# N 20 N

#### National Webinar Report

A talk on "Performance of Initial Condition in Numerical Modeling System: An Approach of Data Assimilation" was organized by Dr. Yogendra kr. Rajoria and Dr. Rahul Boadh, Department of Mathematics -SBAS for UG, PG, Research Scholars and instructed faculty members on 25<sup>th</sup> June 2021 at 11:00 am in online mode via MS Team by the expert **Dr. Kuvar Satya Singh** (Assistant Professor), in the Department of Mathematics and Centre for Disaster Mitigation & Management (CDMM), Vellore Institute of Technology (VIT) University, Vellore, Tamil Nadu, India. Total 80 number of attendees patriciate in this webinar.

Dr. Rahul Boadh welcomed the expert by briefing his contributions in the field of Applied Mathematics. The speaker began the session with the introduction to data assimilations and numerical modelling. Dr. Singh also talked about the importance of numerical modeling system especially in the simulation of extreme weather conditions (tropical cyclones), a real time case study in which the initial condition is one of the major components in the modeling system.

Dr. Singh used different techniques of data assimilation; therefore we can utilize the model initial condition and hence can improve the forecast. The way he explained the topic is exemplary. In the end of the talk, our speaker gave thanks to organisers to conduct this webinar. At last Dr. Rajoria delivered a vote of thanks to the dignitary on request of organizer moderator Miss. Venuka Sandhir and Dr. Ajay Kumar was available for the technical support.

#### Few glimpses of the event:





# K.R. MANGALAM UNIVERSITY THE COMPLETE WORLD OF EDUCATION

Date: 09/05/2021

#### Report

#### Chetna Society

## STUDENT CAPACITY ENHANCEMENT PROGRAM ON CONNECTING WITH INNER SELF & BUILDING RESILIENCE

The K.R. Mangalam University, in association with The Heartfulness Institute, organized a special online session on connecting with the inner self and building resilience for the students, faculty, and staff of the university. The session was held on Saturday, 08 May 2021.

The session was conducted by Mr. Sanjay Upreti and Mrs. Vinita Upreti, who are experts in financial advisory and business services, and practitioners of Heartfulness Meditation. The session covered the following objectives:

- To create awareness about the importance and benefits of connecting with inner self and building resilience
- To demonstrate some simple and effective methods and precautions for practicing inner connection and resilience
- To explain the physiology and science behind inner connection and resilience

The session witnessed a large participation and enthusiasm from the university community. The participants expressed their appreciation and gratitude to the K.R. Mangalam University and The Heartfulness Institute for organizing the session and providing them with an opportunity to learn and practice inner connection and resilience.

The session consisted of various activities and sessions, such as:

- A welcome address by Dr. Ruchika Yadav (SOMC), who introduced the significance and theme of the session
- A presentation by Mr. Sanjay Upreti, who shared his insights and experiences on the role and impact of inner connection and resilience on personal and professional growth
- A guided inner connection and resilience exercise by Mrs. Vinita Upreti, who led the participants through a 15-minute activity, involving self-reflection, self-compassion, and self-empowerment

Ka Wandalau

- A Q&A session by Mr. Sanjay Upreti and Mrs. Vinita Upreti, who answered the queries and doubts of the participants regarding inner connection resilience and well-being

The session was a success, as it achieved its objectives and received positive feedback and recognition from the participants and the media. The session also inspired the participants to continue their inner connection and resilience journey and spread the message of inner connection and resilience to others.

K.A. Mangalam Sohna Paad, Gurus

Date: 02/05/ 2021

#### Report

#### Chetna Society

#### MANAGING STRESS THROUGH MEDITATION IN COVID TIMES

The Chetna Society organized a special online session on managing stress through meditation in COVID-19 times for the students, faculty, and staff of K.R. Mangalam University. The session was held on Saturday, 01 May 2021, at 9 AM.

The session was conducted by Dr. Rahul Mehrotra, a renowned cardiologist and Director of Non-Invasive Cardiology at Max Super Speciality Hospital, Saket. The session covered the following objectives:

- To create awareness about the causes and effects of stress on physical and mental health
- To teach some simple and effective techniques to cope with stress, such as relaxation, meditation, and positive thinking
- To provide tips and resources on how to practice stress management regularly and improve well-being

The session witnessed a large participation and enthusiasm from the K.R. Mangalam University community. The participants expressed their appreciation and gratitude to the Chetna Society and Dr. Rahul Mehrotra for organizing the session and providing them with an opportunity to learn and practice meditation.

