

Academic Information (Universal) detail from April 2015 to March 2016 by

**Dr. Rakesh Kumar Singh,
Asst. Professor cum Prof. in charge –Establishment
Aryabhata Centre for Nanoscience & Nanotechnology, Aryabhata Knowledge University, Patna**

Responsibilities: At present responsible for(1) Assisting general administration, looking, planning & development of different affairs of Establishments of ACNN(2) familiarity/liasing with the administrative system of academics for Interdisciplinary frontier area of 21st century, university Centre set up, **in addition** to my academic Engagement in **Category I**. Curricular Aspects, **Category II**. Teaching-learning and evaluation, **Category III**. Research, Consultancy and Extension.

Publication in International/ National Journal/ Proceeding

1. Rakesh Kumar Singh et.al., Crystal Structure and Magnetic Property Studies on Nanocrystalline La_{0.5}(Fe_{1.95}R_{0.05})₂O₇ (R= Pr, Sm & La) Bhasma-An Ayurvedic Medicine, Int. J. Ayu. Alt. Med., 2016; 4(1).
2. Rakesh Kumar Singh, Jyoti Shah, R. K. Kotnala, Magnetic and Dielectric Properties of Rare Earth Substituted Ni_{0.5}Zn_{0.5}Fe_{1.95}R_{0.05}O₄ (R= Pr, Sm & La) Ferrite Nanoparticles, Material Science and Engineering: B, DOI-10.1016/J.mseb,2016.03.011
3. Amarendra Narayan and Rakesh Kumar Singh, Beyond Classroom: **Some College and University level experiments that foster research driven learning**, proceeding, Natn. Conf. Science Education: Issues, Challenges and Strategies- In press.
4. Rakesh Kumar Singh, Amarendra Narayan, Year 2015- International Year of Light:
An opportunity to know the importance of Science & Scientist for shaping the society,
International J. of Engineering and Technical Research (IJETR), V01.3,(2015)P.112-115.

Publication in International/ National Journal/ Proceeding

5. Rakesh Kumar Singh, Amarendra Narayan and Dolly Sinha, Low Temperature Preparation and Effect of Pr^{3+} , La^{3+} , Sm^{3+} and Gd^{3+} Substitution on Structural, Magnetic and Dielectric, Studies of $\text{Ni}_{0.5}\text{Zn}_{0.5}\text{Fe}_2\text{O}_4$ Ferrite Nanoparticles, International Journal of Innovative Science and Modern Engineering (IJISME). Vol.3(2015)1-6.
6. Rakesh Kr Singh, Sanjay Kr, Abhaykraman, ManoranjanKar, Evaluation of iron oxide nanoparticles (NPs) on aging and age related metabolism and physiological changes in *C.elegans*. Reported, International Nano letters.
7. Nanotechnology: Emerging technology of 21st century (full length article-one page), Dainik Jagaran, Jagaran Josh, Patna-Lucknow edition, 14th March 2016, pp.11
8. Rakesh Kr Singh, Sanjay Kumar, Abhay Kr Aman, S.M.karim, sunil Kr and ManoranjanKar, Study of Ayurvedic Nanocrystalline *Tamra* and *Sankh* Bhasma physical Characteristics by Employing Modern Scientific tools and Applications, reported in European Advanced Materials Congress- 2016, Stockholm, Sweden.
9. Rakesh kr Singh, Abhay Kr Aman and R.K.Verma, Optical and Thermal properties of Barium hexaferrite nanoparticles in quenching and annealing, Reported in JTAC-Springer, March 2016.

Ph. D Students enrolled and working under my supervision:

Mr. Sanjay Kumar and Mr. Abhay Kumar Aman

M.Tech students enrolled and working under my supervision

Md. Quamar Tanvir and Saurbh Kr Sharma.

