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Report of IISRR World Conference 2024

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Prologue:

Indian Institute of Social Reform and Research (IISRR), a voluntary organization is functioning in the city of Kolkata under the directorship of Prof. Asit Kumar Das (Former Dean, Kalyani University, Kalyani). IISRR has initiated publication of IISRR-IJR (IISRR International Journal) which is referred international journal. In addition, IISRR had arranged some online seminars for the benefit of research scholars and faculty members in the country. Through these activities it could establish good contacts with academicians all over the country. As a next step IISRR embarked on a challenging task of organizing a three-day international conference at Kolkata from December 5 to 7, 2024. This task was gigantic.

But the organizers took the challenge and made it a successful event. Here is the brief report of the conference held in the Jadavpur University, Kolkata on December 5, 6 and 7, 2024. The theme of the conference was "Paradigm Shift in Teaching Learning Process, Assessment and Educational Administration: Scope of AI Application". It was jointly organized by the Indian Institute of Social Reform and Research (IISRR), Secom Skills University, Department of Library and Information Science, Jadavpur University and Department of Library and Information Science, Kalyani University. The conference was in dual mode where a large number of participants attended the conference and presented their papers physically. About one third of the papers were presented online. Salient features of the conference are presented in this report.

1. Pre-Conference Activities:

A few academicians reached Kolkata a day before the conference. To keep them engaged and to familiarize them with the city of Kolkata two visits were arranged on December 4, 2024.

1.1 Visit to Eden Garden:

Eden Garden is a famous ground in the city of Kolkata where many important cricket matches were played. The members had an opportunity to visit this place and see it from close corners. The officer taking care of the garden took us around and showed us all the facilities available there. For many of us it was the first opportunity to witness the record made on this ground.



1.2 Visit to Ravindra Bharati University:

Ravindranath Tagore, a great Indian poet and a thinker was born in the city of Kolkata. The family house of Rabindranath Tagore has been converted into Ravindra Bharati university in 1961 to mark his birth anniversary. Conference participants had an opportunity to visit this auspicious place. They could see the birthplace of Ravindranath and witness exhibitions created by embassies of different countries. There was a light and sound show in the evening that highlighted the life of Gurudev Tagore.

1.3 Visit to IACS:

Indian Association for the Cultivation of Science (IACS) is located just opposite to the Jadavpur University the venue of the world conference. This institution is famous as the discovery of Raman Effect was made here in 1928. The experiment that resulted into the 1930 Nobel Prize for physics to Chandrasekhar Venkat Raman was conducted in the laboratory of IACS. Some members made it a point to visit this place on their own. As the time at their disposal was short, they could not spend much time in the institute but could get a glimpse of this old place that has generated useful knowledge in science in the last century. It had brought luminaries in science like P. C. Ray, J. C. Bose. S. N. Bose. Meghanad Saha, etc. together and provided them a platform for intellectual discourse.

2. Inaugural session:

A grand inaugural session was arranged in the spacious Dr. Triguna Sen Auditorium of the Jadavpur University in the forenoon session on December 5, 2024 at 1015am. Following the Indian tradition the session began with the lighting of lamp. A large number of dignitaries and academicians attended the inaugural session. Many of them have shared their ideas about school and college education in the 21st century.



Inauguration of the IISRR World Conference 2024
on 5th December 2024 at Dr. Triguna Sen Auditorium, Jadavpur University, Kolkata, WB, India