The session consisted of various activities and sessions, such as:

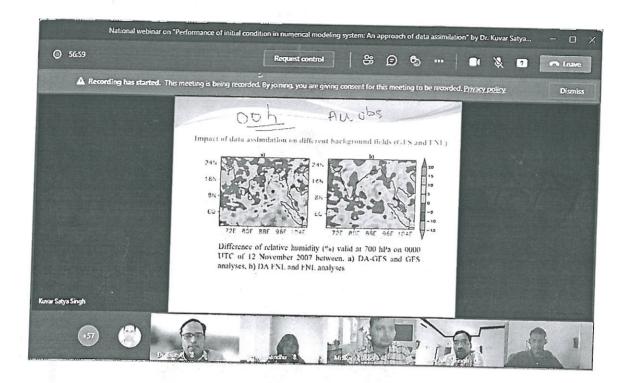
- A welcome address by Dr. Ruchika Yadav, the faculty coordinator of the event and an associate professor of SOMC, who introduced the significance and theme of the session
- A presentation by Dr. Rahul Mehrotra, who shared his insights and experiences on the role and impact of meditation on the cardiovascular system and overall health
- A guided meditation practice by Dr. Rahul Mehrotra, who led the participants through a 15-minute meditation session, involving focusing on the breath and the heart, and feeling a sense of calmness and peace
- A Q&A session by Dr. Rahul Mehrotra, who answered the queries and doubts of the participants regarding meditation and stress management

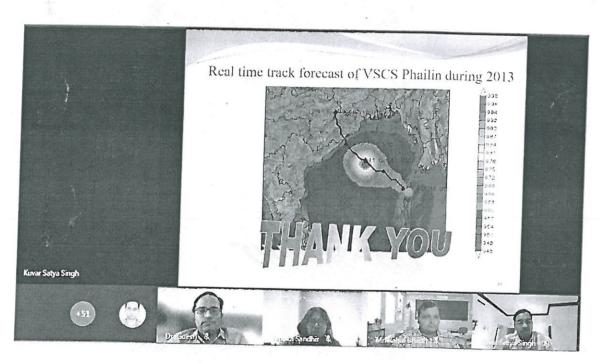
Outs bood Emmission

- A feedback and evaluation session by Dr. Ruchika Yadav, who collected the responses and suggestions of the participants and thanked them for their participation and cooperation

The session was a success, as it achieved its objectives and received positive feedback and recognition from the participants and the media. The session also inspired the participants to continue their meditation journey and spread the message of meditation to others.

W.A. Mandalan Linus and Hills of the street of the street





Registrat

K.R. Mangalam (Interest)

Sohna Road, American al (2) (400%)

#### Report on Academic Writing - I and II

Academic Writing is the most interesting as well as a tumultuous process of any research endeavour. The process of writing an academic paper or dissertation can be extremely different from other types of written English. Writing academically implies having a structured, evidence based and formal tonality. Researchers often lack the specific skill sets to plan the writing process systemically owing to negligence of training in writing skills at different educational levels. The lack of writing study centers make the situation more grim.

In this backdrop, on February 18, 2021 and 19, 2021, Science Society of KRMU, hosted Seminars on Academic Writing-I and Academic Writing-II respectively within School of Basic and Applied Science (SBAS). The aim was to train the participants with the different skills beneficial for academic writing. Even though each discipline may have a range of writing conventions, vocabulary and discourse there are certain components of the process which are common to every subject area.

Dr. Pawan Kumar, Assistant Professor at the SBAS, KRMU and member of Abdul Kalam Science Society, was the speaker at both the seminars.

