

Bio Data

Name: Dr. Sukhwinder Singh Billing

Designation: Associate Professor & Head

Department of Mathematics

Sri Guru Granth Sahib World University

Fatehgarh Sahib - 140 406, Punjab, India



Educational Qualification:

M. Sc. (Mathematics) from Punjabi University Patiala, Punjab, India

Ph. D. (Mathematics) from S.L.I.E.T. (Deemed University) Longowal, Sangrur, Punjab, India

Area of Specialization: **Complex Analysis**

Experience:

Teaching: 15

Research: 09

Awards:

1. **Young Scientist Award** in Mathematical and Physical Sciences by Punjab Academy of Sciences at 13th Punjab Science Congress held at Punjab University, Chandigarh during February 7 – 9, 2010.

Short Term Courses (Attended / Organized):

1. Refresher course in **Mathematics and Statistics** organized by academic staff college, Punjabi University Patiala, Punjab, India, May 03-22, 2010.
2. Attended one week course on **Mathematical Computations Using Software Tools** organized by the Department of Mathematics, I.I.T. Roorkee, Uttarakhand, India, July 01-05, 2008.

Workshops (Attended / Organized):

1. Attended national level one week instructional workshop on **Computational Aspects of Mathematics**, organized by the Department of Mathematics, S.L.I.E.T. Longowal, Sangrur, Punjab, India, December 22-26, 2008.

2. Worked as a member of organizing committee of national level one week instructional workshop on **Computational Aspects of Mathematics**, organized by the Department of Mathematics, S.L.I.E.T. Longowal, Sangrur, Punjab, India, May 22-26, 2006.

Conferences (Attended / Organized):

1. Organized a National Conference **13th Emerging Horizons in Science and Technology** at Sri Guru Granth Sahib World University, Fatehgarh Sahib, Punjab, India, January 17-18, 2014.
2. Attended International Conference on **Complex Analysis and Its Applications** organized by the Department of Mathematics, Walchand College of Engineering, Sangli, Maharashtra, India, December 18-20, 2008.
3. Attended **13th Punjab Science Congress** organized by Punjab University Chandigarh, India, February 07-09, 2010.
4. Attended International Conference **Pre-ICM International Convention on Mathematical Sciences** organized by the Department of Mathematics, University of Delhi, Delhi, India, December 18-20, 2008.
5. Attended **11th Punjab Science Congress** organized by Thapar University Patiala, Punjab, India, February 07-09, 2008.
6. Attended **National Conference on Applied Mathematics** organized by the Department of Mathematics, Guru Nanak Dev Engineering College, Ludhiana, Punjab, India, November 30-December 01, 2007.

Papers Published / Accepted in Refereed International Journals: 46

1. **Singh, S.**, Gupta, S. and Singh, S., On a Problem of Univalence of Functions Satisfying a Differential Inequality, *Mathematical Inequalities & Applications*, **10**(1)(2007), 95-98.
2. Gupta, S., Singh, S. and **Singh, S.**, A Criterion of Φ -like Functions, *General Mathematics*, **15**(4)(2007), 121-130.
3. **Singh, S.**, Gupta, S. and Singh, S., On a Class of Multivalent Functions Defined by a Multiplier Transformation, *Matematicki Vesnik*, **60**(2)(2008), 87-94.

4. **Singh, S.**, Gupta, S. and Singh, S., On a Subclass of Analytic Functions, *General Mathematics*, **16**(2)(2008), 37-47.
5. **Singh, S.**, Gupta, S. and Singh, S., On a Bounded Subclass of Certain Analytic Functions Satisfying a Differential Inequality, *Journal of Mathematical Inequalities*, **2**(1)(2008), 27-36.
6. **Singh, S.**, Gupta, S. and Singh, S., On Starlikeness and Convexity of Analytic Functions Satisfying a Differential Inequality, *Journal of Inequalities in Pure and Applied Mathematics*, **9**(3)(2008), 1-7.
7. **Singh, S.**, Gupta, S. and Singh, S., On Certain Results of Differential Subordination and Superordination, *Communications in Mathematical Analysis*, **6**(2)(2009), 21-32.
8. **Singh, S.**, Gupta, S. and Singh, S., An Extension of the Region of Variability of a Subclass of Univalent Functions, *Journal of Inequalities in Pure and Applied Mathematics*, **10**(4)(2009), 1-7.
9. **Singh, S.**, Gupta, S. and Singh, S., A Sandwich-type Theorem with Applications to Univalent Functions, *International Journal of Mathematical and Computer Sciences*, **5**(4)(2009), 224-229.
10. **Singh, S.**, Gupta, S. and Singh, S., An Application of Differential Subordination to Analytic Functions, *International Journal of Computational and Mathematical Sciences*, **3**(7)(2009), 321-323.
11. **Singh, S.**, Gupta, S. and Singh, S., A General Coefficient Inequality, *General Mathematics*, **17**(3)(2009), 99-104.
12. **Singh, S.**, Gupta, S. and Singh, S., On a Problem in the Theory of Univalent Functions, *General Mathematics*, **17**(3)(2009), 135-139.
13. **Singh, S.**, Gupta, S. and Singh, S., Differential Subordination and Superordination Theorems for Certain Analytic Functions, *General Mathematics*, **18**(2)(2010), 143-159.
14. **Singh, S.**, Gupta, S. and Singh, S., Certain Applications of Differential Subordination to Analytic Functions, *International Journal of Open Problems in Complex Analysis*, **2**(1)(2010), 30-38.

