



# Sarita Agrawal

## Curriculum Vitae

### Current Position

02/07/2022– **Assistant Professor**, *ITER, SOA DEEMED TO BE UNIVERSITY*, Bhubaneswar, Odisha.

### Professional Experiences

01/11/2018– **NBHM Post-Doctoral Fellow**, *Institute of Mathematics and Applications (IMA)*, Bhubaneswar, Odisha.

01/08/2017– **Post-Doctoral Fellow in Mathematics**, *Institute of Mathematical Sciences (IMSc)*, Chennai.

03/02/2017– **Post-Doctoral Fellow in Mathematics**, *Indian Statistical Institute (ISI)*, Chennai Centre, Chennai.

### Education

2011–2016 **Doctor of Philosophy**, *Discipline of Mathematics*, Indian Institute of Technology Indore, Indore.

2008–2009 **Master of Philosophy**, *Berhampur University*, Berhampur, Odisha.  
Mathematics

2004–2006 **Masters of Science**, *Utkal University*, Bhubaneswar, Odisha.  
Specialized in Mathematics

2001–2004 **Bachelor of Science**, *Govt. College*, Bhawanipatna, Odisha.  
Mathematics Honours

### Awards

2009 CSIR-UGC NET (LS)

2010 CSIR-UGC NET (JRF under UGC scheme)

2017 NBHM Postdoc Fellowship

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## Languages

Odia	<b>Mothertongue</b>	
English	<b>Intermediate</b>	<i>Con conversationally fluent</i>
Hindi		<i>Con conversationally fluent</i>

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## Invited Talks

- 2018 **National Conference on Geometric Function Theory and its Applications & Felicitation Programme in Honor of Dr. S. Latha**, *January 29-30, 2018*, Yuvaraja's College, University of Mysore, Mysuru.

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## Conferences and Workshops

- 2013 **International Conference on Special Functions & Applications (ICSFA 2013)**, *December 13-15, 2013*, Malviya National Institute of Technology, Jaipur.
- 2013 **International Symposium on Complex Analysis and Conformal Geometry (ISCACG 2013)**, *December 28-30, 2013*, Indian Institute of Technology Indore, Indore.
- 2014 **International Conference on Geometric Function Theory and Applications (ICGFTA 2014)**, *December 18-21, 2014*, Indian Institute of Technology Kharagpur, Kharagpur.
- 2015 **IIT Indore-Russia-ISI Chennai Centre Joint Seminar on Complex Analysis (a one-day symposium to promote Indo-Russian collaboration)**, *December 4, 2015*, Indian Institute of Technology Indore, Indore.
- 2015 **An Introduction to Several Complex Variables**, *December 18-23, 2015*, Indian Statistical Institute, Chennai Centre, Chennai.
- 2017 **Global Initiative of Academic Network (GIAN) course on "Quasi-conformal Mappings and their Applications"** (Prof. Pekka Koskela), *December 11-16, 2017*, Indian Institute of Technology Indore, Indore.
- 2018 **Workshop on Planar Harmonic Mappings and Quasi-Conformal Mappings**, *March 19-23, 2018*, Department of Mathematics, Central University Rajasthan, Rajasthan.

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## Research

My current research interests are in Geometric Function Theory. More precisely, I am interested in univalent functions, special functions, univalent harmonic mappings, quasiconformal mappings and their applications in geometric function theory.

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## Publications

- [1] Agrawal S., Sahoo S. K. (2014), Geometric properties of basic hypergeometric functions, *J. Difference Equ. Appl.*, **20** (11), 1502–1522.
- [2] Agrawal S., Sahoo S. K. (2017), A generalization of starlike functions of order alpha, *Hokkaido Math. J.*, **46** (1), 15–27.
- [3] Agrawal S. (2017), Coefficient estimates for some classes of functions associated with  $q$ -function theory, *Bull. Aust. Math. Soc.*, **95** (3), 446–456.
- [4] Agrawal S., Sahoo S. K. (2017), Radius of convexity of partial sums of odd functions in the close-to-convex family, *Filomat*, **31** (11), 3519–3529.
- [5] Agrawal S., Mohapatra M. R. (2018), Bohr radius for certain classes of analytic functions, *J. Class. Anal.*, **12** (2), 109–118.
- [6] Agrawal S., Sahoo S. K. (2018), On coefficient functionals associated with the Zalcman conjecture, *J. Class. Anal.*, **13** (2), 95–105.
- [7] Agrawal S., Arora V., Mohapatra M. R., Sahoo S. K. (2019), Area problem for univalent functions in the unit disk with quasiconformal extension to the plane, *Bull. Iranian Math. Soc.*, **45**(4), 1061–1069.
- [8] Agrawal S. (2021), On a generalization of starlike functions, *Indag. Math.*, **32** (4), 824–832.
- [9] Agrawal S., Sahoo S. K. (2021), Nehari's univalence criteria, pre-Schwarzian derivative and applications, *Indian J. Pure Appl. Math.*, **52** (1), 193–204.

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## Preprints

- [1] Agrawal S., Generalized Zalcman's conjecture for a subclass of close-to-convex functions, *In Preparation*.

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## Peer Review Activities

- **Journal of Mathematical Analysis and Applications (Elsevier).**
- **Analysis Mathematica (Springer).**
- **Mathematical Reviews (MathSciNet).**
- **The Ramanujan Journal (Springer).**
- **Complex Variables and Elliptic Equations (Springer).**
- **Journal of Inequalities and Applications.**

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## References

- 1 **Dr. Swadesh Kumar Sahoo**, *Associate Professor, Discipline of Mathematics*, Indian Institute of Technology Indore, Indore 453 552, India.  
Email:swadesh@iiti.ac.in, Mobile: (+91) 89890 06181
- 2 **Professor Saminathan Ponnusamy**, *Professor, Department of Mathematics*, Indian Institute of Technology Madras, Chennai, India.  
Email:samy@iitm.ac.in
- 3 **Professor Karl-Joachim Wirths**, *Professor, Institute of Analysis and Algebra*, Technische Universität Braunschweig, Germany.  
Email:k-j.wirths@tu-bs.de, Phone: (++49 531) 391-7416