



University Faculty Details/Bio-data

Title	Dr.	First Name	Alok Kumar	Last Name	Rai	Photograph
Designation	UGC-Assistant Professor					
Department	Chemistry					
Address (Campus)	Department of Chemistry, University of Delhi, North Campus, Delhi-110007. Office: #306, Old USIC building, University of Delhi.					
Mobile	+91-8800785276					
E-mail	alokkumarrai1@gmail.com					
Web-Page	http://chemistry.du.ac.in/faculty.html					
Educational Qualification						
Degree	Institution			Year/Division		
Ph.D	Indian Institute of Technology-Banaras Hindu University (IIT-BHU)			2010		
M.Sc	Veer Bahadur Singh Purvanchal University, Jaunpur			2003, (1 st Division)		
B.Sc	Veer Bahadur Singh Purvanchal University, Jaunpur			2001, (1 st Division)		
Career Profile						
Organisation / Institution	Designation		Duration			
Department of Chemistry, University of Delhi	UGC-Assistant Professor		September 2018 to PRESENT			
Amity University, Noida, Sector-125, India	Associate Professor		16th January 2017 to 31st August, 2018			
Amrita Centre for Nanosciences & Molecular Medicine, Kochi	Ramanujan Fellow		11th January 2016 to 30 th December, 2016			
Amrita Centre for Nanosciences & Molecular Medicine, Kochi	Assistant Professor		6th October, 2014 to 10th January, 2016			
Chonnam National University, Gwangju, South Korea	Research Professor		1st September 2013 to 30th September 2014			
Chonnam National University, Gwangju, South Korea	Postdoctoral Research Fellow		1st March 2011 to 31st August 2013			
SPRC, Chonbuk National University, Jeonju, South Korea	Postdoctoral Research Fellow		1st April 2010 to 28th February 2011			

Research Interests
Novel solution-based synthesis to produce nanostructured metal oxides, Energy storage nanomaterials for lithium ion and post lithium ion batteries applications, TEM studies on Li-intercalated/de-intercalated metal oxide nanomaterials, Electrochemical impedance spectroscopy.
Teaching Experience (Subjects/Courses Taught) last five years or date of joining to till date
<u>M.Tech (Nanotechnology & Renewable Energy)</u> NT 603: Renewable energy technologies (4 credit) NT 604: Electrical storage technologies (4 credit) NS 606: Characterization of Nanomaterials (3 credit) NS 603: Nanomaterials: Chemistry and Design (4 credit) NT 607: Nanodevice Fabrication (2-0-2-4)
Honors & Awards
<ul style="list-style-type: none"> • Sanction of Start-Up research Grant under fast track young scientist scheme from SERB. • Award of Ramanujan Fellowship from DST-SERB. • Award of Postdoctoral Fellowship in Indian Institute of Science (IISc) Bangalore in Dec. 2010. • Award of Senior Research Fellowship (S.R.F.) from (C. S. I. R.) (New Delhi) in Nov. 2008. • UGC Fellowship • BHU University Fellowship
Research Guidance till August 2018
Research Guidance @ Chonnam National University, Gwangju, South Korea <ul style="list-style-type: none"> • Co-supervisor : 02 Research Guidance @ Amrita Centre for Nanosciences & Molecular Medicine, Kochi <ul style="list-style-type: none"> • <u>Project Assistant</u>: 02 Research Guidance @ Amrita Centre for Nanosciences & Molecular Medicine, Kochi <ul style="list-style-type: none"> • M.Tech Supervision : 03 Research Guidance @ Amity University, Noida <ul style="list-style-type: none"> • <u>Project Assistant</u>: 01
Research papers published in Refereed/Peer Reviewed Journals
2018: 56. Anchali Jain, Baboo Joseph Paul, Sungjin Kim, V. K. Jain, Jaekook Kim, Alok Kumar Rai , 'Two dimensional porous nanodisks of $NiCo_2O_4$ as anode material for high performance rechargeable lithium-ion battery' (Journal of Alloys and Compounds 772 (2019) 72-79 . I. F: 3.133, ISSN: 09258388 55. Dona Susan Baji, H.S. Jadhav, Shantikumar V. Nair, Alok Kumar Rai* 'Porous $MnCo_2O_4$ as superior anode material over $MnCo_2O_4$ nanoparticles for rechargeable lithium ion batteries' Journal of Solid State Chemistry 262 (2018) 191-198 . I. F: 2.299, ISSN: 00224596 2017:

