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Excel Technical Campus News Bulletin

Vol. 6; Issue: I; Periodicity: Quarterly; Jan - Mar 2022; Date of Issue: 01.04.'22

- Excel Engineering College (Autonomous)
- Excel Public School CBSE
- Excel College for Commerce & Science
- Excel College of Architecture and Planning
- Excel Polytechnic College & ITI
- Excel Colleges of Education

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EXCE

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Hon. Chairman's Message



I have often noticed that people forget their quarrels and rivalry with the passage of time. That is something positive and appreciable. But it cannot be applied to the studies you do in various courses. Once an interviewer finds out that you have majored in a particular stream, you are sure to get a generic question about that field and you are expected to be specific in your answer, if you want to impress your interviewer.

All cannot excel in every field. Similarly, you may not be a success in all what you do. Mistakes are bound to happen. But here is where your Godgiven memory power should be put to good use. Fail in the exam, but learn the lesson. Remember that each and every person who has succeeded in life has done it by learning the lesson even after the initial projects were utter failures.

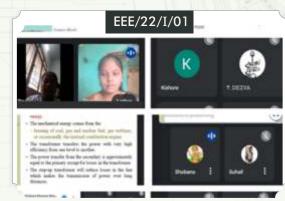
I wish that this year 2022–23 be the best for you by way of having gathered experience from your mistakes, from the truancy of climatic conditions, from unexpected disasters like the pandemic, and the heavy target laid on you with limited time to catch up; but with a determination on your forehead that you can and you will make it...

- Prof. Dr. A.K. Natesan



EPC's Department of Automobile Engineering, AUTOSPARTANS' ASSOCIATION, organized a Saturday event on 08.01.2022 through online mode (GOOGLE MEET). The Chief Guest, Mr. S. Srihariharan, M.D., Sri Sai Car Care, Anthiyur, spoke about the importance and benefits of E-Vehicles. He said that an electrical vehicle could be a great way for us as consumers to save a lot of money by avoiding gas and fuel. Moreover, there are so many other reasons why we should invest in an electrical vehicle in these modern days of Nano tech when the vehicles can be made less than half its actual weight. Avoiding gas & fuel is saving money for life. Lack of emissions and easy driving makes travel a comfort for those inside in the vehicle as well as for those outside. Low maintenance cost and reduction in noise pollution are the other benefits to be harvested from switching on to E-Vehicles.

EPC's Department of Electrical and Electronics Engineering, IEEE ASSOCIATION, organized a Saturday event on 08.01.2022 at Pallaniyappar Hall. Mr.R.Ravi,HoD Electrical and Electronics Engineering, delivered the welcome address, and Mr.M.Srikanth,HoD/Mechanical Engineering, delivered the key note address. Mr.A.SUBRAMANIYAN,Principal (i/c), delivered the presidential address. Ms.S.SHOBANA,Research Scholar, Vivekanandha Engineering College, delivered a Guest Lecture on "POWER QUALITY MANAGEMENT IN ELECTRICAL NETWORK".Ms.S.Gowsalya,Lecturer/Electrical and Electronics Engineering, delivered the vote of thanks. Nearly 50 students participated in the programme, gaining knowledge about optimizing the



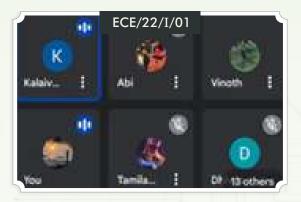
quantity of electricity consumed, and they also came to know about voltage sag & interruptions; transient over-voltages; fundamentals of harmonics; and about Power quality monitoring. The speaker dwelt on quality power saving where energy saved is money saved Direct savings to consumers come from lower energy cost and reactive power tariffs. Indirect saving is gained by avoiding circumstances such as damage and premature aging of equipment.