Note- One research paper published by Sanjay Kumar, Ph.D scholar in peer reviewed impact factor journal, and another reported in International Journal. One paper presented in National Conference by Sanjay Kumar and Abhay Kumar Aman. M. Tech thesis work is in progress. 2014-2016 batch students completed their course by the end of May 2016 and 2015-2017 session is going on. One research paper reported in International Conferences for presentation, Sweedan (European Congress)

Invited Talk /Paper presented/ Lecture delivered as a Resource Person

S. No	Events Name and Topic of paper/Lecture	Date and Venue	Organized/ Invited By
1	UGC sponsored National Conference cum workshop on: Science Education, Issues, Challenges and Strategies, title- “Beyond Classroom: Some College and University level experiments that foster research driven learning” .(<u>paper presented</u>)	30 th Jan 2016 Patna	MagadhMahila College, Patna University
2	Senior Resource Person meet of Utsahi Physics teachers, coordinated by Prof. H.C.Verma, IIT Kanpur and National Anvesika network of India(NANI)-Indian Association of Physics Teachers(IAPT) meet-2015, Issues of Physics education and Revitalization of experiment assisted science teaching and Inspired for Research(Presented and plan future activities)	10-12 June 2015 I.I.T Kanpur	Dept. of Physics, IITKanpur IAPT-NANI
3	Children Science Congress- A programme of DST Govt. of India, Conducted teachers workshop- on Nanoscience and Its Applications(Invited lecture)	Biharsharif Nalanda 16 Oct 2015	NCSTC-DST, Govt. of India Science for Society , Bihar
4	National Seminar on Importance of Light and Light based Technologies. Talk delivered on Luminescence properties of Magnetic nanoparticles and their Applications(Invited Lecture).	Kanpur University 13 June 2015	UGC and Kanpur University
5	INSPIRE- An Initiative of DST- Govt. of India. Invited Talk on Think at small level and foster big Innovations(Invited Lecture)	A.N.College Patna	DST-Govt. of India and A.N.College, Patna

Category II- Seminars/ Conferences/ Scientific Tour Organized/ Conducted

S . N	Name of the Programme	Date and Venue	Responsible for
1	National Anvesika Network of India- Experimental Skill test-2015, screening, 8 th Aug and prelims 30 th Sep, 2015	Science College Patna University	Co-ordinator
2	UGC sponsored National seminar on Environmental pollutant, safty measure and managment	5-6 Dec. 2015	Organizing Committee member
3	National Graduate Physics Examination-2015 of Indian Association of Physics Teachers(IAPT)- Bihar state level- An Olmpaid Examination for growth in higher education and Research(Compaingning, and conducting examination)	24 January 2016	Coordinator
4	21 st National Children Science Congress: A Programme of Govt. of India on Focal theme “ Energy: Explore, Harness and Conserve”, Organized by-NCSTC-Network, Delhi, Science for society Bihar.	29 th Oct 2015 Patna	Valued guidance as a member of Evaluation committee member for the selection of national team(Bihar state awardee)
5	UGC sponsored, National Conference on ‘Physics education- Issues, Challenges and Prospects, at MagadhMahila College, Patna university	30 th Jan to 1 st Feb 2016	Organizing Committee member
6	National Standered Examination -2015 of IAPT	23 rd May 2016	Jt. Coordinator
7	Performance of participitants of Elocution competition at S.K.Science center, Ministry of culture, Govt. of India on the focal theme-Science & Technology for 21st Century.	28 th Fen 2016- National Science day.	Judges
8	OrnanizedPublic lecture on –Emeging fields in Biomedical Science and oppportunities in Research/higher studies in India and abroad , Resource Person- Irfan Ahmad Ghazi, University of Hyderabad	29 th may 2015 BBrainDevlope ment Society	Coordinator
9	State level Balsri selection programme-2015 on focal theme-Creative scientific innovation, Organized by-Kilkari, Dept. of Education, Govt. of Bihar	1 st Nov 2015 Patna	Judges

Note- Creating a Community that is in harmony with its environment

Various Member of Committee of AKU and its unit and worked/ participated for their progress