54. M. Saravanan, Shantikumar V. Nair, **Alok Kumar Rai*** 'Low temperature synthesis of carbon-wrapped CuO synthesized without using a conventional carbon source for Li ion battery application' **Physica E: Low-dimensional Systems and Nanostructures** 94 (2017) 113–117. I. F: 2.221, ISSN: 13869477

53. Dona Susan Baji, Shantikumar V. Nair, **Alok Kumar Rai*** 'Highly porous disk-like shape of Co₃O₄ as an anode material for lithium ion batteries, **Journal of Solid State Electrochemistry** 21 (2017) 2869–2875. I. F: 2.316, ISSN: 14328488

52. Subhalaxmi Mohapatra, Shantikumar V. Nair, **Alok Kumar Rai*** 'Synthesis of Co₃O₄ nanoparticles wrapped within full carbon matrix as an anode material for lithium-ion batteries' **Acta Metallurgica Sinica (English letters)**; 31(2) (2017) 164-170. I. F: 1.292, ISSN: 10067191

51. Deepa T.D, Subhalaxmi Mohapatra, Shantikumar V. Nair, Sreekumaran Nair, **Alok Kumar Rai*** 'Surfactant assisted synthesis of porous TiO₂ nanofibers as anode material for secondary lithium ion battery' **Sustainable Energy & Fuels** 1 (2017) 138-144. ISSN: 23984902

2016:

50. Preetham P, Subhalaxmi Mohapatra, Shantikumar V. Nair, Dhamodaran Santhanagopalan, **Alok Kumar Rai*** 'Ultrafast pyro-synthesis of NiFe₂O₄ nanoparticles within a full carbon network as a high-rate and cycle-stable anode material for lithium ion batteries' **RSC Advances** 6 (2016) 38064-38070. I. F: 3.108, ISSN: 20462069

49. Subhalaxmi Mohapatra, Shantikumar V. Nair, Dhamodaran Santhanagopalan, **Alok Kumar Rai*** 'Nanoplate and mulberry like porous shape of CuO as anode materials for secondary lithium ion battery' **Electrochimica Acta** 206 (2016) 217-225. I. F: 4.798, ISSN: 00134686

2015:

48. Trang Vu Thi,¹ **Alok Kumar Rai**,¹ Jihyeon Gim, Jaekook Kim* 'High performance of Co-doped NiO nanoparticle anode material for rechargeable lithium ion batteries' **Journal of Power Sources** 292 (2015) 23-30. I. F: 6.395, ISSN: 03787753

47. M.H. Alfaruqi,¹ **Alok Kumar Rai**,¹ V. Mathew, Jaekook Kim* 'Pyro-synthesis of nanostructured spinel ZnMn₂O₄/C as negative electrode for rechargeable lithium-ion batteries' **Electrochimica Acta**, 151 (2015) 558-564. I. F: 4.798, ISSN: 00134686

46. **Alok Kumar Rai**, Jaekook Kim* 'High reversible capacity and rate capability of ZnCo₂O₄/graphene nanocomposite anode for high performance lithium ion batteries' **Solid State Sciences**, 48 (2015) 90-96. I. F: 1.811, ISSN: 12932558

45. **Alok Kumar Rai**, T.V. Thi, J. Gim, S. Kim, Jaekook Kim* 'Li₃V₂(PO₄)₃/graphene nanocomposite as a high performance cathode material for lithium ion battery' **Ceramics International**, 41 (2015) 389-396. I. F: 2.986, ISSN: 02728842

44. **Alok Kumar Rai**, L.T. Anh, J. Gim, V. Mathew, Jaekook Kim* 'Carbon coated CoO electrode synthesized by urea-assisted auto combustion for rechargeable lithium battery' **Journal of Nanoscience and Nanotechnology**, 15 (2015) 540–543. I. F: 1.483, ISSN: 15334880

