK Pati, A Parganiha<br>The Biology of Subterranean Fishes, 415-440  |   | 2010 |
| Circannual rhythm in spatial distribution of burrows of freshwater<br>crab, Barytelphusa cunicularis (Westwood, 1836)<br>S Sinha, AK Pati<br>Biological Rhythm Research 39 (4), 359-368   |   | 2008 |

| Dichotomy in human population based on variability in peak spread<br>of rest-activity rhythm in respect of internal phase reference point<br>R Sultana, N Vaidya, A Parganiha, AK Pati<br>Biological Rhythm Research 39 (2), 109-121                            | 2008 |
|---|------|
| XX National Symposium on Chronobiology: Under the Auspices of<br>Pt. Ravishankar Shukla University and the Indian Society for<br>Chronobiology, 27-29 December 2008, Abstracts<br>School of Life Sciences, Pt. Ravishankar Shukla University                    | 2008 |
| Compliance with monitoring needed after switching treatment timing<br>to eliminate vascular disease risks.<br>AK Pati, A Parganiha, RK Pradhan, A Agrawal, G Cornelissen, F Halberg<br>International Conference on the Frontiers of Biomedical Science: Medical | 2006 |
| XVII International Symposium on Biospeleology, Raipur, India, 25-<br>30 November 2004<br>AK Pati<br>International Symposium on Biospeleology 2004: Raipur, India)   | 2004 |
| Chronobiology: Implications of circadian rhythms<br>AK PATI<br>National Academy Science letters 27 (7-8), 233-248   | 2004 |
| National symposium on chronobiology<br>AK Pati, A Agrawal<br>CURRENT SCIENCE-BANGALORE- 87, 421-421   | 2004 |
| National Symposium on Recent Advances in Pineal Research: A<br>Report<br>AK Pati, R Maheshwari<br>Biological Rhythm Research 31 (1), 117-119  | 2000 |

| Temporal organization in population density of protozoans in septic<br>tank sewage<br>G Nair, AK Pati, ML Naik  | 1999 |
|---|------|
| CURRENT SCIENCE-BANGALORE- 76, 1128-1133  |      |
| 26. Temporal Relationship Between Circannual Reproductive Cycle<br>and Infradian Rhythms in Physiologic<br>AK Pati, M Shedpure<br>Comparative Endocrinology and Reproduction, 433             | 1999 |
| Circadian rhythm of subjective fatigue and subjective drowsiness in<br>shift workers<br>S Gupta, AK Pati<br>Indian Journal of Physiology and Allied Sciences 53 (3), 117-129                  | 1999 |
| Annual cycle of thermal tolerance in sham-pinealectomized and<br>pinealectomized air-breathing catfish Clarias batrachus<br>E Varghese, AK Pati<br>Biological Rhythm Research 28 (4), 453-459 | 1997 |
| VizieR Online Data Catalog: BVI photometric study of NGC 2453<br>(Mallik+, 1995)<br>DCV Mallik, R Sagar, AK Pati<br>VizieR Online Data Catalog 411, 40537                                     | 1995 |
| THE ACADEMY DOCUMENT: A PERCEPTIVE APPRAISAL OF<br>SCIENE EDUCATION IN INDIA<br>AK PATI<br>Current science 69 (2)   | 1995 |
| The proposal for a national science university - more comments<br>U Raval, MS Sriram, BB Biswas, C Dasgupta, AK Pati<br>Current science 68 (3), 234-238                                       | 1995 |
| The academy document: A perceptive appraisal of science<br>education in India<br>AK Pati<br>Current science 69 (2), 87  | 1995 |
| <b>Chronobiology</b><br>AK Pati<br>Pt. Ravishankar Shukla University  | 1993 |
| Effects of zeitgeber shifts on gonadal function in male domestic<br>fowls.<br>SK Saini, AK Pati<br>Indian journal of experimental biology 28 (8), 739-741                                     | 1990 |

