

May 2020

Curriculum Vitae

Dr. Umesh Neupane

Ph.D. in Chemistry

Visiting Lecturer

Department of Chemistry

Tribhuvan University, Nepal

Visiting Lecturer

Crimson College of Technology

Department of Health Science

Pokhara University, Nepal

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Research Interest

- **Synthesis and Physicochemical Characterization of Binary Organic Charge Transfer Complexes**
- **Synthesis, Crystal Growth and Characterization of Organic-, Inorganic-, and Binary Organic Nonlinear, Electro-optic Materials and Fluorescence Materials.**

Award and Honor

Scientific Research and Publication Award, awarded by Province Government, Ministry of Industry, Tourism, Forest and Environment, Province No.5, Nepal

Academic Qualification

2015-2019 Ph. D. in Chemistry, Department of Chemistry, Institute of Science, Banaras Hindu University, Varanasi, India

Research Topic: **“Solid-State Synthesis and Physicochemical and Optical Characterization of Binary Organic Crystalline Materials”**

Supervisor: **Prof. Ramanand Rai**, Department of Chemistry, BHU

2007-2009 Master of Science (MSc), Physical Chemistry, Central Department of Chemistry- Tribhuvan University, Kirtipur, Nepal (75.30 %)

- 2003-2006 Bachelor of Science (BSc)**, Major Chemistry, Tri-chandra Multiple Campus-Affiliated to Tribhuvan University, Kathmandu, Nepal (61 %)
- 2001-2002 Proficiency Certificate Level (PCL)**, Tri-chandra Multiple Campus-Affiliated to Tribhuvan University, Kathmandu, Nepal. (59.14 %)
- 1999-2001 School Leaving Certificate (SLC)**, Sri Panch Kanti Sec. School, Butwal, Nepal (72 %)

Academic Participation

- Convener** An Interactive workshop on, “**Science and Technology; Present Scenario, Future Possibilities and Challenges in Province 5**” organized on 15th June 2019 by Ministry of Industry, Tourism, Forest and Environment, Province No. 5, Butwal, Nepal.
- Convener** Two Days Provincial Youth Scientist Conference on, “**Promoting Youth Participation in Science, Technology and Innovation for Development and Prosperity**” organized on 28-29th February 2020 by National Youth Council and Ministry of Social Development, Province No. 5, Butwal, Nepal.

Publications

1. Synthesis, spectroscopic, crystal structure, thermal and optical studies of novel proton transfer complex: 2-methyl-8-hydroxyquinolinumpicrate
Umesh Neupane, Manjeet Singh, Priyanka Pandey and R. N. Rai, **Journal of Molecular Structure**, 1195 (2019): 131-139
<https://doi.org/10.1016/j.molstruc.2019.05.026>
2. Solid State Synthesis of Novel Charge Transfer Complex and Studies of its Crystal Structure and Optical Properties.
Umesh Neupane and R. N. Rai, **Journal of Solid State Chemistry**, 268 (2018): 67-74 <https://doi.org/10.1016/j.jssc.2018.08.029>
3. Solvent free synthesis of a novel intermolecular compound and its crystal structure, thermal and optical studies.
Umesh Neupane and R. N. Rai. **Journal of Solid State Chemistry**, 265 (2018): 1-11
<https://doi.org/10.1016/j.jssc.2018.05.025>
4. Thermal, physicochemical and spectroscopic studies on some novel organic

complexes obtained by green synthesis.

Umesh Neupane, U. S. Rai, and R. N. Rai. **Journal of Thermal Analysis and Calorimetry**: **132.3** (2018): 1741-1752. <https://doi.org/10.1007/s10973-018-7051-z>

5. Synthesis, Spectral Characterization, Thermal and Optical Studies of Novel complexes: 4-(Dimethylamino)benzylidene-4-acetamideoaniline and 4-Dimethylamino)benzylidene-4-nitroaniline.

