Best Practices-3

1. International Year of Physics Proclaimed by United Nations

Scientific Visit in different Parts of Bihar communicates the basic scientific aspects of modern discoveries, how they have shaped our lives and promotes the method of science and spread a scientific outlook among the people.

- 2. Coordinator in a programme "Vigyan ke teen sopan" Khoj, SodhAur Bodh, Indo-German Initiative and Science Express Train in Bihar.
- 3. Appreciating Science in Daily Life Programme Follow up Programme of World Year of Physics.
- 4. International Year of Astronomy Proclaimed by United Nations

Scientific Visit in different Parts of Bihar communicate the basic scientific aspects 400 years of completion of discoveries by Galileo, Kepler's in the year1609 and total solar Eclipse moment on 16th July 2009 and how they have shaped our lives, promotes the method of science and spread a scientific outlook among the people.

5. Coordinator/Organizing Committee Member of National Graduate examination (NGPE), National Slandered Examination Programme (NSEP) for School, Colleges and University students

International Year of Physics Proclaimed by United Nations

Scientific Visit in different Parts of Bihar communicate the basic scientific aspects of modern discoveries, how they have shaped our lives, promotes the method of science and spread a scientific outlook among the people.



(Master Resource Person Training Programme of at Institute of Physics, Bhubeneshawar) Master Resource Person of International Year of Physics-2005, Proclaimed by United Nation Academic Recognition of Master Resource person of International Year of Physics-2005, (Proclaimed by United Nations) by DST-Govt. of Bihar and NCSTCnetwork, Delhi, Science for Society, Bihar.

- Year 2005 was declared as **International Year of Physics(IYP) by united nations.** This year marks of the theory of relativity, Special and general- has stood the test of time for a century now and remains one of the greatest creations of human mind that help us to understand nature in the proper perspective. The **IYP** also marks the centenary of the golden decade(1895-1905: Modern Physics) in which momentous discoveries in Physics were made including Quantum Science. In the same year Albert Einstein's seminal paper entitled "on the electrodynamics of moving bodies" appeared in AnnalenderPhysik in 1905.
- Importance to celebrating the year of Physics is, so celebrating 100 year of the golden decade and offers great opportunity to communicate the basic scientific aspects of these discoveries and how they have shaped our lives, promotes the method of science and spread a scientific outlook among the people.
- On 27-29 July 2005, as Master Resource Person training programme was organized by the DST-Govt. of India at Institute of Physics(I.O.P) Bhubaneshwar, Dept. of Atomic energy. Dr. Rakesh actively participated in all the sessions of this training programme.
- Dr. Rakesh kr Singh nominated for the Master Resource person of International Year of Physics by Bihar Council on Science & Technology-DST-Govt. of Bihar and Science for society, Bihar, member of National Council of Science & Technology Communicationnetwork- Technology Bhawan, Delhi. On this occasion delivered talks on various aspects of Physics, conducted various activities at different colleges/PG centers/Institutions and schools through the state Bihar and others places for the progress of science for the people.

International Year of Physics Proclaimed by United Nations

Scientific Visit in different Parts of Bihar communicate the basic scientific aspects of modern discoveries, how they have shaped our lives, promotes the method of science and spread a scientific outlook among the people



R & D.J College Munger, Bhagalpur Univ



Organized session with Sri Abhyanand, DGP and founder Super-30 with young students of Bihar



Delivering a Lecture in Teacher workshop at Nalanda, Bihar Sharif and at Patna



Appreciating Science in Daily Life Programme



Module prepn on Appreciating Physics in Daily life at Guwahati-Assam- As a Resource Person

One of the Expert in National workshop to "produce a module on Appreciating Physics in everyday life and Physics for Consumer" Organized by- NCSTC-DST Govt of India and DST, Govt of Assam.

• Everday, we see around us various phenomenon- at home or outside- that can be explained by basic principal of Physics and its interdisciplinary nature. Once the laws of Physics are understand it becomes very much simple to explain allthe observed phenomenon. An understanding of Physics is very much essential for smooth running of our life. We may not have studied Physics subject in the classroom but there is need for everyone to understand it, at least the basic laws of Physics that govern our daily life. As a consumer, producers and sellers of commodities also see around us and face various phenomenon that can be explained by basic principal of Physics.

