

Dr. Ashish Kumar

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Contact Address:

Ashish Kumar S/O Sh. Parmod Singh, Vill Kotla, PO- Kotla Mangwal, Teh- Indora, Distt- Kangra, Himachal Pradesh, Pin- 176204.

My Strengths:

- Self Confidence
- Positive approach
- Adaptable to changes
- Ability to learn new Technologies
- Good team player

Personal Data:

Date of Birth: 08/12/1990

Sex : Male

Nationality : Indian

Marital Status : Married

Languages known:
English, Hindi

Permanent Address:

Ashish Kumar S/O Sh. Parmod Singh, Vill Kotla, PO- Kotla Mangwal, Teh- Nurpur, Distt- Kangra, Himachal Pradesh, Pin- 176204.

Objective

Seeking a responsible and career-oriented opportunity in your organization that could utilize my knowledge and ability in a competitive environment and a part of the team that dynamically works towards the growth of the organization and gains satisfaction thereof.

Educational Qualification

Degree	Year	Subject	University	% marks
Ph.D.	2019	Materials Science	National Institute of Technology Warangal, India	Awarded 13/08/2019
MSc.	2013	Physics	Central University of Himachal Pradesh	67.40
BSc.	2011	Physics, Chemistry, Mathematics, English	Himachal Pradesh University Shimla	65.45
12 th	2008	Physics, Chemistry, Mathematics	Himachal Pradesh Board of School Education	60.00

Technical Skills

Operating System:

Windows Xp/2000/7/8/10

Characterization Techniques:

DSC, TG/TDA, SEM, XRD, FT-IR, NMR, UTM, HDT, Impact-Testing

Polymer Processing Machines:

Micro compounders – Xplore, Twin screw extruder-Thermo Haake and Thin film applicator

Softwares:

Origin-Lab, TORIS, ChemDraw Ultra 12.0, MestReNova, Latex, Mathematica, Microsoft Office

Professional Experience

- **Post Doctoral Fellow**, Department of Physics, Indian Institute of Technology Roorkee, Uttarakhand, India (2021 to ongoing).
- **Assistant Professor (Guest Faculty)**, Department of Physics and Astronomical Sciences, Central University of Jammu, India. (2020-2021)

Research Experience

- **Senior Research Fellow (SRF): DAE-BRNS Research Project**
Principal Investigator: Dr. T. Venkatappa Rao, Associate Professor, Department of Physics, NIT Warangal (2017-2019).

- **Junior Research Fellow (JRF): DAE-BRNS Research Project**
Principal Investigator: Dr. T. Venkatappa Rao, Associate Professor, Department of Physics, NIT Warangal (2015-2017)
- **Project Associate:** School Of Basic Sciences, Indian Institute of Technology Mandi, Mandi, Himachal Pradesh, India, 175001 (2014).
Project Advisor: Dr. Anirudhha Chakraborty, Assistant Professor, SBS, IIT Mandi.