EPC's Department of Civil Engineering and Chemical Technology, SKYLON ASSOCIATION organized a WEBINAR, as a Saturday event on 08.01.2022. Er.K.R.Sakthivel, HOD/CIVIL delivered the welcome address and Mr.M.Srikanth, HoD/Mechanical Engineering delivered the key note address. Mr.A.Subramaniyan, Principal (i/c) delivered the presidential address, Er.P.Suresh Anand B.E., AMIE, Managing Director, SPG Construction and BIM Consultancy, spoke in detail about software usage in civil industry. He dwelt on the Analysis and Design of Steel Structure using Staad Pro and E- Tabs. Er.S.Hemalatha, Lecturer/Civil proposed the vote of thanks. The participating students found the Webinar very usefuland also learntabout the method of making presentation quality printer plots of geometry, in addition to performing code check, member selection of analysis and design cycles. Consequently, they were able to design concrete beams, column, slabs and footings.

EPC's Department of Mechanical Engineering, Organized a Saturday event on 08.01.2022 through Google Meet. Mr.V.Karthikeyan, Lecturer, delivered the welcome address, and Mr.M.SRIKANTH, HoD/Mech delivered the key note address. Mr.A.Subramaniyan,Principal (i/c) delivered the presidential address. Mr.P.ARUNPRAKASH, Engineer- Sales & Marketing, AMADA INDIA Pvt. Ltd., delivered alecture on "Career Guidance". 85 students participated in this webinar and they gained awareness about Mechanical-Engineering- Diploma job opportunities in the industry, and about selecting their field for their future career.

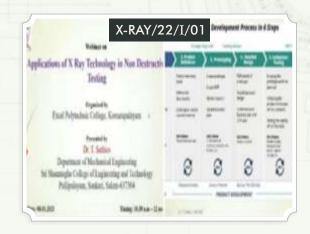




EPC's Department of Electronics and Communication Engineering, ELECTRONICS ASSOCIATION organized a Webinar as a Saturday event on 08.10.2022 in presence of the Principal-in-Charge, Mr.A.SUBRAMANIYAN, who delivered the presidential address. The Welcome Speech was given by Mrs. O.Obilakshmi, HoD/ECE. Mr.M.Srikanth, HOD/Mechanical Engineering delivered the keynote address. Mrs.S.KALAIVANI, AP/ECE, Rajalakshmi Institute of Technology, Chennai, delivered a Special Lecture on 5G Communication using Mobile phones. Nearly 30 students participated in this event and gainedample knowledge about 5G communication system used in real-lifesituations and about the technology used in mobile communicationusing 5G.

The Department of Technician X-Ray Technology's X-RAY ASSOCIATION, organized a webinar as a Saturday event on 08.10.2022. Mrs. O. Obilakshmi. HoD/ECE, delivered the welcome address, and Mr. M. Srikanth, HoD/ Mechanical Engineering, delivered the keynote address for the event. Mr. A. Subramaniyan, Principal (i/c), delivered the presidential address. Dr. T. SATHIS, AP/Mechanical Engineering, Sri Shanmugha College of Engineering delivered a guest lecture on Application of X-Ray Technology in Non-Destructive Testing. Mr. R. Venkateshwaran, Lecturer/Mechanical Engineering, proposed the vote of thanks.

Nearly 32 students participated in this programme and they gained ample knowledge about the Application of X-Ray Technology in Non - Destructive Testing in the industrial sector.





The Department of Science and Humanities/EPC, organized a Saturday event on 08.01.2022 through online mode (GOOGLE MEET). The HoD/S&H, Mr. Murugan, along with, Mr. Subramaniyam were present to grace the occasion. Mrs. Deivapriya M., Lecturer/Eng gave a detailed explanation of the topic of the Five Finger Theory of Communication, which covered all the verbal, non-verbal hearing, reading, writing and visualizing skills. The hosting the webinar for all the first-year students was effectively done and a total of 150 students attended the same. The host explained in detail how to present the students before the interviewer in all the aspects and had an interactive session with our students regarding the interview questions and to gain further knowledge about communicating and interacting with persons properly.

All the 37 students from Excel polytechnic College who participated in the on- campus Interview conducted by the Placement and Training coordinators in association with RANE (Madras) Pvt. Ltd., Chennai, at EPC campus on 31.03.2022, were selected by that company.