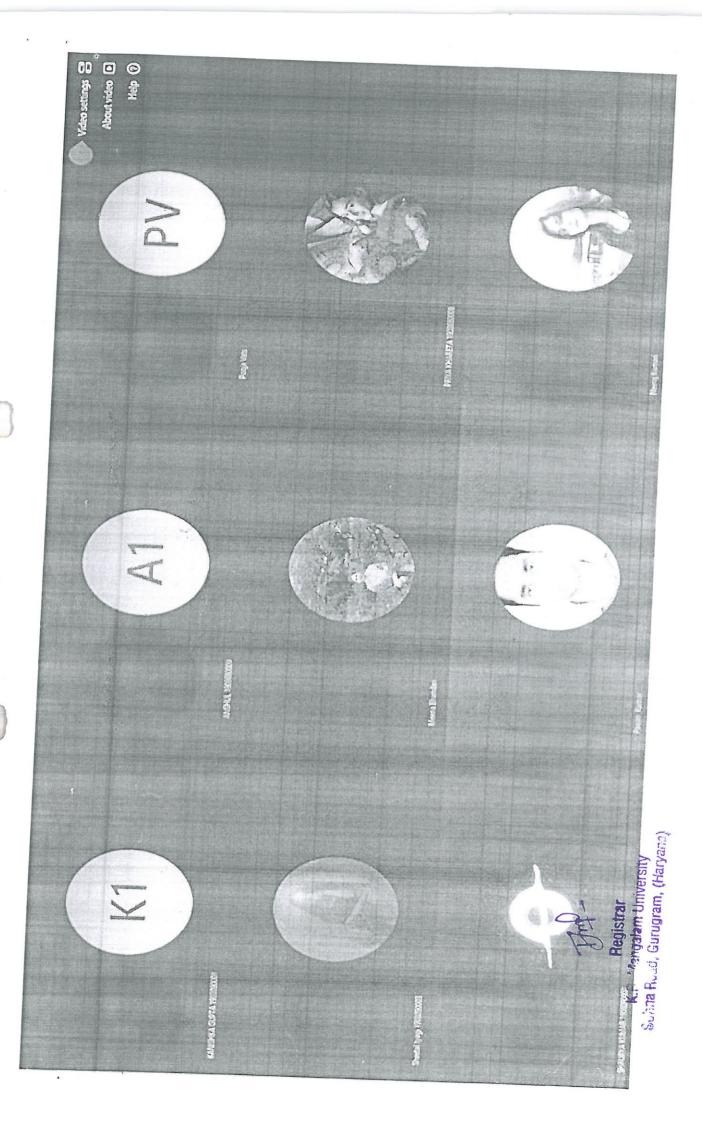
During the event, he detailed the basic rules for preparation of scientific publications in academic journals in English, the structure of publications, the main mistakes in publication preparation and writing. Particular attention was paid to such issues as construction of argumentation system in scientific publication, formulation and description of the research task, selection of methodology, study of works on the issues of the scientific research, and the analysis of scientific journals.

The seminars were organized for Ph.D. scholars, as well as for students, post-graduate students, and University Professors.



- Must be logical make sense.
- Put information down logically, so that the sentences connect together in a way that makes sense.
- You should spend time rearranging the main points until they are in logical order.
- Writing a paper is not only a matter of gathering and presenting information, it is an exercise in comprehension and critical analysis. Registrar Ross Gungram University

是是



#### Report on "Best Out of Waste" Competition

The virtual competition on "Best Out of Waste" was organized Dr APJ Abdul Kalam Science Society, K. R. Mangalam University on 24<sup>th</sup> December 2020 on Microsoft team app. More than 20 participants were present in the event including faculties and students.

The main aim to organize this event was to develop the sense for nurturing the ecosystem through some creative activities like "Best Out of Waste". In today's world reuse, reduce and recycling of waste materials play an important role. There are a lot of things around that are labelled as dump and every person can use these waste materials for useful purposes. Hence utilizing the best from unwanted things has become a generic necessity of every human's life.

Students from different departments participated in this event where they prepared very creative and innovative models and art items from different waste materials, which were then showed during the event. They used different reusable and recyclable waste materials like newspapers, shoe boxes, ice cream stick's and much more for creating some amazing and useful array leaving everyone totally impressed. The values like preservation, recycling, conservation, reduce, reuse etc are imbibed on the young heart and minds by demonstrating this noble act of caring our environment.