Dr. Rakesh Kumar Singh participated in a National Workshop on this topic as a Resource person (Expert), at Guwahati in June 2007, invited by NCSTC-DST, Govt. of India. Then I worked in state Bihar for various interdisciplinary work for the progress and development. As an impact the only one cutting edge research center-Nanotechnology center in sate Bihar till date. This is due to appreciating basic principal of science specially Physics. The impact assessment can be seen in nanotechnology section. Till date we have been working in Nanotechnology in Ayurveda Science, Nanotechnology in food & Agriculture, Nano-Electronics such research are being spread in sate Bihar.

Appreciating Science in Daily Life Programme



जा. प्र., मुंगेर शुक्रवार को नगर के आर.डी. एण्ड डी. ज. कालेज के सभाकक्ष में 'दैनिक जीवन में भौतिकी का महत्व' विषय पर एक संगोष्ठी आयोजित की गयी।

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आइंस्टीन के तीन शोध-पत्रों के सौ साल पूरे होने के अवसर पर यह संगोष्ठी आयोजित की गयी। संगोष्ठी की अध्यक्षता कर रहे

रामनरेश पाण्डेय ने उपरोक्त विषय के

संदर्भ में कहा कि देश में कम लागत से भौतिकी की प्रायोगिक पढाई की जा सकती है।

गोष्ठी में स्वागत भाषण डा. जयप्रकाश नारायण ने किया। यह बताया डा. राकेश कुमार सिंह ने तरंग, चुम्बकीय प्रभाव एवे जल-विद्युत के उत्पादन पर प्रकाश डाला। विज्ञान सेवा समिति के सचित सुखदेव प्रसाद ने बताया कि एक तरफ आईन्सटीन और दूसरी तरफ महान भारतीय दार्शनिक-अध्यात्मवेत्ता अरविंद के चिंतन का अध्ययन किया जाय तो यह स्पष्ट हो जाएगा कि सामान्य मस्तिष्क की क्षमता को पांच सौ गुना बढ़ाया जा प्रो. राजीव रंजन और डा.रामयतन ठाकुर ने भौतिकी के कई महत्वपूर्ण

रहस्यों की जानकारी दी। गोष्ठी में प्रो. के.के. बोस, प्रो. डी. पी. सर्वज्ञ, प्रो. लाल बहादुर सिंह, प्रो. एस.एस. आचार्या, एस.पी. वर्मा तथा शिक्षक रोहित यादव भी शामिल थे। विजेता मुद्गलपुरी ने विज्ञान जागरण गीत गाया।

तिकी में हुए प्रयोग पर व्याख

(आज समाचार सेवा) पटना। मगध महिला महाविद्यालय के साइंस एवं आई टी सोसाएटी एवं भौतिको विभाग द्वारा अन्तरराष्ट्रीय भौतिकी वर्ष का आयोजन किया गया। इसके अन्तर्गत मंगलवार को कॉलेज परिसर में भौतिकी में हुए प्रयोग पर ब्याख्यान का आयोजन किया गया। इसके अलावा प्रयोग को छात्राओं के समक्ष दशार्या गया।

उक्त प्रयोग प्रो. एच.सी. वर्मा एवं आई.आई.टी. कानपुर के मुकेश कुमार द्वारा बनाया गया था। जिसे सोसाएटी की डा. डोली सिन्हा एवं राकेश कुमार ने प्रदर्शित किया।

मौके पर मुख्य अतिथि के रूप में प्रो. डा. पदमाभधी श्री नवासन मौजूद



थे। कार्यक्रम के बाद डा. डोली सिन्हा ने बताया कि कार्यक्रम का अयोजन छात्रों के बीच भौतिक विषय के प्रति रूझान बढाने के लिए किया गया था। धन्यवाद ज्ञापन भौतिकी विभाग की विभागाध्यक्ष प्रो. आभा शरण ने दिया।



Coordinator in a programme – "Vigyanke teen sopan" Khoj, SodhAur Bodh, Indo-German Initiative and Science Express Train in Bihar.