2014:

43. **Alok Kumar Rai**, J. Gim, T.V. Thi, D. Ahn, S.J. Cho, Jaekook Kim* 'High rate capability and long cycle stability of Co₃O₄/CoFe₂O₄ nanocomposite as an anode material for high-performance secondary lithium ion batteries' **Journal of Physical Chemistry C**, 118 (2014) 11234–11243. I.F: 4.536, ISSN: 19327447

- 42. Alok Kumar Rai**, T.V. Thi, J. Gim, Jaekook Kim* 'Electrochemical lithium storage of $ZnFe_2O_4$ /graphene nanocomposite as an anode material for rechargeable lithium ion batteries' **RSC Advances**, **4** (2014) 47087-47095. I. F: 3.108, ISSN: 20462069
- 41. Alok Kumar Rai**, T.V. Thi, B.J. Paul, Jaekook Kim* 'Synthesis of nano-sized $ZnCo_2O_4$ anchored with graphene nanosheets as an anode material for secondary lithium ion batteries' **Electrochimica Acta**, **146** (2014) 577-584. I. F: 4.798, ISSN: 00134686
- 40. L.T. Anh**¹, **Alok Kumar Rai**¹, T.V. Thi, J. Gim, S. Kim, V. Mathew, Jaekook Kim* 'Enhanced electrochemical performance of novel K-doped Co_3O_4 as the anode material for secondary lithium-ion batteries' **Journal of Materials Chemistry A**, **2** (2014) 6966-6975. I. F: 8.867, ISSN: 20507488
- 39. H. Jadhav**¹, **Alok Kumar Rai**¹, J.Y. Lee, Jaekook Kim, Chan-Jin Park* 'Enhanced electrochemical performance of flower-like Co_3O_4 as an anode material for high performance lithium-ion batteries' **Electrochimica Acta**, **146** (2014) 270-277. I. F: 4.798, ISSN: 00134686
- 38. T.V. Thi**¹, **Alok Kumar Rai**¹, J. Gim, S. Kim, Jaekook Kim* 'Effect of Mo^{6+} doping on electrochemical Performance of anatase TiO_2 as a high performance anode material for secondary Lithium Ion Battery' **Journal of Alloys and Compounds**, **598** (2014) 16-22. I. F: 3.133, ISSN: 09258388
- 37. T.V. Thi**¹, **Alok Kumar Rai**¹, J. Gim, Jaekook Kim* 'Potassium-doped copper oxide nanoparticles synthesized by a solvothermal method as an anode material for high-performance lithium ion secondary battery' **Applied Surface Science**, **305** (2014) 617-625. I. F: 3.387, ISSN: 01694332
- 36. Alok Kumar Rai**, T.V. Thi, J. Gim, V. Mathew, Jaekook Kim* ' $Co_{1-x}Fe_{2+x}O_4$ ($x = 0.1, 0.2$) anode materials for rechargeable lithium-ion batteries' **Solid State Sciences**, **36** (2014) 1-7. I. F: 1.811, ISSN: 12932558
- 35. Alok Kumar Rai**, T.V. Thi, J. Gim, Jaekook Kim* 'Combustion synthesis of $MgFe_2O_4$ /graphene nanocomposite as a high performance negative electrode for lithium ion batteries' **Materials Characterization**, **95** (2014) 259-265. I. F: 2.714, ISSN: 10445803
- 34. Alok Kumar Rai**, L.T. Anh, J. Gim, V. Mathew, Jaekook Kim* 'Electrochemical properties of Na_xCoO_2 ($x \sim 0.71$) cathode for rechargeable sodium-ion batteries' **Ceramics International**, **40** (2014) 2411-2417. I. F: 2.986, ISSN: 02728842
- 33. J. Gim**, J. Song, D. Nguyen, M.H. Alfaruqi, S. Kim, J. Kang, **Alok Kumar Rai**, V. Mathew, Jaekook Kim* 'A two-step solid state synthesis of $LiFePO_4/C$ cathode with varying carbon contents for Li-ion batteries' **Ceramics International**, **40** (2014) 1561-1567. I. F: 2.986, ISSN: 02728842
- 32. Alok Kumar Rai**, J. Gim, E. Shin, H. Seo, V. Mathew, K.D. Mandal, O. Parkash, Jong Sook Lee, Jaekook Kim* 'Effects of praseodymium substitution on electrical properties of $CaCu_3Ti_4O_{12}$ ceramics' **Ceramics International**, **40** (2014) 181-189. I. F: 2.986, ISSN: 02728842
- 31. L. Singh**, K.D. Mandal*, U.S. Rai, **A.K. Rai** 'Effect of site selection on dielectric properties of Fe doped $CaCu_3Ti_4O_{12}$ electro-ceramic synthesized by citrate nitrate gel route' **Indian Journal of Physics**, **88** (2014) 665-670. I. F: 0.988, ISSN: 20848

