



Miranda House

UNIVERSITY OF DELHI

Name: A.R. Sitalakshmi

Department: Elementary Education

Current Designation: Associate Professor

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Academic Qualifications:

M.Ed., Central Institute of Education, University of Delhi, 2007

B.Ed., Central Institute of Education, Delhi University, 2000

M.Sc. Chemistry, University of Delhi, 1999

B.Sc. Chemistry (Hons), Hansraj College, Univ. of Delhi, 1997

Diploma in French (2 year part time 97-98) , Hansraj College 1997-98

Qualified UGC-National Eligibility Test for lectureship in Chemistry, 2001

Research Degree:

Ph.D. in Education, Aug 2016, Department of Education (CIE), University of Delhi,

Title of PhD thesis: "Evolution of students' constructs in Science in relation to learner and contextual characteristics"

Research supervisors: Prof. Bharati Baveja and Prof. Alka Behari, Dept of Education, Delhi

Field of Specialization under the Subject/Discipline: Science Education

Total Teaching Experience: 14 years (excluding study leave)

Teaching at Miranda House since: 25 Oct, 2007



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List of Publications Conference proceedings-

Sitalakshmi A.R. 2015. *Use of multiple representations to promote students' understanding of phase changes*. In Proceedings EpiSTEME 6, Emerging Computational Media and Science Education, December 15- 18, 2015, (Eds.Chandrasekharan, S.,Murthy, S., Banerjee, G., and Mualidhar,A.), pp. 134- 141,published by Cinnamon Teal Publishing, Goa, India. On behalf of Homi Bhabha Centre for Science Education, TIFR, Mumbai. **ISBN** : 978-93-85523- 48-9

Sitalakshmi A.R. 2016. *Promoting students' understanding of Chemical Bonding through an intervention based on constructivist approach*. In Scientific programme and Abstracts, WorldSTE2016, 5th World Conference of Science and Technological Education, November 1-5, 2016, (Eds. Cavas B., Apkan, B. And Cakmakci G.), pp.33,published by Paiplon Yayinlari, Istanbul, Turkey. **ISBN** : 978065-9226-81-3.

Conference Presentations (other than those listed in conference proceedings above)

Podium oral presentations in person at International Conferences (abroad) selection by peer review

'Students' conceptions of Phase Changes: Effect of an intervention incorporating constructivist pedagogy to facilitate conceptual development' presented at the 25th IUPAC International Conference on Chemical Education, ICCE 2018, organized by IUPAC and University of Sydney at Sydney, Australia, 10 to 14 July, 2018

'Students' conceptions related to bonding in ionic compounds: an interventional study using multiple representations to explore and reconstruct students' ideas' presented at International Science Education Conference, ISEC 2018, at the National Institute of Education, Singapore, 19th-21st June 2018

'Students' explanations of phase changes in relation to the teaching and learning of chemical bonding and structure in India', presented at International Science Education Conference (ISEC 2014), National Institute of Education, Singapore, 25-27 Nov, 2014

Podium oral presentations in International Conferences (in India)

'Inter and intra molecular forces- Integrating student generated representations & relative strength of forces to elicit and support understanding' presented at the International Conference on Current Advances in Chemical Science research and Education, CACSRE, Mizoram University, 06 to 08 Nov 2024



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'Facilitating knowledge construction through constructivist pedagogy in senior secondary science classroom in India', presented at The 6th International Conference of the Comparative Education Society of India, Azim Premji University, Bengaluru., 14-16 December 2015

Papers presented (Podium presentations) in National level Conferences (in India)

'Science Learning and Assessment as a part of Environmental Studies: Some key issues & concerns', presented in National Symposium of Preprimary & Primary School Education, Peoples Council of Education, A.N.Sinha Institute of Social Studies, Patna, 7-9 Feb, 2012

'Senior Secondary School students' understanding of Chemistry at microscopic level: Implications for pedagogy' presented at Second Peoples Education Congress on Science Education in India, Peoples Council of Education and Homi Bhabha Centre for Science Education , TIFR, Mumbai, 05-8 Oct, 2009