- A Countrywide Programme on Research and Development popularization built around an exhibition train – Science express (A journey in to the future of Scientific discovery) at Patna. This Science express train was developed by German Plank Society, Govt. of Germany and DST, Govt. of India., Organized by :- NCSTC-DST, Govt. of India, Science For Society Bihar. Date:-26-29 December 2007. The main purpose of this train is to create awareness about Science education & Research among general public and academicians/ students of Bihar.
- On this occasion Dr. Rakesh Kr Singh visited various higher education institutes (one month campaigning) in Patna for visiting this Science Express train and organized career orientation session in R&D, and lecture on cutting edge research at Patna Railway station for 3 days. Nearly more than 1 lakh people including students visited this Science express train.



Conducting Research & Devlopment activities at Patna Railway Station, 20-26 Dec, 06 as a Coordinator Science Express- Train: Indo-German Initiative, An exhibition of 14 advanced Research areas of Science)

The three day session was so excited, even most of the parents/faculty member also visited. Parents also inspire their children for perusing career in Science.

'Science Express'

OVER 10,000 persons visited 'Science Express' stationed on platform number 9 of Patna Junction on Saturday. The main attractions were the audio-visual presentation of origin of universe, black hole, ecosystem, working of human brain and mathematical modeling. Organised by National Council for Science, Technology and Communication Network and Department of Science and Technology (D&T), the exhibition displayed various models developed by Max Plank Society of Germany and D&T. Science for Society general secretary Dr Devendra Prasad and programme coordinator Dr Rakesh Kumar Singh urged the visiting students to undertake research work in their respective streams and come out with new findings. Coordinator in a programme – "Vigyanke teen sopan" Khoj, SodhAur Bodh, Indo-German Initiative and Science Express Train in Bihar.



International Year of Astronomy - Proclaimed by United Nations

Scientific Visit in different Parts of Bihar communicate the basic scientific aspects 400 years of completion of discoveries by Galileo, Keplers in the year1609 and total solar Eclipse moment on 16th July 2009 and how they have shaped our lives, promotes the method of science and spread a scientific outlook among the people



Master Resource Person, Training Programme of International Year of Astronomy-2009 at Guru-Govind Dev University, Amritsar (Proclaimed by United Nation)

Academic Recognition of Master Resource person of International Year Astronomy-2009 (Proclaimed by United Nations) by DST-Govt. of Bihar and NCSTC-network, Delhi, Science for Society, Bihar

- Year-2009 was declared as International Year of Astronomy (IYA) by united nations. In this year we celebrate a momentous event, the Astronomical use of a telescope by Galileo in 1609, an invention that initiated 400 years of incredible Astronomical discoveries; and pay homage to one of the greatest of scientists. Indeed, Galileo telescope triggered a scientific revolution, which has profoundly affected our world view. At the same time, we celebrate yet another momentous event- the publication of the first two laws on planetary motion by Johannes Kepler's in 1609. The Total Solar Eclipse, the largest celestial drama of this century was occurred on 22 July 2009 in the same year.
- On 27-29 July 2009, as Master Resource Person training programme was organized by DST-Govt. of India at Guru-Govind Dev University, Amritsar. Dr. Rakesh actively participated in all the sessions of this training programme. Dr. Rakesh kr Singh nominated for the Master Resource person of International Year of Astronomy by Bihar Council on Science & Technology-DST-Govt. of Bihar and Science for society, Bihar, member of National Council of Science & Technology Communication-network- Technology Bhawan, Delhi.

On this occasion delivered talks on various aspects of Evidence based Scientific phenomenon, conducted various activities at different colleges/PG centers/Institutions and schools through the state Bihar and others places for the progress of science for the people. His contributions for popularization of science and scientists was appreciated at large for establishing image of science and scientist in the society.

International Year of Astronomy - Proclaimed by United Nations

Scientific Visit in different Parts of Bihar communicate the basic scientific aspects 400 years of competition of discoveries by Galileo, Kepler's in the year1609 and total solar Eclipse moment on 16th July 2009 and how they have shaped our lives, promotes the method of science and spread a scientific outlook among the people

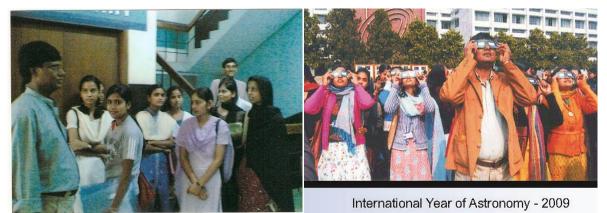


On this occasion organized more than 45 scientific programmes across the state Bihar as Master resource person. This programme was supported by DST-BCST-Govt. of Bihar, SCERT-Dept. of Education, Govt. of Bihar, Science for society-member-NCSTC-network-Delhi and Sri krshna Science center Patna, Ministry of culture, Govt. of India.