2013:

- 30. Alok Kumar Rai**, L.T. Anh, J. Gim, V. Mathew, J. Kang, B.J. Paul, N.K. Singh, J. Song, Jaekook Kim* 'Facile approach to synthesize CuO /reduced graphene oxide nanocomposite as anode materials for lithium-ion battery' **Journal of Power Sources**, **244** (2013) 435-441. I. F: 6.395, ISSN: 03787753
- 29. Alok Kumar Rai**, L.T. Anh, J. Gim, V. Mathew, J. Kang, B.J. Paul, J. Song, Jaekook Kim* 'Simple synthesis and particle size effects of TiO_2 nanoparticle anodes for rechargeable lithium ion batteries' **Electrochimica Acta**, **90** (2013) 112-118. I. F: 4.798, ISSN: 00134686

28. Alok Kumar Rai, J. Gim, L.T. Anh, Jaekook Kim* 'Partially reduced Co_3O_4 /graphene nanocomposite as an anode material for secondary lithium ion battery' **Electrochimica Acta**, **100** (2013) 63–71. I. F: 4.798, ISSN: 00134686 (One of the top 10 most cited article in this journal; 2013-2014)

27. Alok Kumar Rai, L.T. Anh, J. Gim, V. Mathew, Jaekook Kim* 'Low temperature synthesis of porous tin oxide anode for high performance lithium-ion battery' **Electrochimica Acta**, **109** (2013) 461–467. I. F: 4.798, ISSN: 00134686

26. L.T. Anh¹, Alok Kumar Rai¹, T.V. Thi, J. Gim, S. Kim, E. Shin, J.S Lee, Jaekook Kim* 'Improving the electrochemical performance of anatase titanium dioxide by vanadium doping as an anode material for lithium-ion batteries' **Journal of Power Sources**, **243** (2013) 891–898. I. F: 6.395, ISSN: 03787753

25. Alok Kumar Rai, L.T. Anh, Chan–Jin Park, Jaekook Kim* 'Electrochemical study of NiO nanoparticles electrode for application in rechargeable lithium-ion batteries' **Ceramics International**, **39** (2013) 6611–6618. I. F: 2.986, ISSN: 02728842

24. Alok Kumar Rai, L.T. Anh, J. Gim, Jaekook Kim* 'One step synthesis of CoO anode material for rechargeable lithium-ion batteries' **Ceramics International**, **39** (2013) 9325–9330. I. F: 2.986, ISSN: 02728842

23. L. Singh, U.S. Rai, Alok Kumar Rai, K.D. Mandal* 'Sintering effects on dielectric properties of Zn-Doped $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ ceramic synthesized by modified sol-gel route' **Electronic Materials Letters**, **9** (2013) 107–113. I. F: 1.790, ISSN: 17388090

22. L. Singh, U.S. Rai, K.D. Mandal*, Alok Kumar Rai 'Effect of processing routes on microstructure, electrical and dielectric behavior of Mg-doped $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ electro-ceramic' **Applied Physics A-Materials Science & Processing**, **112** (2013) 891–900. I. F: 1.455, ISSN: 09478396