| Influence of repeated synchronizer phase-shifts on growth and<br>circadian rhythm in core temperature of male domestic fowls<br>SK Saini, AK Pati<br>Biological Rhythm Research 20 (4), 289-295                          | 1989 |
|--|------|
| Time dependent effects of hormones on rate of protein synthesis in<br>lymphoid organs of chickens.<br>RK Pradhan, AK Pati, AK Agrawal, SM Agarwal<br>Indian journal of experimental biology 27 (2), 193-195              | 1989 |
| Chronopharmacologic optimization of oral ciclosporin-a in mice<br>F Levi, A Pati, I Florentin, V Chung, G Lemaigre, M Desousa, M Berardet,<br>Proceedings of the American Association for Cancer Research 29, 434-434    | 1988 |
| Ciclosporine-induced renal damage in mice and circadian rhythm in<br>drug toxicity.<br>AK Pati, F Levi, A Roulon, G Lemaigre, O Ferment, Y Touitou, A Reinberg,<br>Biome 1, 27-33  | 1986 |
| CIRCADIAN-RHYTHM OF SURFACE-ACTIVITY IN CAVEFISH,<br>NEMACHEILUS-EVEZARDI<br>RK PRADHAN, AK PATI, SM AGARWAL<br>CHRONOBIOLOGIA 12 (3), 265-265   | 1985 |
| 6 Influence of Cooling of the Hypothalamus on Circadian Rhythm of<br>Oxygen Uptake and Blood Variables of Chequered Water-snake,<br>Natrix piscator<br>S Sharan, JP Thapliyal, AK Pati<br>Chronobiology 1982-1983, 25-30 | 1984 |
| INTERNAL DESYNCHRONIZATION OF 2 CIRCADIAN-RHYTHMS<br>OF SNAKE, XENOCHROPHIS-PISCATOR<br>AK PATI, JP THAPLIYAL<br>CHRONOBIOLOGIA 10 (2), 146-146  | 1983 |
| CIRCADIAN AND CIRCANNUAL RHYTHMS IN OXIDATIVE-<br>METABOLISM OF INDIAN GARDEN LIZARDS, CALOTES-<br>VERSICOLOR<br>BBP GUPTA, AK PATI, JP THAPLIYAL<br>CHRONOBIOLOGIA 10 (2), 128-128                                      | 1983 |
| Circannual circadian interaction in ophidian biological rhythm.<br>AK Pati<br>Oriental Zoologist 3, 23-28  | 1983 |
| Chronosusceptibility of ophidian blood variables to pentobarbital.<br>AK Pati, JP Thapliyal<br>Adv. Biol. Res. 1, 37-44  | 1983 |
| Thymectomy and changes in blood morphology of the adult male<br>chequered water-snake, Natrix piscator<br>J Thapliyal, AK Pati<br>Indian Journal of Experimental Biology 17, 1242-1244                                   | 1979 |
| <u>Covert Weakening of Circadian Organization in a Cohort of</u><br><u>Rotational Shift Workers</u><br>A Parganiha, RK Soni, AK Pati   |      |