- **Presidential Address:** Prof. Shorosi Mohan Dan, Former Vice-chancellor, Burdwan University, West Bengal.
- **Welcome Address:** Mr. Anish Chakraborty, Chairperson, Reception Committee of the IISRR **World Conference 2024** and the Chairman, Seacom Skills University
- **Introductory Speech:** Prof. Asit Kumar Das, Director, **Indian Institute of Social Reform & Research** and the Director of the **IISRR World Conference 2024**; followed by Dr. Sibsankar Jana, Joint Organizing Secretary of the Conference and Associate Professor, University of Kalyani, and Mr. Debasish Pal, Joint Organizing Secretary of the Conference, and Jt. Finance Officer, Jadavpur University.
- **Inaugural Speech:** Prof. Jack Holbrook, UNESCO Expert and Emeritus Professor Tartu University, Estonia delivered an inaugural speech. Unfortunately, he could not attend the ceremony physically. Nonetheless he has sent his inaugural address which was read by the Master of ceremony.
- **Keynote Address:** Keynote address was given by Dr. Robin Groves, Director STEM (Science, Technology, Engineering and Mathematics) Education, Curtin University, Australia.



Some Glimpse of the **IISRR World Conference 2024** during 5 to 7 December 2024 at Jadavpur University

- **Guest of Honour's Speeches:** These speeches were given by Dr. Janchai Yingprayoon, Director, STEM Education Centre, Prince of Sonkhla University, Thailand, Prof. Amitava Dutta, Pro vice Chancellor, Jadavpur University, Kolkata, Prof. Chandrasekhar Chakraborty, Former vice Chancellor, Animal and Fishery Science University, Mr. Udayan Bhattacharya, HoD, Dept of Library and Information Science, Jadavpur University.



- **Sponsors Speeches:** The conference was sponsored by the **Life Insurance Corporation of India**. Representatives of these organizations delivered short speeches and wished the success to the conference.
- **Vote of Thanks:** The responsibility of giving Vote of thanks was entrusted to **Dr. Tapas Kumar Chatterjee**, Former Registrar, North Bengal University.

3. IISRR-Award 2024 Giving Ceremony:

Indian Institute of Social Reform and Research has instituted an award named “**IISRR Award**” that is given to the academicians for their contribution towards sustainable development and societal reforms.

3.1 IISRR-Award 2023:

The first IISRR Award was given to **Prof. Jack Holbrook** (UNESCO Expert and Professor Emeritus, Tartu University, Estonia) during the conference of International Council of Associations of Science Education (ICASE) held at Dubai in March 2022. Two more awards were given during the present conference.

3.2 IISRR-Award 2024 conferred to Dr. Robin Groves, Australia and Prof. Sudhakar C. Agarkar, TIFR, India:



**IISRR Award 2024 Conferred to
Dr. Robin Groves,**
Former President, ICASE; and Curtin University, Australia
Handed over by Mr. Anish Chakraborty
Chairman, Seacom Groups



**IISRR Award 2024 Conferred to
Prof. Sudhakar C. Agarkar,**
Former Prof. HBCSE, TIFR, Mumbai; and Editor. IISRR-IJR
Handed over by Prof. Shorosimahan Dan, Former
Vice-Chancellor, Burdwan University

- (1) **Dr. Robin Groves**, an eminent science educationist, had worked in Uganda and Australia to improve science education. He was the Director of STEM Education at Curtin University in Australia. He is closely associated with ICASE and continues to guide teachers and teacher educators to teach science effectively.
- (2) **Dr. Sudhakar Agarkar**, an eminent scientist, and science communicator has designed Remedial Instructional Strategy for teaching School Science and Mathematics to socially



deprived students. In the capacity as secretary CASTME-Asia (An Asian Branch of the Commonwealth Association of Science Technology and Mathematics Educators) he continues to build bridges among STME educators across Asia. Closely associated with the Marathi Vijnan Parishad (a voluntary organization engaged in spreading science using local language Marathi) he delivers lectures and conducts workshops to popularize science and mathematics among the masses.

4. Technical Sessions:

There were 9 technical sessions; arranged during the IISRR World Conference 2024; a brief outline of each of the technical sessions are given below.