21. L. Singh, U.S. Rai, Alok Kumar Rai, K.D. Mandal* 'Dielectric behavior of $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ electro-ceramic doped with La, Mn and Ni synthesized by modified citrate-gel route' **Journal of Advanced Ceramics**, **2** (2013) 119–127. I. F: 1.198, ISSN: 22264108

2012:

20. Alok Kumar Rai, J. Lim, V. Mathew, J. Gim, J. Kang, B.J. Paul, D. Kim, S. Ahn, S. Kim, K. Ahn, Jaekook Kim* 'Highly reversible capacity nanocomposite anode for secondary lithium-ion batteries' **Electrochemistry Communications**, **19** (2012) 9–12. I. F: 4.396, ISSN: 13882481

19. Alok Kumar Rai, J. Gim, J. Song, V. Mathew, L.T. Anh, Jaekook Kim* 'Electrochemical and safety characteristics of TiP_2O_7 -graphene nanocomposite anode for rechargeable lithium-ion batteries' **Electrochimica Acta**, **75** (2012) 247–253. I. F: 4.798, ISSN: 00134686

18. Alok Kumar Rai, J. Gim, S.W. Kang, V. Mathew, L.T. Anh, J. Kang, J. Song, B.J. Paul, Jaekook Kim* 'Improved electrochemical performance of $\text{Li}_4\text{Ti}_5\text{O}_{12}$ with a variable amount of graphene as a conductive agent for rechargeable lithium-ion batteries by solvothermal method' **Materials Chemistry and Physics**, **136** (2012) 1044–1051. I. F: 2.084, ISSN: 02540584

17. J. Kang, Alok Kumar Rai, S.J. Kim, E.S. Choi, I.S. Yoo, J.H. Kim, Jaekook Kim* 'Synthesis of Ti-based electrodes using Ti-salt flocculated sludge and their application in lithium-ion batteries' **Materials Research Bulletin**, **47** (2012) 2834–2837. I. F: 2.446, ISSN: 00255408

16. B.J. Paul, V. Mathew, G.X. Do, J. Kang, J. Gim, Alok Kumar Rai, N.K. Singh, J. Song, Jaekook Kim* 'Enhanced storage capacities in carbon-coated triclinic- LiVOPO_4 cathode with porous structure for Li-ion batteries' **ECS Electrochemistry Letters**, **1** (4) (2012) A63–A65. I. F: 1.771, ISSN: 21628726

15. J. Kang, S. Baek, V. Mathew, J. Gim, J. Song, H. Park, E. Chae, **Alok Kumar Rai**, Jaekook Kim* 'High rate performance of a $\text{Na}_3\text{V}_2(\text{PO}_4)_3/\text{C}$ cathode prepared by pyro-synthesis for sodium-ion Batteries' **Journal of Materials Chemistry**, **22** (2012) 20857–20860. I. F: 6.626, ISSN: 13645501 (Selected as a hot article on the Journal of Materials Chemistry blog)

14. V. Mathew, J. Gim, J. Kang, J. Song, **Alok Kumar Rai**, B.J. Paul, N.K. Singh, Jaekook Kim* 'The polyol strategy to improve electrochemical properties of olivine-type LiFePO_4 cathode for Li-ion batteries' **Journal of the Research Institute for Catalysis**, **33** (2012) 11–35. Chonnam National University, Korea. (Review)

13. S.K. Acharya¹, **Alok Kumar Rai**¹, G.S. Kim, J.H. Hyung, B.G. Ahn, Sang-Kwon Lee* 'Effect of cooling time on the vapor Liquid solid based growth of gold-catalyzed bismuth Nanorods' **Physica E: Low-dimensional Systems and Nanostructures**, **44** (2012) 839–842. I. F: 2.221, ISSN: 13869477

12. J.H. Hyung, G.S. Kim, **Alok Kumar Rai**, C.O. Jang, C.Y. Lee, Z. Khurelbaatar, S.K. Acharya, Sang-Kwon Lee* 'Dependence of the morphology evolution and crystal orientation of tellurium (Te) micro- and nanostructures on the growth temperature' **Journal of the Korean Physical Society**, **60** (2012) 47–50. I. F: 0.467, ISSN: 03744884