The Placement Drive took place in Sri Palaniyappar Memorial Hall. Mr. R. KRISHINAMOORTHY, Senior HR Manager of Emphasis Pvt. Ltd, Chennai, shared the expectations of recruiting companies and it was motivational in every way for all who were waiting for their chance to take part in the next On-campus Placement Drive. The Placement Director, Mr. Yuvaraj proposed the Vote of Thanks.

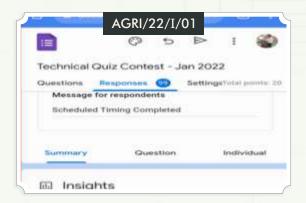




50 students from Excel Polytechnic College participated in the National Service Scheme project organized under the leadership of NSS Coordinator, Mr. Vasantha Kannan, at Govt Hr. Sec. School & Primary Health Center, Pallakkapalayam from 24.03.2022 to 30.03.2022(7 days). The Executive Director of the Technical Campus, Dr. K. Bommanna Raja, M.Tech., Ph.D., delivered the presidential address for the inauguration of the programme, and Prof. A. Subramanian, Principal (i/c), delivered the welcome address. The chief Guest Mr. Vadivel, the Headmaster, shared the expectations of the present day society from welfare organizations and thanked the students for coming forward to do service that was bound to give them satisfaction and joy.

12 Students from Excel polytechnic College belonging to the Department of Mechanical Engineering Year-II completed internship training under the guidance of Er. Mr. Sreekanth, HOD, along with staff members, Er. M. Ramachandran & Er. Ramesh, at Vishwam (TVS) Showroom, Tiruchengode &Aruna Wheels Ltd., Tiruchengode, from 28.03.22 to 01.04.22 (5 days). The students were thrilled to have had a first-hand experience of what they had learnt theoretically and it increased their confidence level. The two companies were thanked for having given the students of EPC a chance for the internship training.





The Department of Agriculture Engineering, Excel Engineering College (Autonomous) organized a Technical Online Quiz Contest on Jan-22, 2022. The Quiz Contest commenced sharply at 10:00 am. The Agriculture students participated in the online Quiz and gained knowledge about the basic concepts of Agriculture and about the current state of affairs of Agriculture. Finally, students who scored 40% and above got E-Certificates, and the Technical online Quiz Contest Jan-2022 concluded at 11:00 am. The benefitted participants numbered 98.



The Department of Agriculture Engineering, Excel Engineering College (Autonomous) and Excel Medical College for Naturopathy & Yoga jointly organized a one-day "Health Awareness programme" on 12.03.2022. The Awareness programme commenced at 10:00 am with the welcome address by Dr. Muthu Subramaniyam, Chief Medical Officer (CMO), Excel Medical College for Naturopathy&Yoga Hospital.Ms. P.Ramya, Final year student, Department of Agriculture Engineering, introduced Dr. Mohan Kumar, Lecturer Cum Medical Officer, Department of Pharmacology from Excel Medical College for Naturopathy &Yoga Hospital.The President of the gathering, Dr. G. Vijayakumar, Professor & Head, Dept of Agri, delivered the felicitation address. Then the Chief Guest Dr. K. Vibhas, Principal, Excel

Medical College for Naturopathy & Yoga, spoke of "Health Awareness" to all the students gathered. The programmecame to a close at 04:30 pm with a Vote of Thanks by Mr. C. Manoj Prabhu, A/P Agri. A total of 145 students participated in the programme.

GRAES – GReengrow Agriculture Engineers' Society of Department of Agriculture Engineering, Excel Engineering College (Autonomous) – organized a 'Project Contest on Emerging Trends in Agriculture' on 29.01.2022. The Contest commenced at 10:00 am. 68 Agriculture students participated in the Contest, in addition to 3 members of the faculty. The students showcased their project ideas and presented them as Ppt programs. The Contest concluded at 12:00 pm.





