

Dr Hemanthkumar B

Assistant Professor

Educational
Qualification

M.Sc., Ph.D.

Experience

Teaching: 12 Years, Research: 09 Years

Area of Interest

Number Theory: Special functions, q - series, partition theory.

Date of Joining RVCE

21-11-2022

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List of Publications

- [International Journal : 14](#)
- [National Journal:01](#)
- [International Conference : 02](#)
- National Conference : 00

Awards

1. Qualified CSIR-UGC NET, December 2012 for junior research fellowship and lectureship in Mathematical sciences.
2. Received annual exemplary faculty-teaching award on 7/9/2020 in Ramaiah University of Applied Sciences, Bengaluru.

List of International Journal Publications:

1. B. Hemanthkumar and D. S. Gireesh, On 5^k – regular partitions modulo powers of 5, Bulletin of Australian Mathematical Society, DOI: 10.1017/S0004972725000139, 2025.
2. B . Hemanthkumar, On 4^α – regular overpartitions modulo powers of 2, Ramanujan Journal, 10.1007/s11139-024-00974-8, 2024.
3. D. S. Gireesh and B . Hemanthkumar, Partition – theoretic interpretation for certain truncated series, Journal of integer sequences, 26, 2023, Article 23.6.8. 2. S.
4. S. Chandankumar and B. Hemanthkumar, “mixed” modular equations of degree 15, Afrika Matematika, 10.1007/s13370-023-01043-x, 2023.
5. B. Hemanthkumar, “Congruence properties of coefficients of the eighth order mock theta function ”, Ramanujan journal, 10.1007/s11139-020-00342-2, 2021.

6. B. Hemanthkumar and S. Chandankumar, New Congruence Modulo Small Powers of 2 for Overpartitions into Odd Parts, *Matematicki vesnik*, 73(2), pp 141-148, 2021.
7. Sumanth Bharadwaj H.S., B. Hemanthkumar and M.S. Mahadeva Naika, "On 3-and 9-regular overpartitions modulo powers of 3", *Colloquium Mathematicum*, vol 154, pp 121-130, 2018.
8. B. Hemanthkumar, Sumanth Bharadwaj H.S. and M.S. Mahadeva Naika, "Arithmetic Properties of 9-Regular Partitions with Distinct Odd Parts", *Acta Mathematica Vietnamica*, vol 44, pp 797-811, 2019. doi.org/10.1007/s40306-018-0274-z.
9. B. Hemanthkumar, Sumanth Bharadwaj H.S. and M.S. Mahadeva Naika, "Arithmetic properties of partitions with 5-cores", *Proceedings of the Jangjeon Mathematical Society*, Vol 21, No. 2, pp 229-237, 2018.
10. M.S. Mahadeva Naika, B. Hemanthkumar and S. Chandankumar, "New modular equations and their applications", *Annali dell'universita' di ferrara*, vol 64(2), pp 407–425, 2018, doi.org/10.1007/s11565-017-0286-y.
11. B. Hemanthkumar, Sumanth Bharadwaj H.S. and M.S. Mahadeva Naika, "Congruences Modulo Small Powers of 2 and 3 for Partitions into Odd Designated Summands", *Journal of integer sequences*, Vol 20, Article 17.4.3, 2017.
12. M.S. Mahadeva Naika and B. Hemanthkumar, "Arithmetic properties of 5-regular bipartitions", *International Journal of Number Theory*, Vol. 13, No. 4, pp. 937-956, 2017.
13. M.S. Mahadeva Naika, B. Hemanthkumar and Sumanth Bharadwaj H. S., "Congruences modulo 2 for certain partition functions", *Bulletin of Australian Mathematical Society*, Vol. 93, Issue 3, pp. 400-409, 2016.
14. M.S. Mahadeva Naika, B. Hemanthkumar and Sumanth Bharadwaj H. S., "Color partitions identities arising from Ramanujan's theta-functions", *Acta Mathematica Vietnamica*, Vol. 41, Issue 4. pp. 633-660, 2016.
15. M.S. Mahadeva Naika, S. Chandankumar and B. Hemanthkumar, "New Modular relations for cubic class invariants", *Note di Matematica*, Vol. 34, Issue 2, pp. 75–89, 2014.
16. M.S. Mahadeva Naika, S. Chandankumar and B. Hemanthkumar, "On some new modular identities for a remarkable product of Theta-functions and their explicit evaluation", *Tbilisi Mathematical Journal*, Vol. 7, Issue 1, pp. 55–68, 2014.
17. M.S. Mahadeva Naika, S. Chandankumar and B. Hemanthkumar, "Modular identities for Ramanujan's remarkable product of Theta-functions", *Advanced Studies in Contemporary Mathematics*, Vol. 23, No. 3, pp. 431–449, 2013.

List of National Journal Publication

1. B. Hemanthkumar, D. Ranganath and Sumanth Bharadwaj H. S., "On eight colour partitions", *Indian Journal of Pure and Applied Mathematics*, 51(4), pp 1843—1856, 2020.

List of International conference proceedings:

1. Presented paper in conference conducted by Indian mathematical society, IMS-2012, held at Banaras Hindu University, Banaras.
2. Presented a paper entitled "On eight colour partitions" in the International conference on number theory and graph theory held at department of studies in mathematics, University of Mysore, Mysuru, during June 27-29, 2019.