4.1 Technical Session I: Students' Incubation Workshop-1:

This Technical Session was Chaired by **Dr. Robin Groves, Curtin University, Australia**. It was held on 5 December 2024, soon after the inauguration in Dr. Triguna Sen Auditorium of the Jadavpur University. It was in a workshop mode conducted for school children by a team of STEM Educators from Thailand. The team comprised **Dr. Janchai Yingprayoon** (Director, STEM Education Centre, Prince of Songkhla University, Thailand), **Dr. Nthaphon Boonnam** (Prince of Songkhla University, Thailand) and **Dr. Tiraka Nualjan** (A-chuan International School, Thailand). In this workshop the resource persons focused their attention on fun activities using easily available material. It was enjoyed by both the students as well as adult participants of the conference.

4.2 Technical Session II: Students' Incubation Workshop-2:

This session was chaired by **Dr. Amalesh Mishra**, Former Emeritus Scientist, ZSI. on 5 December 2024. The Incubation Workshop was conducted jointly by **Prof. Sudhakar Agarkar** (Professor and Dean VPM's Academy of International Education and Research, Thane) and **Dr. Prashant Thakare** (Assistant Professor, Gondwana University, Gadachiroli, Maharashtra State). The theme of the workshop was "Science Embedded in Indian Traditional Toys". The presenters tried to explain how the toys function. They showed a large number of toys used by young children and tried to explain the scientific principle on which they work. It was brought home that such toys can be used in the classroom to teach scientific principles effectively. After the workshop a large number of students came forward to handle the toys and get the first-hand feel.

4.3 Technical Session III: Paper Presentation (Online mode):

This session was arranged in K. P. Basu Memorial Hall of the Jadavpur University on 5 December 2024. It was Chaired by **Prof. Tapas Kumar Chatterjee** (Former Registrar Bengal University) and co-chaired by **Dr. Amlesh Mishra** (Emeritus scientist, Zoological Survey of India) and was moderated by **Dr. Nivedita Sarkar** (Secretary, IISRR). This session was conducted online using google meet link. In all 13 papers were presented during the session.



4.4 Technical Session IV: Paper Presentation (Physical mode):

This session was held in the Department of Library and Information Science, Jadavpur University on 5 December 2024. It was chaired by **Dr. Eliene Horne** (Manager, CoEducation, Western Australia), co- chaired by **Prof. Udayan Bhattacharya** (HoD, Library and information Science, Jadavpur University) and was moderated by Dr. Sibsankar Jana (Jt. Organizing Secretary, IISRR World conference). In all 11 papers were presented in this session physically. Each presentation was followed by short question answer session.

4.5 Technical Session V: Paper Presentation (Online mode):

This session was arranged in K. P. Basu Memorial Hall of the Jadavpur University on 5 December 2024. It was Chaired by **Prof. Madan Mohan Chel** (Former Principal, Sammilani Mahavidyalaya) and co-chaired by **Dr. Rambilash Mahapatra**, (Dy. Controller Examination, Burdwan University). It was moderated by Dr. Kamal Kant Hazra (Asst. Professor). This session was conducted online using google meet link. In all 15 papers were presented during the session.

4.6 Technical session VI: Paper Presentation (Physical mode):

This session was held in the Department of Library and Information Science, Jadavpur University. It was chaired **Prof. Chandrasekhar Chakraborty** (Former vice chancellor, Animal and Fishery Science University), co- chaired by **Prof. Sabuj Dasgupta** (Library and Information Science, Kalyani University) and was moderated by Dr. Rudra Prakash Saha (Professor Murlidhar Girls' College). In all 13 papers were presented in this session physically. Each presentation was followed by a short question answer session.

4.7 Technical Session VII: Paper Presentation (Physical mode):

This session was arranged in K. P. Basu Memorial Hall of the Jadavpur University on the second day of the conference. It was chaired by **Prof. Ramani Barman** (Director, IIRDDA, Assam), Co-chaired **Mr. Choudhary** (Advisor IIRDDA, Assam) and was moderated by Dr. Nivedita Sarkar (Secretary, IISRR, Kolkata). In all 8 papers were presented in this session physically. Each presentation was followed by a short question answer session.