The Department of Agriculture Engineering, Excel Engineering College (Autonomous), organized a 'TALENTINA CONTEST' on 29.01.2022., Saturday. The Contest commenced at 10.00 am. Our Agriculture students participated in the Talentina Contest. The symbolic sketches and paintings by Lokesh M., and Pooja S. drew the attention of all. Finally, the Talentina Contest adjourned at 12.00 pm. 60 students along with 3 Staff Members drew benefit from this event to showcase their talents as well as to spread message about Agriculture and itsimportance.

On behalf of the Department of Civil Engineering, ICI Student's Chapter and IEI – Excel Group Institutions, organized a Workshop on "Innovative Techniques in Building Modeling" on 12.03.2022 from 10 am to 12:30 pm in the CADD Lab of the Civil Engineering Block. The same was conducted by Mr. C. Arun Doss, Assistant Professor, Civil Engineering Department, Excel Engineering College (Autonomous). He explained in detail about the application software that can draw different building plans, with their elevations and sectional views. Shortcut methods in creating innovative building models too were explained in a detailed manner. 120 students benefitted from this workshop.





The Department of Mechanical Engineering conducted a Paper Presentation and Technical Quiz on 12.03.2022 at 9:30 am under the auspices of Machine Warriors Association. Prof. Dr. N. Natarajan, Head of the Department of Mechanical gave the keynote address and prepared the audience for the talk with demonstration that was to follow. Dr. N. Venkatachalam went into the nuances and techniques involved in presenting a paper and he gave examples for the same with a Ppt show. A Quiz programme followed in which the students of Year-I to Year-III took part enthusiastically. The programme concluded at 11:30 am with a Vote of Thanks proposed by Mr. K. Tamilan, AP/Mech.

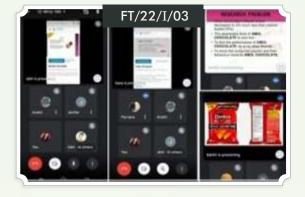
The Department of Food Technology, Excel Engineering College (Autonomous), organized an "Awareness Programme on Packaging and Labeling of Food Products" on 09.01.2022. During the Morning Session the students gained knowledge about food packaging and labeling requirements and in the afternoon session they did their presentation of packaging and labeling of specific food products. During the afternoon session, awareness was created among the students about the conditions of the packaged food and the need for packaging and labeling different food products according to their nature. Ms. Nivetha E., AP/FT, conducted the programme and the number of students who benefitted from this was 9.





The Department of Food Technology, Excel Engineering College (Autonomous) organized a Virtual Guest lecture on "Food Technologist as a Quality Engineer" on 29.01.2022. The guest lecture commenced at 10:30 am with the welcome address by Mr. M.Raja, AP/FT, and he introduced the Chief Guest. Then, the Guest Lecturer, Ms.M. Prethika, Analyst, Quality council of India, Ministry of Commerce & Industries, Govt of India, delivered the Virtual Guest Lecture on "Food Technologist as a Quality Engineer" to the Food technology students. 97 students participated in this Guest Lecture and benefitted from it.

The Department of Food Technology, Excel Engineering College (Autonomous) organized a "Webinar on infy TQ from ICAT Academy" on 22.01.2021. The webinar commenced as per schedule at 11:00 am. The students were able to learn the scope of placement training in their chosen field and about the details of companies that offered them placement with on-campus as well as off-campus drives for the year that lay ahead. A total of 26 students benefitted from this webinar.





The Department of Food Technology, Excel Engineering College (Autonomous) organized an awareness programme titled "Hands on training on Food Laboratory Practices" on 18.12.2021. During the Morning Session the students were given some activities such as Handling of glassware (Pipette, Burette, measuring cylinders, conical flasks, beakers), Identification of Lab Equipment, Explanation of SOPs. In the afternoon session the students were asked to prepare standard solutions of different molarity and normality. A total of 18 students participated in the programme and drew benefit from it.

The Department of Food Technology, Excel Engineering College (Autonomous) organized a poster presentation and making of food brand slogans on 23.01.2022. The guest lecturer Dr.P.Balamurugan, Associate Professor, FT/KSRCT, Tiruchengode, delivered a lecture on "Food Industry Sector" The session started in the morning at 11:00 am with welcome address given by Mr. M. Raja, AP/FT. The students got to gain some knowledge of the present scenario of food industry sector through this session. The total number of Benefitted Participants Students was 9.