Ms. Himani from M.Sc. Physics showed a video and explained how we are degrading the environment by directly dumping of the plastic waste. Ms. Anjali from B. Sc. Physics shared her ideas through her presentation where she highlighted the importance of reuse, reduce and recycle the waste materials. Ms. Aarti from B. Sc. Chemistry made her video on reusing the waste materials. She made a pen stand using the waste plastic bottle and decorated it using waste packing paper. Mr. Yash Nagpal from B. A. Program shared his ideas through his presentation where he made some paper bags and also showed some data on preparing the paper and its uses. Ms. Chandani Vij from B. A. Psychology made a bird house using the ice – cream sticks and some waste paper and shared her beautiful ideas through presentation.

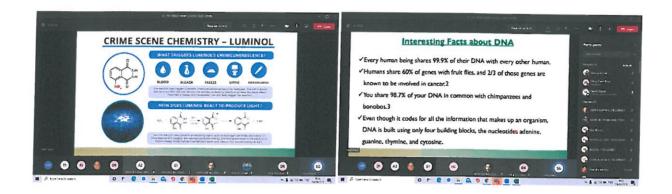
The students who were present during the event enjoyed a lot and they also shared their ideas that this event helped them to realize the importance of recycling and reusing waste material available to them.

Registrar

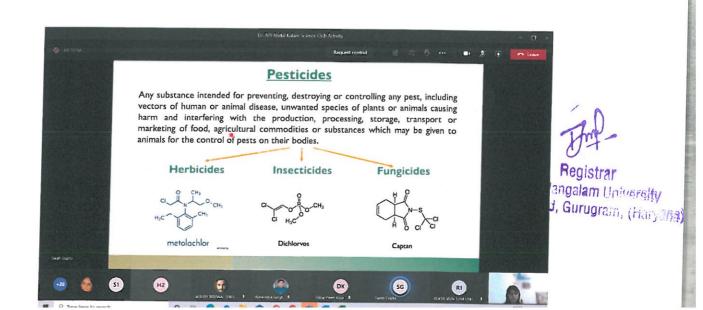
K.B. Mangalam University

Character Survey and Henyam

In her lecture, she highlighted the importance of chemistry and chemists in forensic science. Chemistry is used in forensic science to uncover information from physical evidence. In criminal cases, chemists analyze substances such as blood, DNA and gunpowder residue to attempt to determine when and by whom the crime was committed. In civil cases, chemists analyze DNA to authenticate valuable products and to identify fraudulent activity. Chemists also determine information from unsolved crimes and mysteries of long ago through other means of DNA analysis.

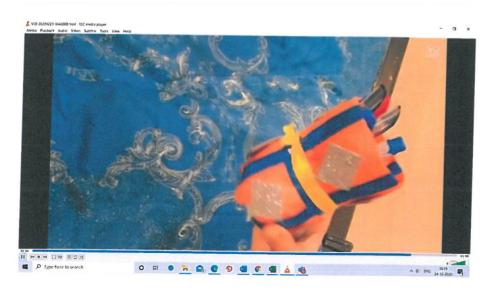


She emphasised the chemistry in agriculture field also. The goals of chemistry in agriculture fields is to understand the causes and effects of biochemical reactions related to plant and animal growth, to reveal opportunities for controlling those reactions, and to develop chemical products that will provide the desired assistance or control. Chemistry deals with compounds, both organic and inorganic, and agriculture deals with the production of organic products using both organic and inorganic inputs Thus Chemistry forms an integral part of agriculture from molecular to organ level. It plays a role from the basics of photosynthesis to the utilization of agricultural produce.





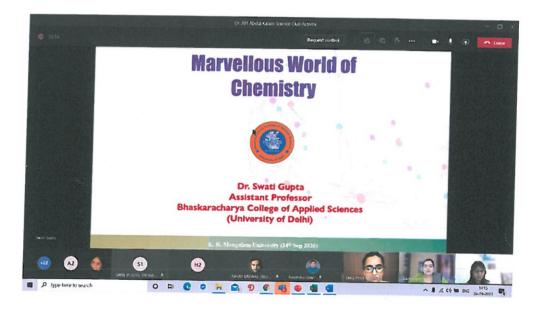




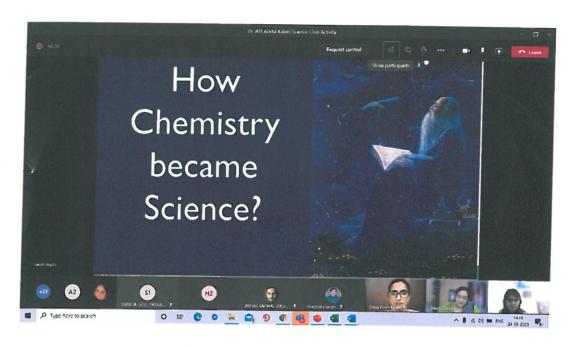
### A REPORT ON GUEST LECTURE "MARVELLOUS WORLD OF CHEMISTRY"