Umesh Neupane and R. N. Rai. **Journal of fluorescence** **27. 6** (2017): 2263-2277. <https://doi.org/10.1007/s10895-017-2168-1>

Conference/ Seminar Presented

1. Studies of Phase diagram, Crystal Growth, Crystal Structure and Optical Property of Novel Organic Charge Transfer Complex, *23rd National Seminar on Crystal Growth and Applications (NSCGA-2019)*,
Umesh Neupane, Sumit Chaudhary and R. N. Rai, January 28-30, 2019, Bharathiar University, Coimbatore, India
2. Significant fluorescent emission from the solid state synthesized novel organic complex, *23rd National Seminar on Crystal Growth and Applications (NSCGA-2019)*,
Sumit Chaudhary, **Umesh Neupane** and R. N. Rai, January 28-30, 2019, Bharathiar University, Coimbatore, India, Page-99
3. Synthesis, Crystal Structure, Optical and Nonlinear Optical Studies of a Novel Organic NLO Material, *23rd National Seminar on Crystal Growth and Applications (NSCGA-2019)*,
Priyanka Pandey, **Umesh Neupane** and R. N. Rai, January 28-30, 2019, Bharathiar University, Coimbatore, India
4. Green Synthesis and Studies of Thermal and Crystal Structure of Novel Organic Charge Transfer Complex, *National Symposium on Emerging Trends in Chemical Sciences*
Umesh Neupane and R. N. Rai., November 17-18, 2018, BHU, India, Page-105
5. Crystal Engineering of Organic Charge Transfer Complex by Green Synthesis, *Science, Information and Technology National Youth Conference (SITNYC-2018)*
Umesh Neupane¹, K. P. Sharma² and R. N. Rai, Jun 18-20, 2018, Kathmandu, Nepal
6. Crystal Growth, Structural and Optical Studies of Organic Charge Transfer Complex and Solvent Effect on its Electronic Properties.
Umesh Neupane, K. P. Sharma and R. N. Rai. *International Chemical Congress-Chemistry for Sustainable Development*, March 8-10, 2018, Chitwan, Nepal Page-67

7. Solid State-Synthesis of Novel Organic complexes and Their Physico-chemical and Fluorescence Studies.
Umesh Neupane and R. N. Rai. *International Conference on Material Science and Technology*, October 8-12, 2017, Pittsburgh, USA, Page-42
8. Green synthesis of binary organic complex and its thermal, physico-chemical and optical studies.
Umesh Neupane, Tulika Sharma and R.N. Rai, *INDO-US International Conference on Nanotechnology: Science and Application in Advanced Materials and Beyond* Dec. 19-22, 2016, BHU, India, Page-152.
9. Kathmandu Symposia on Advanced Materials, May 9-12, 2012, Kathmandu (Participation)
10. The Fifth National Conference on Science and Technology, November 10-12, 2008, Kathmandu. (Participation)

Teaching Experiences

2019-Present	Visiting Lecturer in Chemistry, Butwal Multiple Campus, Tribhuvan University, Butwal, Nepal
2019-Present	Visiting Lecturer in Chemistry, Crimson College of Technology, Pokahara University, Butwal, Nepal
2011-2015 July	Lecturer, Department of Chemistry, National School of Science and Technology (NIST), Kathmandu, Nepal. My work involved the chemistry tutor and practical supervisor for undergraduate students and practical demonstrator for postgraduate students.
2010- 2011 July	Lecturer, Department of Chemistry, Herald International College, Chakrapath, Nepal. My work involved the chemistry tutor and regular supervision of practical classes for undergraduate students

Skills

- Solid-State Synthesis of organic binary and ternary materials
- Expertised on X-ray crystallography, crystal engineering and crystal growth
- Growth of large sized defect less crystals using slow cooling technique
- Good command in FT-IR, NMR, TGA, DTA, DSC, UV-vis. Absorption and Fluorescence analyses and instruments handling
- Expert to handle FT-IR, UV-vis., Fluorescence, HPLC, DSC, TGA instruments
- Good command in scientific report writing and presenting reports

Membership

- **Life Member of Nepal Chemical Society**

References

- **Dr. RamaNand Rai, Professor**, Department of Chemistry, Institute of Science, Banaras Hindu University, Varanasi-221005, India, Phone: +919451892155, E-mail: *rn_rai@yahoo.co.in*
- **Dr. Umashanker Rai, Professor**, Department of Chemistry, Institute of Science, Banaras Hindu University, Varanasi-221005, India, E-mail: *usrai_bhu@yahoo.co.in*
- **Dr. Krishna Prasad Sharma, Associate Professor**, Department of Chemistry (Head), Butwal Multiple Campus, Butwal, Nepal, Phone: +9779847027931, E-mail: *kpsharmabhu@gmail.com*

I HEREBY CERTIFY that all the information is true and accurate to the best of my knowledge and belief.

Umesh Neupane
Butwal, Nepal