



4th QUARTERLY REPORT ON AZADI KA AMRIT MAHOTSAV (AKAM) PROGRAM

(June 2022 - August 2022)

As per the directive of the Department of Atomic Energy, Institute of Physics, Bhubaneswar is celebrating India's 75th year of Independence as '*Azadi Ka Amrit Mahotsav*'. Following activities have been carried out under this program during June 2022 to August 2022.

PART A

June 2022

(1) Scientists-School Students online interaction program: 10th Session of Physics Open Discussion (POD) at IOP Bhubaneswar

The 10th Session of the Monthly Physics Open Discussion (POD) online program at IOP Bhubaneswar was held on 18th June 2022 during 5:30 pm – 7 pm. The program was attended by about 26 school students from all over Odisha from class VI to class XII on Zoom online platform. Questions ranging from basic physics concepts (electromagnetic waves, speed of light calculation and measurement, heat and radiation, thermal equilibrium), to frontier areas of physics (electron-positron pair production, supernova explosion, time and gravity, night vision camera, etc.) were discussed. Students asked questions in English, Hindi, and Odiya.

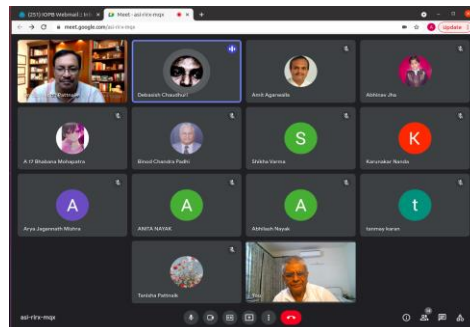
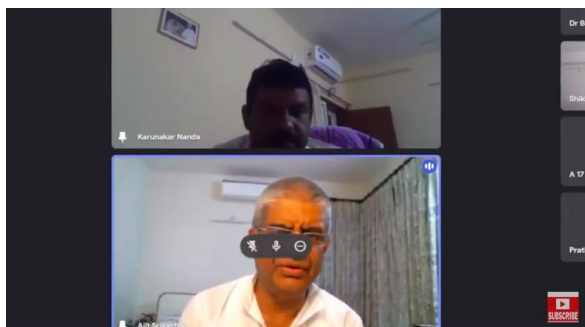
(Banner and Group Photos with Cardio, Ortho doctors and Director, K. K. Nanda)

G. REPORT OF THE DAE ICONIC WEEK DATED 28.08.2022

Scientists-School Students online interaction program: Special 12th Session of Physics Open Discussion (POD) on the occasion of “Azadi ka Amrit Mahotsav” at IOP Bhubaneswar

The 12th Session of the Monthly Physics Open Discussion (POD) online program at IOP Bhubaneswar was held as a special session of POD on 27th Aug. during 5:30 pm – 7 pm as part of the ongoing one-week event at IOP for Azadi Ka Amrit Mahotsav celebration in which several scientists of IOP participated to address queries of young students. At the start of the program, Prof. K.K. Nanda, Director IOP, gave opening statements. Subsequently discussion session started with students asking questions directly, or posting them on chat. Questions in basic physics concepts related to notion of polar and axial vectors, angular and linear velocities in rigid body rotation, shell theory in atomic physics, electromagnetism, etc. Advanced questions in frontier areas of physics related to conceptual issues on uncertainty principle in quantum mechanics, gravitational waves, universe expansion, galaxy structures and its center, twin paradox, wormholes, black holes, etc. Some questions of more general nature were also discussed such as nature of global warming, theory of evolution, reusable rockets etc. Discussions were held in English, Hindi, and Odiya.

Special POD Online Session No. 12, 27th August , 2022



YouTube link: <https://www.youtube.com/watch?v=WfZy1yQGix>

H. REPORT OF THE DAE ICONIC WEEK DATED 28.08.2022

As a part of the DAE Iconic week, On the 7th day of the institute, with the aim of inculcating scientific temper in the campus children as well as patriotism among the little ones, it was decided

to have a drawing competition program among the children on the theme "Azadi Ka Amrit Mahotsav". About 40 children participated in this program. Later a scientific presentation was given by the children of the campus, out of which the names of two children were selected to give their scientific presentation before the judge. Mr. Sarfaraz Khan and Ms. Subhrangi gave their scientific presentation. In order to encourage the little ones for their works also, they were given the "Azadi Ka Amrit Mahotsav Seal". The program ended with the national anthem with the participants. Before the conclusion of the session, there was a group discussion on future planning for the outreach program of the IOP. The evening's Skywatch program was canceled due to bad weather. The program was successfully completed with the support of all the staff members of IOP.



(Banner and Group Photos of campus children participated in drawing completion with other Director, K. K. Nanda)



(Photograph of Concluding Session)