International Year of Astronomy - Proclaimed by United Nations Scientific Visit in different Parts of Bihar communicate the basic scientific aspects 400 years of completion of discoveries by Galileo, Kepler's in the year1609 and total solar Eclipse moment on 16th July 2009 and how they have shaped our lives, promotes the method of science and spread a scientific outlook among the people



Addressing to large gathering of students, teachers and parents. Scientific society require learning based education system and intellectuals. On this occasion, Director, SCERT- Sri HasanWaris and Director, Sri Krishan Science center, Patna Sri Anurag Kr was also shared a dias and address the gathering

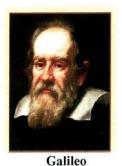


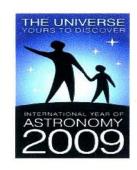
Students Visit to different scientific evidence based observatary places under the supervision of Dr. Rakesh Kr Singh.

Publications on International Year of Astronomy



International Year of Astronomy: 2009, and Remember the Contributions, Relevance of Dr. H.J.Bhabha, Dr. J.C.Boss, Charles Darwin on his birth Centenary.







Aryabhat

Inspiration & Join Hands to Make Society Prosper in Science and Technology



SIR J. C. BOSE 30-11-1858 TO 23-11-1937

(150 Years)



DR. H. J. BHABA 30-10-1909 TO 24-01-1966

(100 Years)



Charles Darwin (200 Years)

Dr. Rakesh Kumar Singh is Master Resource Person: International Year of Astronomy, appointed by DST, Govt of India. He can be reached at Mobile- 09304197595, E-mail - rakeshpu@yahoo.co.in



श्रीकृष्ण

विज्ञान केन्द्र में

वर्कशाप

के डा. राकेश कुमार सिंह व केन्द्र क डा. राकश कुमार सिंह व केन्द्र के परियोजना निदेशक अनुराग कुमार। मास्टर रिसोर्स पर्सन डा. सिंह ने सुर्यग्रहण की वैज्ञानिक व्याख्या दी। सूर्यग्रहण क्यों होता है, कब होता है और इसे कैसे सुरक्षित तरीके से देखें, आदि । डा. कुमार ने कुछ महत्वपूर्ण बातें बतायीं। जैसे कि उस दिन मर्य ने कार अस्त दोगा व

सूर्य दो बार अस्त होगा व उदय होगा। कई ऐसे फूल हैं जो कि सूर्य के उगने पर खिलते हैं और अस्त म होने पर मुरझा जात हैं। कई पक्षी सूर्योदय होने पर घोसलें से निकलते हैं और अस्त

वासल स निकर्णत हे जार जरा होने पर आ जाते हैं। ये पक्षी उस दिन क्या करेंग। उनका व्यवहार अध्ययन किया जाएगा। उन्होंने बताया कि विशेष् चश्मा के अलावा भी सूर्यग्रहण को पिनहोल कैमरा, शीशा के छोटे टुकड़े से पुरावर्तन करके देखा जा दुकड़ से परावतन करक देखा जा सकता है। बाइनाकुलर व टेलीस्कोप से देखना उचित नहीं रहेगा। किसी एक्सपर्ट के साथ ही नंगी आंखों से ग्रहण देखें वह भी कुछ खास क्षण में पूर्ण सूर्यग्रहण नहीं।

पटना (का.सं.)। हर अमावस्या को सूर्यग्रहण क्यों नहीं होता है? का सूर्यग्रहण को लेकर पटना व तरंगना इतना महत्वपूर्ण क्यों हो गया है? सूर्यग्रहण के दिन आसमान बादलों से घिर गया तो क्या होगा? सूर्य के दिन में दो बार उगने व अस्त होने का

फूलों, पक्षियों व जावनरों के व्यवहार पर क्या असर पडेगा? सूर्यग्रहण कैसे देखें?