4.8 Technical session VIII: Paper Presentation (Physical mode):

This session was held in the Department of Library and Information Science, Jadavpur University. It was chaired by **Dr. Bala Lakhendra**, Associate Professor, Banaras Hindu University, co- chaired by **Dr. Prashant Thakare**, Assistant professor, Gondwana University, Gadchiroli; and was moderated by Paulami Pal (University of Kalyani, WB). In all 8 papers were presented in this session physically. Each presentation was followed by short question answer session.



4.9 Technical session IX: Paper Presentation (Physical mode):

This session was held in K. P. Basu Memorial Hall, Jadavpur University on the second half of the conference. It was chaired by **Prof. Madan Mohan Chel**, Former Principal, Sammilani Mahavidyalaya, co-chaired by **Mr. Arpon Chakraborty**, Executive Director, Secom Skills University and was moderated by Dr. Nivedita Sarkar and Ms. Niladri Mujumdar. In all 10 papers were presented in this session physically. Each presentation was followed by a short question answer session.

5. Plenary Lectures: There were two Plenary Sessions on second and third days, respectively. A brief about the Plenary sessions is given below.

5.1 General Assembly I: Plenary Lectures:

A general assembly was arranged in the forenoon session of the second day of the conference in the K. P. Basu Memorial Hall on 6 December 2024. It was chaired by **Prof. Shoroshi Mohan Dan**, Former vice-chancellor, Burdwan University and co-chaired by **Prof. Tapas Kumar Chatterjee**, Former Registrar, North Bengal University). In all four plenary lectures were accommodated in this session.

- 1) **Dr. Eliene Horne:** Teaching Einsteinian physics to school students.
- 2) **Dr. Jimmy Wong:** Using AI for nurturing the talent of gifted students.
- 3) **Prof. Sudhakar Agarkar:** Using AI to popularise Indian Knowledge System (IKS).
- 4) **Prof. Chandrasekhar Chakraborty:** Role of bacteria in human Life.

All the above lectures were received very well. The audience raised pertinent questions which were aptly answered by the speakers.

5.2 General Assembly II: Plenary Lectures:

The second general assembly was arranged in the forenoon session of the third day of the conference in K. P. Basu Memorial Hall. It was chaired by Prof. Shoroshi Mohan Dan (Former vice-chancellor, Burdwan University) and co-chaired by Dr. Sudarshan Sen (Paediatric Surgeon, Kolkata). In all four plenary lectures were accommodated in this session.

- 1) **Mr. Arpan Chakraborty:** Application of AI in Academia.
- 2) **Prof. Asit Kumar Das:** Art of Writing Research Articles.
- 3) **Dr. Sibasankar Jana:** Smart Research using AI tools.
- 4) **Dr. Janchai Yingprayoon:** Building STEM Competence the Fun Way.

All the above lectures were quite informative and threw light on how AI can be used fruitfully in different aspects of academic tasks. Each presentation was followed by a short discussion.

6. Project based Poster Exhibition:

In order to involve school and college students in the conference an appeal was made to schools to encourage their students to submit posters to be displayed during the conference. The topics suggested for the posters were: Sustainable Development, Social Reforms and Green Energy. There was an overwhelming response to the appeal. A large number of students submitted their entries. All the posters were displayed in front of K. P. Basu Memorial Hall. It was inaugurated by Dr. Eliene Horne (Perth Australia) and Prof. Amitava Dutta (Pro vice chancellor, Jadavpur University). All the posters were judged by the panel of experts. Awards were given in two categories: High School (up to Class -X and Higher Secondary School (Class XI - XII) in all the three categories. The award ceremony was held during the Valedictory Function of the conference. List of Merit Prize Winners is given below.



