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List of Publications

International Journals

1. **R. Hissariya**, S. Babu, S. Ram, and S. K. Mishra 2021,"Spin-up conversion, exchange-interactions, and tailored magnetic properties in core-shell La_2NiMnO_6 of small crystallites ", *Nanotechnology 32 (43), 435702*

2. P. K. Ojha, R. Sharma, **R. Hissariya**, S. Babu, E. Ketkar, S. Singh, S. Neema, A. Rana, N. Pal, V. G. Sathe, and S. K. Mishra, 2021,"Observation of V–V dimers softening and distinct length scales in nanostructured VO_2 thin films ", *Journal of Physics and Chemistry of Solids, 110564*

3. **R. Hissariya**, V. G. Sathe, and S. K. Mishra, 2023, "Antisite disorder mediated exchange bias effect and spin-glass state in $La_{2-x}Sm_xNiMnO_6$ ", *Journal of Magnetism and Magnetic Materials, 170769*

Comunicated articles

1. **R. Hissariya**, N. Tripathi, Vivekanand Shukla, Tommas Brumme, and S. K. Mishra, 2023, "Antisite disorder induced exchange bias effect and spin-glass state in $La_{1.5}Sm_{0.5}NiMnO_6$. (under Review)

2. **R. Hissariya**, R. Sharma, and S. K. Mishra, 2023, "Antisite Antisites disorder driven magnetization relaxation and polydispersity La_2NiMnO_6. (under Review)

Proceedings

1. **R. Hissariya**, and S. K. Mishra, 2021, "Antisites driven magnetic transition study in La_2NiMnO_6 ", *Journal of Physics: Conference Series 2070 (1), 012060*

Seminar and Symposium

1. WWSTMS-2018, Winter School on Synchrotron Techniques in Materials Science, S. N. Bose National Centre for Basic Sciences, Kolkata, India, October 25-31, 2018 (**Winter School**).

2. ICMAGMA-2018, International conference on Magnetic Materials and Applications Dept. of Physics, NISER, Bhubaneswar, December 09-13, 2018 (**Poster Presentation**).

3. ICFNM-2019, International Conference on Functional Nanomaterials at Department of Physics, IIT-(BHU), Varanasi, India, February 22-25, 2019 (**Poster Presentation**).

4. SMST-2020, International Conference on Smart Material for Sustainable Technology at Bogmallo Beach Resort, Goa Conference is jointly organized by Society of Interdisciplinary Research in Materials and Biology (SIRMB), IIT (BHU) Varanasi, IIT-Delhi, IIT-Goa, and SINP-Kolkata IIT-(BHU), Varanasi, India, February 22-25, 2020 (**Poster Presentation**).

5. Expert/tranier lecture to ceramic enggineer student through video conferencing during COVID-19 emergency which held during 4^{th} May- 20^{th} June, 2020.

6. AMBT-2021, International Conference on Advances Materials for Better Tomorrow, jointly organized by Society of Interdisciplinary Research in Materials and Biology (SIRMB), IIT (BHU) Varanasi, July 13-17, 2021 (**flash talk Presentation**).

7. ICAPSM-2021, International Conference on Advances in Physical Sciences and Materials at Coimbatore, Tamil Nadu, India, August 12-13, 2021 (**Paper Presentation**).

Vita

Raman Hissariya was born on May 15^{th}, 1992, and raised in Bikaner, Rajasthan, India. He completed a Bachelor of Technology in Ceramic Engineering from the College of Engineering and Technology, Bikaner. In 2013, he recieved bachelor's degree.

Raman got admission to the School of Material Science & Technology at the Indian Institute of Technology (Banaras Hindu University), Varanasi to pursue his M.Tech under the supervision of Dr. Shrawan Kumar Mishra and Prof. Rajiv Prakash. His project was focused on the size effect on physical properties of La_2NiMnO_6. He secured AIR-166 rank in GATE, a national-level examination during the same period.

In July 2018, Raman Hissariya joined Dr. Shrawan Mishra's research group as a Ph.D. student in the School of Materials Science & Technology at the Indian Institute of Technology (Banaras Hindu University), Varanasi, to continue the research on double perovskites. In his thesis research, he worked on emergent magnetic frustration systems and spin-related phenomena that are highly significant for spintronics, non-volatile memories, and energy storage. My area of research is material processing and synthesis for ceramic powder and thin film, as my core is ceramic engineering.

My long-term objective is to seek a teaching and research position in a research or academic institution after finishing Ph.D.. I will like to have the opportunity to share my experience and knowledge with students and people who are as excited and focused as I am in the field of material science. Within an academic or research institution, I envision myself engaging in both teaching and research endeavors. I will have the opportunity to mentor and guide students, imparting my knowledge and experience while nurturing their passion for materials science. Additionally, I intend to actively participate in conferences, workshops, and professional societies, allowing me to network with experts in the field and stay abreast of the latest advancements.