15. **Singh, S.**, Gupta, S. and Singh, S., A First Order Differential Subordination and Its Applications, *International Journal of Open Problems in Complex Analysis*, **2**(2)(2010), 95-109.
16. **Singh, S.**, Gupta, S. and Singh, S., Certain Conditions for Strongly Starlike and Strongly Convex Functions, *International Journal of Computational and Mathematical Sciences*, **4**(6)(2010), 290-292.
17. **Singh, S.**, Gupta, S. and Singh, S., Starlikeness of Analytic Maps Satisfying a Differential Inequality, *General Mathematics*, **18**(3)(2010), 51-58.
18. **Billig, S. S.**, A Subclass of Close to Convex Functions, *International Journal of Open Problems in Complex Analysis*, **2**(3)(2010), 203-210.
19. **Billig, S. S.**, An Application of Differential Subordination for Starlikeness of Analytic Functions, *International Journal of Open Problems in Complex Analysis*, **2**(3)(2010), 221-229.
20. **Singh, S.**, Gupta, S. and Singh, S., Certain Differential Inequalities Involving Multivalent Functions, *International Journal of Open Problems in Complex Analysis*, **3**(2)(2011), 43-49.
21. **Billig, S. S.**, A Subordination Theorem with Applications to Analytic Functions, *Bulletin of Mathematical Analysis and Applications*, **3**(3)(2011), 1-8.
22. **Billig, S. S.**, Certain Differential Sandwich-Type Results, *Journal of Mathematical Analysis*, **2**(1)(2011), 8-17.
23. **Billig, S. S.**, Differential Sandwich-Type Results and Criteria for Starlikeness, *Rend. Sem. Mat. Univ. Politec. Torino*, **69**(1)(2011), 57-71.
24. **Billig, S. S.**, Some Results on Close-to-convex Univalent Functions, *Mathematical Sciences Research Journal*, **15**(5)(2011), 137-149.
25. **Billig, S. S.**, On Certain Results for a Subclass of Analytic Functions, *International Journal of Open Problems in Complex Analysis*, **3**(3)(2011), 43-48.
26. **Billig, S. S.**, Cesaro and De La Vallee Pousson Means of Functions of Bounded Turning, *International Journal of Open Problems in Complex Analysis*, **3**(3)(2011), 49-55.

27. **Billing, S. S.**, Conditions for a Subclass of Analytic Functions, *Scientia Magna*, **7**(4)(2011), 35-41.
28. **Billing, S. S.**, A Remark on Certain Differential Inequalities Involving p-valent Functions, *Analysis in Theory and Applications*, **28**(1)(2012), 58-64.
29. **Billing, S. S.**, On Regions of Variability of Some Differential Operators Implying Starlikeness, *Proceedings of Pakistan Academy of Sciences*, **49**(1)(2012), 1-8.
30. **Billing, S. S.**, Certain Differential Subordination Involving a Multiplier Transformation, *Scientia Magna*, **8**(1)(2012), 87-93.
31. **Billing, S. S.**, On Certain Results for Univalent Functions, *International Journal of Open Problems in Complex Analysis*, **4**(3)(2012), 1-6.
32. **Billing, S. S.**, Some New Criteria for Starlikeness and Convexity of Analytic Functions, *Rend. Sem. Mat. Univ. Politec. Torino*, **70**(3)(2012), 279-287.
33. **Billing, S. S.**, Region of Variability of a Differential Operator Involving Bazilevic Functions, *International Journal of Open Problems in Complex Analysis*, **5**(1)(2013), 1-8.
34. **Billing, S. S.**, Differential Inequalities Implying Starlikeness and Convexity, *Acta Universitatis Matthiae Belii, series Mathematics*, **20**(2012), 3-8.
35. **Billing, S. S.**, Some Sufficient Conditions for ϕ -like functions, *Scientia Magna*, **8**(3)(2012), 29-37.
36. **Billing, S. S.**, On Certain Subclasses of Analytic Functions, *Scientia Magna*, **8**(4)(2012), 11-16.
37. **Billing, S. S.**, On Certain Results for Sakaguchi Type Functions, *Acta Universitatis Apulensis*, **33**(2013), 275-285.
38. **Billing, S. S.**, A Subordination Theorem Involving a Multiplier Transformation, *International Journal of Analysis and Applications*, **1**(2)(2013), 100-105.

