

ACHIEVEMENTS

- UGC sponsored minor research project (2013 – 15)
- 21 publications in reputed peer reviewed UGC listed journals
- Received Inspiring Citizens' Award from the Institute of Self Reliance, Bhubaneswar for outstanding contribution in the field of "Innovative Teaching Methodology" in the year 2019
- Received award for 'Teaching Excellence' from Indus Foundation in Indo Global Education Summit, 2013.
- Received Recognition for Excellent Research from renowned environmentalist, Prof: K. Purushotham Reddy, Chief Adviser, Green's Alliance for Conservation of Eastern Ghat (GRACE) in 2017
- Founder of St. Pious Undergraduate Environment Research group (SPUGER group)
- Initiated Multidisciplinary Student Education and Research Program with SPUGER group
- Member of Editorial Board, International Journal
- Reviewer of research papers of a number of International journals

Significant Innovations

1. Riddles in chemistry

- Teaching chemistry through riddles. (2004) *Resonance*, v. 9 (7), p. 74–76.
- Riddles in chemistry through "CHEMZEAL (2004). *CHEM 13 News*, v. 320, p. 4–6.
- The Riddler (2005) *Education in Chemistry*, v. 42, Infochem issue 93.
- Chemistry riddle-a new approach to chemistry teaching (2006) *Khimiya (Bulgarian Journal of Chemical Education)*, v. 15 (3), p. 179–186.
- CHEMRIDDLE- A student-friendly method of teaching and learning (2007) *Australian Journal of Education in Chemistry*, v. 67, p. 37–39.

2. Microtitration Method

- An easy, rapid and cost-effective method of microtitration. (2005) *Resonance*, v. 10 (10), p. 78–83.
- A cost effective and environmentally friendly method of titration (2007). *School Science Review*, v. 88 (324), p. 12–14.

3. Students' friendly alternative methods for a number of common laboratory experiments.

- Rapid determination of partition coefficients of some common organics between organic and aqueous solvents (2009). *Khimiya (Bulgarian Journal of Chemical Education)*, v. 18(4), p. 268–279.

- Kinetic Study of Catalytic Decomposition of Hydrogen Peroxide by Aqueous Fe³⁺ Ion —A Green Chemistry Approach (2014). *Chem. Educator*, v. 19, p. 18–21.
- A Novel Approach for Kinetic Study of Alkaline Hydrolysis of Ethyl Acetate (2017). *Khimiya/Chemistry (Bulgarian J. of Sci. Education)*, v. 26(5), p. 754–762.

4. Low cost gas generator

- Design and Fabrication of a Bench-top Gas generator for Four Year Undergraduate Laboratory Classes.(2013) *World Journal of Chemical Education*, v. 1 No. 1, p. 9–11.