Publications

1. **Ashish Kumar**, T.Venkatappa Rao, “Physicochemical properties of the electron beam irradiated bamboo powder and its bio-composites with PLA”, **Composites Part B: Engineering** **175**, **107098** (2019). (Impact Factor 6.864) <https://doi.org/10.1016/j.compositesb.2019.107098>
2. **Ashish Kumar**, T.Venkatappa Rao, S. Ray Chowdhury, S.V.S Ramana Reddy, “A green physical approach to compatibilize a bio-based poly (lactic acid)/lignin blend for better mechanical, thermal and degradation properties” **International Journal of biological macromolecules** **121**, **588-600** (2019). (Impact Factor 4.784) <https://doi.org/10.1016/j.ijbiomac.2018.10.057>
3. **Ashish Kumar**, T.Venkatappa Rao, S. Ray Chowdhury, S.V.S Ramana Reddy, “Optimization of mechanical, thermal and hydrolytic degradation properties of Poly (lactic acid)/Poly (ethylene-co-glycidyl methacrylate)/Hexagonal boron nitride blend-composites through electron-beam irradiation” **Nuclear Inst. Methods in Physics Research B** **428**, **38-46** (2018). (Impact Factor 1.323) <https://doi.org/10.1016/j.nimb.2018.05.011>
4. **Ashish Kumar**, T.Venkatappa Rao, S. Ray Chowdhury, S.V.S Ramana Reddy “Compatibility confirmation and refinement of thermal and mechanical properties of Poly (lactic acid)/Poly (ethylene-co-glycidyl methacrylate) blend reinforced by hexagonal boron nitride” **Journal of Reactive and Functional Polymers** **117**, **1–9** (2017). (Impact Factor 3.151) <http://dx.doi.org/10.1016/j.reactfunctpolym.2017.05.005>
5. **Ashish Kumar**, T.Venkatappa Rao, S. Ray Chowdhury, S.V.S Ramana Reddy, “Effect of electron beam irradiation on thermal and mechanical properties of Poly (lactic acid) / Poly (ethylene-co-glycidyl methacrylate) blend”, **Conference Paper in AIP Conference Proceedings** **1849(1):020039** · June 2017 DOI: 10.1063/1.4984186. <http://dx.doi.org/10.1063/1.4984186>
6. D. Diwaker, C.S.Chidan Kumar, **Ashish Kumar**, Siddegowda Chandraju, Hoong-Kun Fun, Ching Kheng Quah, “Synthesis, spectroscopic characterization and computational studies of 2-(4-bromophenyl)-2-oxoethyl 3-methylbenzoate by density functional theory”, **Journal of molecular structure** **1092**, **192-201** (2015). (Impact Factor 2.011) <http://dx.doi.org/10.1016/j.molstruc.2015.03.028>
7. D. Diwaker, C.S.Chidan Kumar, **Ashish Kumar**, S. Chandraju C.K. Quah, H.K. Fun, “Synthesis, spectroscopic characterization, electronic and optical studies of (2Z)-5, 6-dimethyl-2-[(4-nitrophenyl) methylidene]-2, 3-dihydro-1-benzofuran-3-one” **Journal of Computational Science** **10**, **237-246** (2015). (Impact Factor 2.502) <http://dx.doi.org/doi:10.1016/j.jocs.2014.11.005>

Book Chapters

1. **Ashish Kumar and T.Venkatappa Rao**, “Electron Beam Irradiation Induced Compatibilization of Poly (lactic acid) Based Blends”, Applications of High Energy Radiations: Synthesis and Processing of Polymeric Materials, Springer Nature Publications (In Press).

Symposia Presentations

1. **Ashish Kumar**, T.Venkatappa Rao: Effect of reinforcing particles on the thermal, mechanical and degradation properties of poly (lactic acid)/poly (ethylene-co-glycidyl methacrylate) blend presented at International conference “**International Conference on Advanced Functional Materials and Devices (ICAFMD-2019)**” held at **National Institute of Technology Warangal, India from 26-28 February 2019. (Best Oral Presentation)**
2. **Ashish Kumar**, T.Venkatappa Rao, S. Ray Chowdhury, S.V.S Ramana Reddy: Impact of electron beam irradiation on degradation properties of poly (lactic acid)/poly (ethylene-co-glycidyl methacrylate) blend presented at International conference “**International Conference on Advanced Applications of Radiation Technology (NICSTAR-2018)**” held at **Hotel Courtyard by Marriott, Mumbai, India from 05-07 March 2018.**
3. **Ashish Kumar**, T.Venkatappa Rao, S. Ray Chowdhury, S.V.S Ramana Reddy: Effect of electron beam irradiation on thermal and mechanical properties of poly (lactic acid) / poly (ethylene-co-glycidyl methacrylate) blend” has been presented at an **International conference “Optics 17” held at NIT Calicut during 9-11 January 2017.**
4. **Ashish Kumar**, T.Venkatappa Rao, S. Ray Chowdhury, S.V.S Ramana Reddy: Effect of reinforcing hexagonal boron nitride particles on the hydrolytic degradation properties of poly (lactic acid) / poly (ethylene-co-glycidyl methacrylate) blend” has been presented at **National conference “Recent Trends in Experiments and Theoretical Physics” held at SSU Palampur (H.P.) during 23-24 November 2017.**

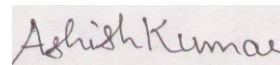
Declaration

I hereby declared that the above information given by me is true to the best of my knowledge.

Date: 18/04/2022

Place: Kangra, India.

Ashish Kumar



References :

1) **Prof. Anil Kumar Gourishetty**

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Indian Institute of Technology Roorkee Roorkee-247667,
Uttarakhand, INDIA.
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2) **Prof. Tumu Venkatappa Rao**

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3) **Dr. Subhendu Ray Chowdhury**

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