39. **Billing, S. S.**, Some Sufficient Conditions for Starlike and Convex Functions, *Studia Universitatis Babes Bolyai Mathematica*, **58**(3)(2013), 355-360.
40. **Billing, S. S.**, Differential sandwich-type results for starlike functions, *Scientia Magna*, **9**(2)(2013), 30-40.
41. **Billing, S. S.**, A multiplier transformation and conditions for starlike and convex functions, *Mathematical Sciences Research Journal*, **17**(9)(2013), 239-244.
42. **Billing, S. S.**, Differential Inequalities and Criteria for Starlikeness and Convexity of Analytic Functions, *Studia Universitatis Babes Bolyai Mathematica*, **59**(2)(2014), 191-198.
43. Brar, Richa and **Billing, S. S.**, Certain Results on Starlike and Parabolic Starlike Functions, *International Journal of Open Problems in Computer and Mathematics*, **8**(4)(2015), 27-35.
44. Brar, Richa and **Billing, S. S.**, Certain Sufficient Conditions for Parabolic Starlike and Uniformly Close-to-Convex Functions, *Studia Universitatis Babes Bolyai Mathematica*, **61**(1)(2016), 53-62.
45. **Billing, S. S.** and Kimmi Markan, A Remark on a Subclass of Analytic Functions, *Acta Universitatis Apulensis*, **45**(2016), 105-113.
46. Brar, Richa and **Billing, S. S.**, On Starlike Functions Involving a Certain Differential Operator, *Acta Universitatis Apulensis*, **46**(2016), 65-77.

Papers in International Conferences: 01

1. **Singh, S.**, Gupta, S. and Singh, S., On Starlikeness of Certain Analytic Functions, *Pre- ICM International Convention on Mathematical Sciences*, University of Delhi, Delhi, India, December 18-20, 2008.

Papers Presented at National Conferences: 06

1. **Singh, S.**, Gupta, S. and Singh, S., Some Sandwich-type Results on Differential Subordination and Their Applications to Analytic Functions, *Punjab Science Congress*, Punjab University, Chandigarh, India, February 7-9, 2010.

2. **Singh, S.**, Gupta, S. and Singh, S., On a Bounded Subclass of Multivalent Functions, *Punjab Science Congress*, Thapar University, Patiala, India, February 7-9, 2008.
3. **Singh, S.**, Gupta, S. and Singh, S., A General Subordination Theorem and Its Applications, *Punjab Science Congress*, Thapar University, Patiala, India, February 7-9, 2008.
4. Richa Brar and **Billing, S. S.**, Cesàro and De La Vallée Poussin Means of Libera Integral of Functions of Bounded Turning, *Emerging Horizons in Science & Technology*, Sri Guru Granth Sahib World University, Fatehgarh Sahib, India, January 17-18, 2014.
5. Pardeep Kaur and **Billing, S. S.**, On Certain Means of Functions of a Subclass of Analytic Functions, *Emerging Horizons in Science & Technology*, Sri Guru Granth Sahib World University, Fatehgarh Sahib, India, January 17-18, 2014.
6. Rimpi Goyal and **Billing, S. S.**, Certain Means of Alexander Integral Operator of Functions of Bounded Turning, *Emerging Horizons in Science & Technology*, Sri Guru Granth Sahib World University, Fatehgarh Sahib, India, January 17-18, 2014.

Reviewed the papers for the following International Journals:

1. International Journal of Open Problems in Complex Analysis.
2. Analele Stiintifice Ale Universitatii Ovidius Constanta.
3. Analele Universitatii din Oradea - Fascicola Matematica.
4. Kragujevac Journal of Mathematics.