11. **Alok Kumar Rai**, N.K. Singh, S.K. Acharya, L. Singh, K.D. Mandal* 'Effect of tantalum substitutions on microstructures and dielectric properties of calcium copper titanate ($\text{CaCu}_3\text{Ti}_4\text{O}_{12}$) ceramic' **Materials Science and Engineering B**, **177** (2012) 1213–1218. I. F: 2.552, ISSN: 09215107

10. K.D. Mandal*, **Alok Kumar Rai**, L. Singh, Om Parkash 'Dielectric properties of $\text{CaCu}_{2.9}\text{Co}_{0.1}\text{Ti}_4\text{O}_{12}$ and $\text{CaCu}_3\text{Ti}_{3.9}\text{Co}_{0.1}\text{O}_{12}$ ceramics synthesized by semi-wet route' **Bulletin of Materials Science**, **35** (2012) 433–438. I. F: 0.899, ISSN: 02504707

2011:

9. V. Mathew, J. Lim, J. Kang, J. Gim, **Alok Kumar Rai**, Jaekook Kim* 'Self-assembled mesoporous manganese oxide with high surface area by ambient temperature synthesis and its enhanced electrochemical properties' **Electrochemistry Communications**, **13** (2011) 730–733. I. F: 4.396, ISSN: 13882481

8. **Alok Kumar Rai**, N.K. Singh, S.K. Lee, K.D. Mandal, D. Kumar, Om Parkash* 'Dielectric properties of iron doped calcium copper titanate, $\text{CaCu}_3\text{Ti}_{3.9}\text{Fe}_{0.1}\text{O}_{12}$ ceramic' **Journal of Materials Science: Materials in Electronics**, **22** (2011) 1286–1289. I. F: 2.019, ISSN: 09574522

7. **Alok Kumar Rai**, N.K. Singh, S.K. Lee, K.D. Mandal, D. Kumar, Om Parkash* 'Dielectric properties of iron doped calcium copper titanate, $\text{CaCu}_{2.9}\text{Fe}_{0.1}\text{Ti}_4\text{O}_{12}$ ' **Journal of Alloys and Compounds**, **509** (2011) 8901–8906. I. F: 3.133, ISSN: 09258388

2010:

6. **Alok Kumar Rai**, K.D. Mandal*, D. Kumar, Om Parkash 'Characterization of nickel doped CCTO; $\text{CaCu}_{2.9}\text{Ni}_{0.1}\text{Ti}_4\text{O}_{12}$ and $\text{CaCu}_3\text{Ti}_{3.9}\text{Ni}_{0.1}\text{O}_{12}$ synthesized by Semi-wet route' **Journal of Alloys and Compounds**, **491** (2010) 507–512. I. F: 3.133, ISSN: 09258388

5. **Alok Kumar Rai**, K.D. Mandal*, D. Kumar, Om Parkash 'Dielectric properties of $\text{CaCu}_3\text{Ti}_{4-x}\text{Co}_x\text{O}_{12}$ ($x = 0.10, 0.20, 0.30$) synthesized by Semi-wet Route' **Materials Chemistry and Physics**, **122** (2010) 217–223. I. F: 2.084, ISSN: 02540584

2009:

4. **Alok Kumar Rai**, K.D. Mandal*, D. Kumar, Om Parkash 'Dielectric properties of lanthanum-doped $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ synthesized by Semi-wet Route' **Journal of Physics and Chemistry of solids**, **70** (2009) 834–839. I. F: 2.059, ISSN: 00223697

3. K.D. Mandal*, Alok Kumar Rai, D. Kumar, Om Parkash 'Dielectric properties of the $\text{Ca}_{1-x}\text{La}_x\text{Cu}_3\text{Ti}_{4-x}\text{Co}_x\text{O}_{12}$ system ($x = 0.10, 0.20$ and 0.30) synthesized by semi-wet route' **Journal of Alloys and Compounds**, **478 (2009) 771–776**. I. F: 3.133, ISSN: 09258388