A webinar on "Marvellous World of Chemistry" was organized by Dr APJ Abdul Kalam Science Society on 24<sup>th</sup> September 2020 from 2:00pm onwards at online platform. The webinar was delivered by Dr. Swati Gupta, Assistant Professors, Bhaskracharya College of Applied Science, University of Delhi, Delhi - 110075.

The purpose of the webinar was to aware the students about importance of chemistry in our daily life. Two hours interactive session drew the attention of students towards the world of chemistry. Dr. Swati not only introduced basic concept of chemistry but also described role of chemistry started from our kitchen to our body.



Dr. Swati started the webinar from origin of chemistry dealing primarily with collections of atoms, such as molecules, crystals, and metals. She described how chemistry become the science. She told us that many chemists believe chemistry became a proper science in the eighteenth century. Early ideas that later became incorporated into the modern science of chemistry come from two main sources: **Natural philosophers** (such as Aristotle and Democritus) used deductive reasoning in an attempt to explain the behavior of the world around them and **Alchemists** (such as Geber and Rhazes) were people who used experimental techniques in an attempt to extend the life or perform material conversions, such as turning base metals into gold.



She further explained importance of chemistry in spices such as turmeric, ginger, cumin, cloves, fenugreek etc. in our daily life as they contain different chemical compounds. Turmeric is an antioxidant phytochemical known as a polyphenol containing a mixture of phenolic compounds called curcumin about 5%, and related compounds called curcuminoids, and a volatile oil about 5% with turmerone and zingiberene; cineole and other monoterpenes etc. Leaves and seeds of coriander contain many essential volatile oils such as borneol, linalool, cineole, cymene, terpineol, dipentene, phellandrene, pinene and terpinolene. In addition to this they are also rich in numerous anti-oxidant polyphenolic flavonoids such as quercetin, kaempferol, rhamnetin and epigenin. Fenugreek contains simple alkaloids consisting mainly of trigonelline (up to 0.13%), choline (0.05%), gentianine, and carpaine. The chemical constituents present in cloves are methyl amyl ketone, methyl salicylate. Clove oil is comprised of many different compounds, with the primary component being eugenol (49-87%), βcaryophyllene (4-21%), and eugenyl acetate (0.5-21%). The chemical compounds present in the spices are antiseptic and stimulates central nervous system, effects on the gallbladder and also the liver to produce more bile and regulate its viscosity. These compounds are anti - carcinogenic and prevent ling cancer, breast cancer etc.



In last, she also highlighted the scope for the chemists in forensic science laboratory, food industry, agriculture field and in many more fields. She concluded that the chemistry is very interesting and play an important role in our life. Everything is made of chemicals. Drugs are chemicals. Food is made from chemicals. Many of the changes we observe in the world around us are caused by chemical reactions. Examples include leaves changing colors, cooking food and getting yourself clean. Knowing some chemistry can help you make day-to-day decisions that affect your life. Chemistry concepts are important in other disciplines. It's key to cooking, biology, physics, and astronomy.

These are very few glimpse of his lecture. He also told about the chemistry of antiperspirant deodarant, lemon juice, nanoparticles. As we know, in today's time nanoparticles play an important role in our life as they are also used from medical field to cosmetic products. In the last, he concluded that the chemistry is very interesting and play an important role in our life. Everything is made of chemicals. Drugs are chemicals. Food is made from chemicals. Many of the changes we observe in the world around us are caused by chemical reactions. Examples include leaves changing colors, cooking food and getting yourself clean. Knowing some chemistry can help you make day-to-day decisions that affect your life. Chemistry concepts are important in other disciplines. It's key to cooking, biology, physics, and astronomy.