Membership Of Professional Bodies :

Member of the Association of Chemistry Teachers, ACT, India (Life member)
Affiliate Membership, International Union of Pure and Applied Chemistry, IUPAC 2018

Research Guidance

Field mentor for student of MA (Education), TISS , Mumbai, 2018-19 for Masters dissertation

Providing guidance since 2010 research based projects undertaken by B.El.Ed. IV year students

Administrative Responsibilities:

- Teacher-in-charge academic year 2023-24 (02 July 2023 to 22 July 2024), Dept of Elementary Education, Miranda House
- Teacher-in-charge (Aug 2017- July 2018), Dept of Elementary Education, Miranda House

Member (College Committees)-

Extended Admission Committee for B.El.Ed. Admissions 2023

Library Committee member- 2023-24

Library Committee Nominee from El.Ed. Dept 2021-22, 2022-23

Academic Committee (as Teacher in Charge) 2017-18 and 2023-24

Convener of Quiz Society (Student Club) July 2019 – July 2021



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Contributions to Department Committees-

Elementary Education Department Moderation Committee for Internal Assessment 2023-24, 2022-23

Internship Incharge for conduct of B.El.Ed. IV yr Primary Internship & Internal Assessment of Internship 2022-23

School Permissions for Primary and Middle school internships - 2022-23

Coordinator for III year School Observations and Teaching – 2021-22

Organization and conduct of Field trip to Innovative/ alternative schools Bodh (Alwar) 2019, and Digantar, Jaipur (2024)

At University level-

Member of Interview Board for selection of candidates for admission to Ph.D. in the Department of Education, University of Delhi, 2021

Member of the five member B.El.Ed. Admissions Committee- 2016 constituted by Department of Education (CIE) University of Delhi (for the conduct of Entrance Examinations and Counseling of admissions to eight colleges offering B.El.Ed.

Contributions as Invited Resource persons to Workshops:

Invited as Resource Person for Workshop on Pedagogy of Environmental Studies- Integrated approach, in Offline In-service programme for teachers of Delhi Public Schools from across India, organized by Human Resource Development Centre, DPS Society, Knowledge Park, G Noida, on 13th May, 2023.

Invited as Resource person for 'Constructivist Pedagogy in Physical Sciences' in National Workshop on 'Constructivist Approach to Teaching and Learning' held during 30th Jan 2018 – 1st Feb 2018 at School of Education, Mahatama Gandhi Antarrashtriya Hindi Vishwavidyalaya, Wardha, Maharashtra, India

Seminars/Workshops/Conferences attended (last 7 years) -

Participation in International Webinar on Chemistry Education (online) by Association of Chemistry Teachers Mumbai, Department of Chemistry, Kamla Nehru Mahavidyalaya Nagpur and Department of Chemistry, Govt. Madhav Science PG College, Ujjain on 4th and 5th February 2022 under ACT Research Convention- 2021

Participation in a five day training program on ' Understanding Vulnerability and Risks associated with Urban Areas' organized by National institute of Disaster Management, and CESDM Miranda House in collaboration with Department of Environmental Studies , University of Delhi from 23 to 27 November 2021, Miranda House



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J. Krishnamurti and the Contemporary World Crises, Online Conference February 19-21 and February 26-28, 2021, understanding renowned philosopher and educator J Krishnamurthi's ideas in modern context, organized by Mount Saint Vincent University, Indo Canadian Shastri Institute.

Participation and Oral presentation on '*Science, Technology and Sustainable Development in middle school Science Textbooks*' in the International Workshop on *Education for Sustainable Development: Curricular and Pedagogic Experiences from Switzerland and India* on 30th January, 2019 organized by Mata Sundri College for Women, University of Delhi at New Delhi

Participation in Workshop 'Using Video analysis to reframe research on Classroom Interactions', by Sonya N Martin, Seoul National university, 19 June 2018, National Institute of Education Singapore, ISEC 2018

A.R. Sitalakshmi