IJSRR World Conference 2024: Students Incubation Workshop-cum- Project-based Poster Exhibition; held at Jadavpur University on 5-7 December 2024

IJSRR World Conference 2024 :Project Based Poster Contests Merit Prize Winners

Poster Theme	Group	Position Held	Name of the School	Name of the Students
Sustainable Development of the Environment	Gr-A (VIII – X)	First	Samaritan Mission School (High) niveditaghosh808@gmail.com	Afreen Parveen Kumkum Sonkar
		Second	The New Horizon High School chemsaraswati2018@gmail.com	Suvajit Das Ivy Sahoo
		Third	Bani Bhaban High School banibhabanhighschool@gmail.com	Sayan Barman Ayan Barman



			swarupmandal1976@gmail.com	
	Gr-B (XI – XII)	First	Rhode Island Public School ripschool.edu2017@gmail.com	Md. Sohail Sana Khaliq
		Second	Balia Nafar Chandra Balika Vidyalaya (H.S) balianafarchandra@gmail.com	Dipika Dolui Disha Naskar
		Third	Taki House Govt. Sponsored Girls' High School arpita.physics@gmail.com	Ankita Bhattacharjee Adrija Bhattacharya
Societal Reforms	Gr-A (VIII – X)	Consolation Prize	Jadavpur Sammilita Balika Vidyalaya	Prapti Das
	Gr-B (XI – XII)	First	Putiyari Baja Mohan Tewary Girls' High School	Sumi Mondal Pronati Mal
		Consolation Prize	The Heritage School manjari.chatterjee@theheritageschool.org principal@theheritageschool.org	Aryana Pal Anushka Das
Green Energy	Gr-A (VIII – X)	First	Taki House Govt. Sponsored Girls' High School arpita.physics@gmail.com	Anushka Chandra Payel Dutta
		Second	Bidya Bharati Girls High School bidya.bharati09@gmail.com	Debatri Bera Niharika Hazra
	Gr-B (XI – XII)	First	Sushila Birla Girls' School principal@sbgskolkata.ac.in	Yashwini Nandy Yuvika Ondhia
		Consolation Prize	The New Horizon High School newhorizonacademic24@gmail.com	Rohit Seth Shivam Sah

7. Valedictory Session:

Valedictory session of the conference was held on the third day of the conference in K. P. Basu Memorial Hall of the Jadavpur University under the chairmanship of Prof. Sudhakar Agarkar (Former Professor, Tata Institute of Fundamental Research, Mumbai). This function had three parts: 1. Disbursal of Participation Certificates, 2. Giving away awards to best posters and 3. Feedback session.

7.1 Disbursal of participation Certificates: All the paper presenters were given Participation Certificates. Those who presented their paper physically received the certificate during the



Valedictory Function. The participation certificates were dispatched to those who presented their papers in an online mode.

7.2 Awards to Best Posters:

Based on the assessment made by the panel the awards were given to students in two categories (high school and higher secondary school students) under each of the three themes.

7.3 Feedback Session:

Participants and Resource persons were requested to give their valuable feedback. Since this was the first attempt to organize such a big conference for IISRR, the participants were requested to comment on lacunas and suggest ways to overcome them. In general, the feedback was quite encouraging. Most of the speakers expressed satisfaction mentioning that the conference was arranged very well. The conference brought together academicians from different fields like Science, Education, Administration, Mathematics, Science/Mathematics Popularization, Economics, etc. Each of them got benefitted from it. Some of the participants expressed the desire that IISRR would make this an yearly event.

8. Visit to Kalloloni Kolkata through River Cruise Journey:

As a part of the conference a cruise journey was planned in the afternoon on the second day of the conference. A boat was booked for the conference participants and arrangements were made to take them to the jetty. The cruise made a journey through Hubali river providing eye catching sights. It passed under the Old Howrah Bridge and reached Belur math. The participants could visit the Belur math established by Swami Vivekananda and get enriched. A delicious dinner was served during the cruise journey. The voluntary participation of the members in an entertainment programme enhanced the pleasure of journey.

