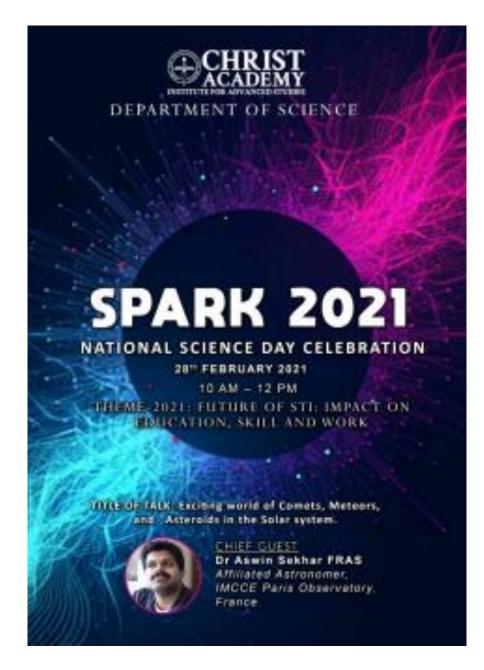


<u>Talk on "Exciting world of Comets, Meteors and Asteroids in the Solar</u> <u>system"</u>

Date: 28th February 2021 between 10 AM – 12 PM **Venue:** 1st Floor Seminar Hall, CAIAS





Objective: To introduce to our students the world of Astronomy and astrophysics.

Abstract: As a part of National Science Day Celebration – SPARK 2021, a webinar was organized by the Department of Science, Christ Academy Institute for Advanced Studies, on 28th February 2021 from 10 AM to 12 PM. The participants include faculty, BSc (all branches) students. The host of the day was Ms Varmitha from Second year BSc PCM. Ms Varmitha gave a small introduction about the relevance of National Science Day and contributions of Sir. C V Raman. The event started with the prayer song by Ms Pallavi from second year BSc PCM, followed by a welcome address by Dr.Rose Joseph (Department of Science). Dr.Rose Joseph extended her warm welcome to Reverend father, resource person, faculty and all the participants of the webinar. The presidential address was delivered by Rev. Fr. Dr. Babu Paul CMI, Principal, CAIAS. Father appreciated the organizers and extended his warm welcome to the participants and resource person. Father emphasized on the importance of conducting webinars, which is an excellent platform for knowledge sharing, during this pandemic. Prof. Sherin Rison introduced the chief guest to the gathering.

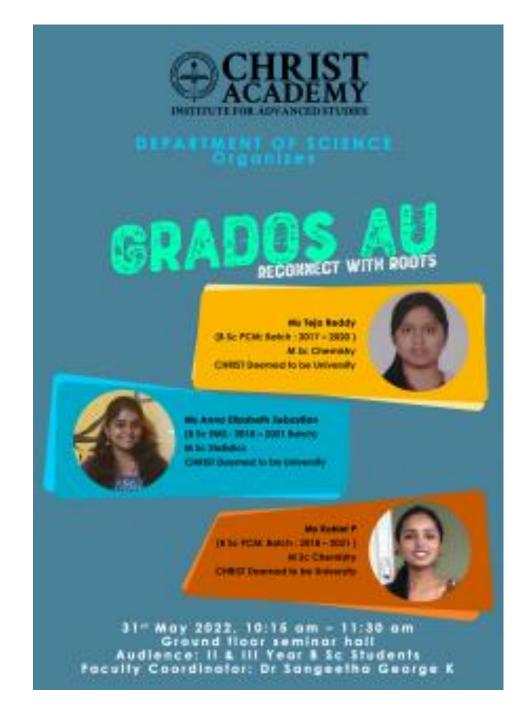
Dr. Aswin Sekhar talked about the interesting world of Comets, Meteorites and Asteroids. He gave a detailed description of the three and the mathematical ways to calculate their position. He clearly explained the difference between each and how the astro-bodies helps the astronomers to know more about outer space. The session was remarkably interesting. He explained in a quite simple way that the students were able to understand well. Also, as an addition he explained how the student who is interested in this field of study must plan his/ her carrier. He explained this by quoting various institutes where they can do their internships and PhD.

The session was concluded by a vote of thanks by Dr Mandira Mohapatra. She expressed special gratitude to the chief guest for his informative and useful presentation. She also expressed gratitude to CAIAS management, Head of department of science, event co-ordinator and faculty for their constant encouragement and support in conducting the webinar. She thanked all the participants in making the webinar a grand success.



Invited Talk Grado Au- Alumni Interaction

Date: 31st May 2022 10:15- 11:20pm **Venue:** 1st Floor Seminar Hall, CAIAS





Objective: To reconnect with roots, an alumni interaction program is planned to promote and foster interaction amongst Alumni, present students and faculty from the Department of Science.

Abstract: An Alumni interaction "GradoS Au – Reconnect with roots" was organized by Department of Science, Christ Academy Institute for Advanced Studies, Bangalore, on 31st May 2022 in II Floor Seminar hall for II & III Year B Sc students. The guest speakers on this occasion was Ms Teja M Reddy, Ms Rohini P, an alumni of BSc Physics Chemistry Maths, 2017, 2018 batch respectively who are presently pursuing their masters in Chemistry in Christ (Deemed-to-be- University) and Ms Anna Elizabath, an alumnus of BSc Economics Maths Statistics, 2018 batch who is presently pursuing her masters in Statistics in Christ (Deemed-to-be- University). The program was organized to promote and foster interaction among alumni, present students and Faculty from Department of Science.