22 जुलाई को होने वाले सूर्यग्रहण को लेकर ऐसे कई सवाल हैं जो आसजनों खासकर 22 जुलाई को होने

आमजनों खासकर बच्चों व शिक्षकों में उत्सुकता पैदा कर रहे व है। इन सवालों का जवाब देने की कोशिश की गयी बुधवार को श्रीकृष्ण विज्ञान केन्द्र में आयोजि्त वर्कशाप में। वर्कशाप में मुख्य तौर वकशोप मा वकशोप न पुख्य जार पर पटना व आसपास स्थित स्कूलों के शिक्षकों ने भाग लिया। शिक्षकों को सूर्यग्रहण के बाबत सारी जानकारियां दी गयीं ताकि वे बच्चों व अपने आसपास के लोगों को जागरूक कर सकें। शिक्षकों को जानकारियां देने वर्कशाप मं पटना वीमेंस कालेज के भौतिकी विभाग

शोध के लिए अस्पताल तैयार यहां ठहरेंगे मुख्यमंत्री और खगोलशास्त्री

मसौढ़ी (नि.सं.)। आगामी 22 जुलाई को लगने वाले सूर्यग्रहण के मौके पर खास रहने वाले नवनिर्मित रेफरल अस्पताल की तैयारियों को तेजी से अंतिम रूप दिया जा रहा है। 75 बंड वाले इस अस्पताल को बिजली, पानी की सुविधाओं से सुसज्जित कर दिया गया है। सूर्यग्रहण का अध्ययन यहां से खगोलशास्त्री करेंगे। इस मौके पर मुख्यमंत्री भी मौजूद रहेंगे। स्वग्रहण के महत्व और उस मौके पर मुख्यमंत्री भी मौजूद रहेंगे। स्वग्रहण के महत्व और उस मौके पर बनने वाले अलौकिक दूश्य को लेकर स्थानीय लोगों में कौतूहल बना हुआ है। हालांकि पांच करोड़ की

लागर स्वागय सामा से कासूठल बना हुआ है। होलाक मांच कराड़ की लागत से बन कर तैयार हुआ यह अस्पताल आम आदमी की सेवा कहा तक कर पाएगा, इसको लेकर संदेह भी बना हुआ है। माना जा रहा है कि दुर्व्यवस्थाओं के बीच इस अस्पताल का बेहतर संचालन हो सके तो सौभाग्य मानिए। बता दें कि पिछले वर्ष 25 जून को मुख्यमंत्री द्वारा की गई डेढ़ सौ करोड़ की विकास योजनाओं में यह अस्पताल भी शामिल था।



Children Science Congress A programme of DST-Govt. of Bihar

The Children Science Congress is unique programme that motivates children in the age group of 10-17 years, to take-up scientific project on local specific issues of their choice under broader themes, instead of imposing issues on them. This programme is an actively towards promoting congenial team work, correlating science with everyday life situation and has been organizing such scientific programme in different districts of Bihar by DST-Govt. of Bihar in collaboration with Science for Society, Bihar and State Council of Educational Research and Training, Dept. of Education, Govt. of Bihar



Counseling to Child Scientist at Madhubani, Bihar & S.K Science Centre, Patna

Dr. Rakesh Kr Singh has been participating as resource person since for than 10 years in face to face Programme of Child scientists, mentoring teachers/supervisor to make their scientific project for sate awardee etc. In this connections, I have visited to various districts of Bihar and they are- Kishanganj, Banka, Bhagalpur, Madhubani, Motihari, Patna, Gaya, Biharsarif, Begusari, Muzaffarpur, Siwan, Purnea, Khagaria, Arah, Buxar and some others.

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Counseling of teachers for students project

Session with Child scientist at Sitamarhi



Session with Child Scientists at Begusarai Coordinator/Organizing Committee Member of National Graduate Examination(NGPE), National Slandered Examination Programme (NSEP) for School, Colleges and University students.

For Identification and Nurturing of Students of Bihar in the field of Education, School, Colleges and University level test has been organizing by different Scientific organizations every year. Dr. Rakesh Kr Singh have been conducting such examinations as Coordinators/Observer etc. He is also actively involved in career counseling for students of Bihar for Olympiad/different scholarship for higher studies etc.