9. Post Conference Activities:

Like the preconference activities there were post conference activities too. Here is the short summary of the post conference activities.

9.1 Visit to Shantiniketan:

After the conference a group of 13 persons went to Bolpur by bus. They had an opportunity to visit Shantiniketan. They could explore this world Heritage Site from close corners. Dr. curator of the museum took them around and showed us the house where Ravindranath Tagore lived. A visit to the museum was quite informative. It displays the entire Gitanjali in Bengali along with English translation. The museum also has information about the foreign tours of Gurudev and picture showing his interaction with great personalities like Albert Einstein, Mahatma Gandhi, Pandit Nehru, etc. Visit to the museum was an enriching experience for all.

A short visit to a school campus was a memorable event. Participants could see the classroom under the tree. In fact, a class was taken by Dr. Sudhakar Agarkar and Dr. Eliene Horne to get the feel of education in nature advocated by Gurudev Tagore. The members had the opportunity to see the school and meet some students engaged in painting.



Visit to Shantiniketan on 8th December 2024 of IJRR World Conference 2024 Team

A visit to Gramshilp was quite enriching. As the name suggests this place has collections of artefacts made by tribal communities from different parts of the country. In fact, there is a separate section for each state where the art of that state is displayed systematically.

9.2 Visit to Sonajhuri Haat (Market):

In the evening the participants had an opportunity to visit local market called Sonajhuri Haat. In this market colourful artefacts made by local tribal communities are displayed under the trees. One can bargain and buy the item of his/her choice. One of the attractive features of the market was that one can join the tribal dance if he/she wishes to enjoy it. Many of the participants took this opportunity and enjoyed the market visit.



Some sweet Memories with Tribal Dancer Group at Sonajhuri Haat, Shantiniketan on 8th December 2024

9.3 Visit to Seacom Skills university:

Seacom Skills University was the one the collaborators of the conference. The chairman of the university invited selected participants to visit the campus located close to the town of Bolpur. The campus is located in the rural area surrounded by agricultural farms. The University offers



different courses to develop skills among the students. Their focus is on developing twenty first century skills so that the students of the university can adjust with changed environment. Since it is located in the rural area the number of students attending the university from rural region is quite high. The university provides lodging and boarding arrangements for the students. At the same time the university has a good library to provide knowledge to the students as and when they wish to take it.



Second Academic Endeavour of IISRR World Conference 2024 at Seacom Skills University on 9th December 2024

9.4 Annual Function of Sri Prakash School at Visakhapatnam:

Sri Prakash Vidya Niketan was involved in the organization of the conference. It had sponsored the conference kit. Coincidentally, their annual function was scheduled on December 10, 2024. Dr. Sudhakar Agarkar along with Dr. Robin Groves and Dr. Eliene Horne made a visit to Visakhapatnam after returning from Bolpur. The annual function was a grand event where all the three academicians had an opportunity to witness the beautiful cultural programme put up by the students of Sri Prakash Vidya Niketan. Most importantly they had the opportunity to interact with students and teachers of this institution.

Epilogue:

It was a great challenge for a new institution like IISRR to undertake the responsibility of arranging a World conference. But the institution has shown that with meticulous planning and hard work anything can be achieved. The convenor Prof. Asit Das, Joint Convenors Dr. Sibsankar Jana and Mr. Debashish Pal along with members of the Organizing Committee deserves a big praise for their untiring efforts. Both Dr. Nivedita Talukdar and Ms. Sabnam Khatun took troubles to see that the function goes on well.

Apart from running IISTR-IR and arranging online sessions IISRR has shown its capacity to organize a big conference. It was a great success. The feedback received from the academicians was quite positive. Many of them have even suggested to make this an annual activity of IISRR. Hoping that some institution or the university come forward to host the conference it should be possible to arrange a similar event in the academic year 2025-26.