S. N	Name of Committee	Nominated by/ Order by Hon'ble
1	Selection Committee member in Teachers appointment in Indrakali Ramji Singh B.Ed College, Gopalganj as a University representative	Vice-Chancellor
2	National Survey by DST-Govt. of India on Resources devoted to Scientific and Technological activities-2015-16 of AKU: Report Preparation	Vice-Chancellor
3	Ethical Committee of P.G Deptt. of Aurvedic Education of Govt. Ayurvedic College, AKU, Patna	Head, P.G Deptt. of Aurvedic Education of Govt. Ayurvedic College
4	AKU building foundation stone-Invitation committee member	Pro-Vicechancellor
5.	Post-Graduate Research Council(PGRC)of School of Enginnering and Technology, AKU	Vice-Chancellor
6	Center Suprintendent of M.Tech-Ph.D-nanoscience and Ph.D-Education, entrance Examination-2016, Dated-	Vice-Chancellor
7	B.Tech-Physics examination(Re),AKU,questation paper-moderation committee	Vice-Chancellor
8	Organizing Committee member of 2 nd Convocation of AKU	Vice-Chancellor
9	Member of RUSA proposal preparation of AKU	Vice-Chancellor
10	International YOGA day at AKU-21 st June 2016, Planning	Registrar
11	Preparation of Draft ordinance of new Schools of AKU, under the chairmanship of Pro Vice chancellor-AKU	Vice-Chancellor
12	Preparation for compliance of the Hon'ble Governor secretariat letter no.BSU-14/2015, Regarding details write up the different affairs of the university	Vice Chancellor
13	Member of Internal assessment committee for implementation of new assessment system for all Community Colleges of Bihar, under AKU	Vice Chancellor
14	Member of formulation of Astronomy and AstroPhysics at AKU	Vice Chancellor
15	Group health Insaurance for Staff, working Committee member	Vice Chancellor
16	Committee member of Planning and execution of M.Tech & Ph.D exam, nanoscience and Ph.D education-exam 2016, dated 19 th Jan 2016	Vice Chancellor

Various Member of Committee of ACNN, AKU and worked for their progress

S.No	Name of Committee	Nominated by/By the Order
1	Esatblishment Officer(Professor Incharge- Establishment) of ACNN, AKU	Vice Chancellor
2	Discipline Committee	Head, ACNN
3	Anti ragging Committee of ACNN(Teachers Representative)	Head, ACNN
4	Academic regulation Committee of M.Tech&Ph.Dprogramme	Vice Chancellor
5	Tender committee member of ACNN	Vice Chancellor
6	Academic Routine Incharge, ACNN	Head, ACNN

Participation in Seminars/ Symposium/ Conferences

S.No	Name of the Programme	Date and Venue	Organized By
2	World Culture Festival: celebrating humanity in diversity	13-15 March 2016 Delhi	The Art of Living Foundation
3	Seminar on Public health awareness	29 th Nov 2015 AdhiveshanBhawan, Patna	Nalanda International University
4	Workshop on “ Training of Trainers”	19 th May 2015	AKU, Patna
5	Sustainable solution to water, waste water and solid waste	8-9 May 2015	NEERI-CSIR and Dept. of Chemistry, A.N.College, Patna
6	Annual General body meeting of Science for Society, Bihar, member-NCSTC network, Delhi, Main Agenda-Science and technology activities for Districts of Bihar	10 th June 2015 Science College, Patna University	Science for Society. Bihar, member-NCSTC network, Delhi

Academic Photographs of Dr. Rakesh Kr Singh, Asst. Prof. cum Establishment Officer



Delivering a Lecture(**Invited Talk**) as a **resource person** in **INSPIRE Workshop- A programme of DST-Govt. of India**, Venue- A.N.College, Patna



Delivering a Lecture as **Resource person** in **Teacher workshop** at **Nalanda, Bihar Sharif**
In **CSC-Programme of DST-Govt. of India**



Delivering a Talk as a **Resource Person** on **Nano Science** in **National Seminar at Kanpur University**.
Persons on the dias- R to L: **Dr. R.K.Singh, AKU**, Prof. Tiwari, Kanpur Univ, **Vice Chancellor**, Kanpur University, U.P, Prof. H.C.Verma, IIT Knpur, Dr. Sanjay Kr Sharma, IAPT-Secretary.



Participated as a Judges to select a budding scientist from state Bihar at Kilkari,
Unit of Dept. of Education, Govt. of Bihar