The Programme was hosted by final year student, Ms Annie Shaju of VI semester B Sc EMS, who welcomed the guests, faculty members and students. Program started with the welcome of the guest speakers, the Principal Rev Fr Dr Babu Paul followed by introductory remarks by Dr Sangeetha George K, Head of the Department, Department of Science, who welcomed guest and Principal, elaborated on the need of such interactive sessions and how alumni can work with the College to support future generations of students. It was an event in which the pre-final and final year students of BSc PCM, PCsM, EMS and CMS benefited from the experience of department's alumni who has their mark in the respective fields of study.

Rev Fr Dr Babu Paul, Principal, CAIAS, presided over the event. Dr Babu Paul suggested the importance of Alumni and the need to be in touch with alma matter. He also encouraged the students to be more involved in extracurricular activities along with academics. He appreciated Ms Teja, Ms Anna and Ms Rohini for being a part of this program. Father reminded the students to be in touch with the department and college in future too. He encouraged the present students to look up to their seniors and to build a career in respective fields and advised the students to adhere to the worthy suggestions given by the learned and accomplished speakers.

The Alumni talked about their experience at CAIAS, how they faced interview for higher education and their experience at the present place of study. They suggested to the preset students to make their concepts clear before they apply for PG courses. Also they mentioned the role of Department of Science, CAIAS in molding them up as individuals today. They specifically mentioned the method to study, to go beyond text books, the way of referring the journals and journal papers, etc. They also suggested the students to read books written on the topic under study by international authors. They emphasized that freshers need to focus on soft skills like communication, body language, problem solving skills, basic software applications like MS Excel and MS PowerPoint as these are the minimum expected skills for any job. They emphasized that the basics of subjects



shall have its importance and students should be mastering their subjects well.

Ms Anna suggested various job opportunities in the field of Statistics while Ms Rohini suggested the job opportunities in the field of Chemistry. They motivated the students and explained the strategies to apply at various levels of jobs in India and abroad. Ms Teja talked about importance of research in post graduate courses. As alumni, all of them advised the students to enjoy the college life by participating in the opportunities at hand without compromising the academics. Ms Rohini suggested the BSc students to do internship at various institutions to get better reach.

Students participated with enthusiasm, were interactive and answered questions by the speaker as well as got answers for their queries during the session.

Ms Aditi R of VI semester B Sc CMS delivered the vote of thanks. Ms Aditi R thanked the speakers for sparing valuable time to mentor our students, sought cooperation for helping our students in various pursuits. She also thanked Principal, CAIAS for giving importance to the event and Head, Department of Science for reaching out the speakers and inviting them all, thanked student volunteers who helped to manage the programme and the Faculty for actively helping out in the smooth conduct of the same. Program followed with Presentation of letter of appreciation to Ms Teja, Ms Rohini and Ms Anna by Head, Department of Science, a time where speakers became nostalgic and mentioned that they felt honoured to be invited by their alma mater for such a session and being felicitated by their teacher. The program was well attended by 74 students, who participated with enthusiasm and interacted with the speakers. The Speakers then visited all their Faculty. In an informal interaction they shared their positive experience of the College and mentioned that they were delighted to see the progress that the Department of Science has made in the years after they have left the campus. The program gave the present II & IIIyear B Sc students about modalities of applying for higher education in Deemed to be Universities and Central universities.



Guest Lecture on Recent Advances and Current Trends in Chemistry

Date: 12th July 2022, 11:30 am – 12:15 pm Venue: 1st Floor Seminar Hall, CAIAS





Objective: To provide the audience with a glimpse of the recent advances in the fields of Solar cells, Batteries and Cancer drug developments.

Abstract: On 12th July 2022, the Department of Science hosted an in-house resources special talk on "Recent advances and current trends in Chemistry" for the BSc Chemistry students. The talk successfully met the objective, which is to give insight to the students regarding the recent advances and achievements in the domains of solar cells, batteries, and cancer treatment research.

The session started with what is cancer and the different types of cancer Followed by the different types of treatment. The focus of the session was on chemotherapy and the different stages of cancer were discussed. The chemotherapeutic drugs generally used in the non-invasive and medical treatment of cancer were discussed. The main focus here was the chemical structure and properties of chemotherapeutic cancer drugs with a slight introduction to the qualitative structure-activity relationship (QSAR). The two most significant drugs were selected for discussion in this talk. The trade name of the selected drugs was Herceptin and Revlimid.

The discussion restricted to the developments from 1988 to 2020, starting from Silicon based solar panels, till multi junction hybrid material solar panels. Few solar cells with their efficiency discussed in this session were, Silicon, Amorphous silicon, perovskites, organic photovoltaics, chalcogenides (CdTe, CIGS, CIGSS), and hybrid cell with more than two junctions. The last topic discussed was on the latest developments in battery technology. The talk started with classification of batteries as Primary and Secondary, the difference between Primary and Secondary Batteries were explained with neat labeled diagrams. of was taken into the highlights of Highlights of battery technology were also discussed.