### SCOPUS Documents and h-Index for AK Pati

| Image: State of the second state o                |                  |          |         |          | ments  | of 90 Docu     | raph for se      | Scopus - h-    | eview -    | Scopus pre         |                              |                                      | /11/2016                       |
|---|------------------|----------|---------|----------|--|----------------|------------------|----------------|------------|--------------------|------------------------------|--------------------------------------|--------------------------------|
| <ul> <li>It is a PREVIEW page of Scopus Learn more about accessing Scopus with our Integration Services. Also, visit our Scopus into site.</li> <li><i>h</i>-graph Measures the impact of a set of articles and shows the number of citations per document.</li> <li>90 cited documents</li> <li>Document <i>h</i>-index: 12 Scopus does not have complete clation information for articles published before 1998.</li> <li>Comments         <ul> <li>Citations</li> <li>Cita</li></ul></li></ul>   | Login 🗸          | Help 🗸   | .ists   | rts Li   | Aler   | Sources        | Search           |                |            |                    |                              | IS Preview                           | Scopus                         |
| <i>h</i> -graph Measures the impact of a set of articles and shows the number of citations per document.<br>90 cited documents<br>Document <i>h</i> -index: 12 Scopus does not have complete citation information for articles published before 1996 €  |                  |          |         |          |  |                |                  | nts            | me         | ocu                | t of 90 E                    | aph for set o                        | h-gra                          |
| 90 cited documents<br>Document <i>h</i> -index : 12 Scopus does not have complete citation information for articles published before 1998   |                  |          |         |          |  | opus info site | Uso, visit our S | tion Services. | our Integr | Scopus with o      | n more about accessing       | REVIEW page of Scopus. Learn mor     | 1 This is a PREVI              |
| Document h-index: 12 Scopus does not have complete citation information for articles published before 1998.   | 🚇 Print   🕎 E-ma | 🕞 Export |         |          |  |                | ocument.         | itations per   | mber of    | ows the num        | set of articles and sho      | Measures the impact of a set o       | <i>h</i> -graph <sub>Mea</sub> |
| Documents         Citations           1         46           2         38           3         27           4         26           5         26           6         23           7         18           8         14           9         14           10         12           11         12           12         12  |                  |          |         |          |  |                |                  |                |            |                    |                              | ocuments                             | 90 cited docu                  |
| Documents         Citations           1         46           2         38           3         27           4         26           5         26           6         23           7         18           8         14           9         14           10         12           11         12           12         12  |                  |          |         |          |  |                |                  | before 1996. 🌘 | s publishe | ation for articles | ave complete citation inform | h-index : 12 Scopus does not have co | Document h-ind                 |
| Image: Non-state of the state of the sta |                  |          |         | 10       |  |                |                  |                |            |                    |                              |                                      |                                |
| 1     46       2     38       3     27       4     26       5     26       6     23       7     18       8     14       9     14       10     12       11     12       12     12  |                  |          | nes     |          |  |                |                  |                |            |                    | is *                         | Citations                            | Documents                      |
| 3     27       4     26       5     26       6     23       7     18       8     14       9     14       10     12       11     12       12     12  |                  |          |         |          | nee at iei   |                |                  |                |            |                    |                              | 46                                   | 1                              |
| 4     28       5     28       6     23       7     18       8     14       9     14       10     12       11     12       12     12   |                  |          |         |          |  |                |                  |                |            |                    |                              | 38                                   | 2                              |
| 4     28       5     28       6     23       7     18       8     14       9     14       10     12       11     12       12     12   |                  |          |         |          |  |                |                  |                |            |                    |                              | 27                                   | 3                              |
| 6 23<br>7 18<br>8 14<br>9 14<br>10 12<br>11 12<br>12 12   |                  |          |         |          |  |                |                  |                |            | 80                 |                              | 26                                   | 4                              |
| 10 12<br>11 12 20<br>12 12 20   |                  |          |         |          |  |                |                  |                |            |                    |                              | 26                                   | 5                              |
| 10 12<br>11 12 20<br>12 12 20   |                  |          |         |          |  |                |                  |                |            | 50 go              |                              | 23                                   | 6                              |
| 10 12<br>11 12 20<br>12 12 20   |                  |          |         |          |  |                |                  |                |            | Cita               |                              | 18                                   | 7                              |
| 10 12<br>11 12 20<br>12 12 20   |                  |          |         |          |  |                |                  |                | 1          | er of              |                              | 14                                   | 8                              |
| 10 12<br>11 12 20<br>12 12 20   |                  |          |         |          |  |                |                  |                |            | 40 A0              |                              | 14                                   | 9                              |
| 12 12   |                  |          |         |          |  |                |                  |                |            | 2                  |                              | 12                                   | 10                             |
| 12 12   |                  |          |         |          |  |                |                  | 1              |            | 20                 |                              | 12                                   | 11                             |
|   |                  |          |         |          |  |                |                  | here           |            | 20                 |                              | 12                                   | 12                             |
| 13 12   |                  |          |         |          | The second s |                | and stress       |                |            |                    |                              | 12                                   | 13                             |
| 14 12 0   | ********         |          | ******* | ******** |  |                |                  |                | -          | 0                  |                              | 12                                   | 14                             |
| 14 12 0 10 20 30 40 50 60<br>15 12 Documents  | 0 80             | 60 70    |         |          | 40   | 30             | 20               | 10             | 0          |                    |                              |                                      |                                |
| 10 12 V Documents   |                  |          | ents    | Docume   |  |                |                  |                |            |                    | •                            |                                      | 10                             |
|   |                  |          |         |          |  |                |                  |                |            |                    |                              |                                      |                                |

| About Scopus     | Language  |  |
|------------------|-----------|--|
| What is Scopus   | 日本語に切り替える |  |
| Content coverage | 切换到简体中文   |  |
| Scopus blog      | 切換到繁體中文   |  |
| Scopus API       |           |  |
| Privacy matters  |           |  |

ELSEVIER

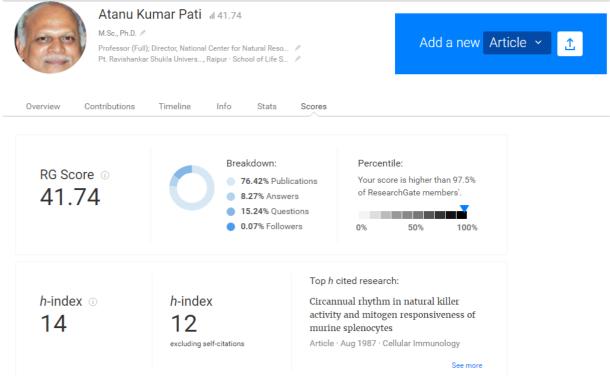
 Terms and conditions
 Privacy policy

 Copyright © 2016 Elsevier B.V. All rights reserved. Scopus® is a registered trademark of Elsevier B.V.

 Cookies are set by this site. To decline them or learn more, visit our Cookies page.

https://www.scopus.com/hirsch/document.uri?stateKey=CTOF\_732960790&accessor=CTO&origin=inward&txGid=FA335059E0C6F1A320C77AA8691B5E65.... 1/1

## Research Gate Score: 41.74 for AK Pati



### Reads/ Citations/ Profile View for AK Pati in Research Gate