2. Alok Kumar Rai, K.N. Rao, Vinoth Kumar L, K.D. Mandal* 'Synthesis and characterization of ultra fine barium calcium titanate, barium strontium titanate and $\text{Ba}_{1-2x}\text{Ca}_x\text{Sr}_x\text{TiO}_3$ ($x = 0.05, 0.10$)' **Journal of Alloys and Compounds**, **475 (2009) 316–320**. I. F: 3.133, ISSN: 09258388

2008:

1. K.D. Mandal*, A.K. Rai, Om Parkash 'Studies on electrical conduction behavior of $\text{La}_{1-3x}\text{Ca}_x\text{Ba}_x\text{Sr}_x\text{MnO}_3$ synthesized by chemical route' **Crystal Research and Technology**, **43 (2008) 297–301**. I. F: 1.000, ISSN: 02321300

Invited Talks & Presentation in National/International Conferences/workshop

A. Invited Talk:

1. International Conference on Multifunctional Materials for Future Applications
October 27-29, 2015, Department of Chemistry, IIT-BHU, Varanasi (221005)
2. National Seminar on Energy Storage Devices (ESD-2015)
October 8-9, 2015, Department of Chemistry & Physics, Velammal College of Engineering & Technology, Madurai-625009

B. Oral Presentation:

3. International Workshop on "Trends in Solar Power Generation and Energy Harvesting" **March 27-29, 2017, Amity University, Dubai Campus.**
4. International Conference on Nano Science and Nano Technology (ICNST-2012)
November 8–9, 2012, Korea Photonics Technology Institute (KOPTI), Gwangju, Korea
5. Korean Battery Society, 10th Anniversary Conference
2011/12/1–3, KAL Hotel, Seogwipo-Si, Jeju-do Korea (Republic of)
6. Dielectric Studies of $\text{Ca}_{1-x}\text{La}_x\text{Cu}_3\text{Ti}_{4-x}\text{Co}_x\text{O}_{12}$ synthesized by Semi-wet Route
International Symposium for Research Scholars on Metallurgy, Materials science & Engineering, IIT Madras, December 10-12, 2008.
7. Synthesis of Nano Sized Lanthanum and Cobalt doped $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ by Chemical Route
National Conference on Nano Materials and Nano Technology at Lucknow University on December 08–10, 2007.

C. Poster Presentation:

8. 2011 International forum on Functional Materials (IFFM-2011)
The 2nd Special Symposium on Advances in Functional Materials (AFM-2)
July 28–31, 2011, Jeju Grand Hotel, Jeju, Korea (Republic of)
9. The 2011 Spring Meeting of the Korean Ceramic Society
Organized by the Korean Ceramic Society (24–10–2011), Gwangju, Korea (Republic of)
10. Synthesis and Characterization of Ultrafine $\text{Ba}_{1-2x}\text{Ca}_x\text{Sr}_x\text{TiO}_3$ ($x = 0.05, 0.10$)
10th CRSI National Symposium in Chemistry & 2nd (CRSI-RSC) symposium in IISC, Bangalore
11. Synthesis of $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ by Chemical-Route at low Temperature
12th Biennial Symposium on Modern Trends in Inorganic Chemistry (MTIC-XII) IIT Madras, December 6–8, 2007.

Projects (Major Grants / Collaborations)

International Collaborations:

1. Argonne National Laboratory, USA
2. Department of Materials Science & Engg., Chonnam National University, Gwangju, South Korea.

Research Fundings:

1. Fast Track Project **(Rs. 21,68,000/-)** sanctioned by SERB-DST. **(Role: Principal Investigator)**
2. Ramanujan Fellowship Research Grant **(Rs. 35,00,000/-)** sanctioned by SERB-DST.

(Role: Principal Investigator)

Professional Profile

Google Scholar: <https://scholar.google.com/citations?user=vMRLS1gAAAAJ&hl=en>

Research Gate: https://www.researchgate.net/profile/Dr_Alok_Rai

Date: September, 2018

Alok Kumar Rai

Place: Delhi