The Department of Safety and Fire Engineering, along with the Safety Professionals Association of India (SPAI) organized a programme on "Career Prospects, Scope & Demand for Safety Engineers" on 12.03.2022 from 2 pm to 4.30 pm at the Safety & Fire Engineering Laboratory.

Dr. K. Boopathy, Associate Professor & Head of the Department of Safety & Fire Engineering, took this motivating and inspiring session with a lot of practical inputs and the 18 students who attended the programme gained immensely from it.





Excel Engineering College celebrated International Women's Day on 08-03-2022 at 10:00 am at APJ A/c Seminar Hall. Mrs. A. Anitha Rani, AP/ECE & Coordinator, Women Empowerment Cell, welcomed the gathering of resource persons, Principal, faculty members and students. The dignitaries and the students on the dais lightened the Kuthuvilakku to mark the celebration open. Mrs. M. Kaviarasi, Director/EPS, who was the special invitee honoured our Chief Guest with a shawl and presented her a memento. In her presidential address she shared her insights on women empowerment. She Encouraged the students that they should fix the target day by day and act upon, and that was the way of "Breaking the Bias"

and establishing Gender Equality. In her Special address, Dr. C. Karthikeyani, Head/IQAC, felicitated the function and called upon the girls to adopt gender equality keeping the family in mind, and becoming self-reliant. Ms. D. Mythili, AP/Civil, introduced the Chief Guest, Mrs. R. J. Megabarathi, founder of Mega Shopping Mall, who gave an inspiring and enthralling speech titled "Breaking the Bias". She spoke of her own life story of becoming an entrepreneur by adapting to the needs of the society. More than 400 students and faculty members from EEC took part in this special event and made it a grand success.

Prof. Dr. Karunakaran, Prof./Aero, has an inimitable style of optimism that shouts out that anything and everything is within the reach of our hands. Numerous are the fields in which he has excelled ever since entering the portals of Excel College of Engineering in the Department of Aeronautical Engineering, later on to become the Head Emeritus, as well as Profesessor. When most most of us lack the determination and the grit that make us say, "Never say Die", Prof. Karunakaran is the quiet worker who strives after perfection whether others recognizes it or not. Numerous are the recognitions and patents and cash awards that Prof. Kaarunakaran has bagged at the National and and also at International levels. On the occasion of Prof. Karunakaran's receiving the AICTE grant for the novel way of using industrial waste for



environment preservation, the Newsdesk of the Technical Campus of EGI felicitates him and wishes him many more miles of smiles ahead!



Excel Engineering College (Autonomous) - Department of Safety and Fire Engineering's, Safety Professionals Association of India (SPAI) organized the program "Mind Map for Assortment of Industrial Safety Process" on 12.03.2022 from 10 am to 12.30 pm, as a Saturday Activity, the venue being the Safety & Fire Engineering Laboratory. It was conducted by Mrs. S. Selvi, Assistant Professor, Dept of Safety & Fire Engineering, and the participants, 23 in number, profited from it greatly.

The Department of Computer Science and Engineering organized a Skill Development Programme on "Python using Tkinter" on 12.02.2022. The Session was handled by Dr.T.Ravichandran, Head, Department of CSE, Excel Engineering College, in TVR Hall, of A1 Block.





The Department of Computer Science and Engineering organized a one-day Webinar on "Emerging Opportunities in Gaming Industry" on 05.02.2022 through the online mode. The chief guest was Mr.M.K.Gokul Kennedy, QA Analyst, Itwicket, Hyderabad. He spoke in detail about the opportunities in the gaming industry and how to develop various gaming apps.

The Department of Computer Science and Engineering organized a Coding Contest using Python on 12.03.2022. The contest was conducted by Brain Dream Technologies, Coimbatore. The contest covering several rounds was something fascinating and informative to the students.





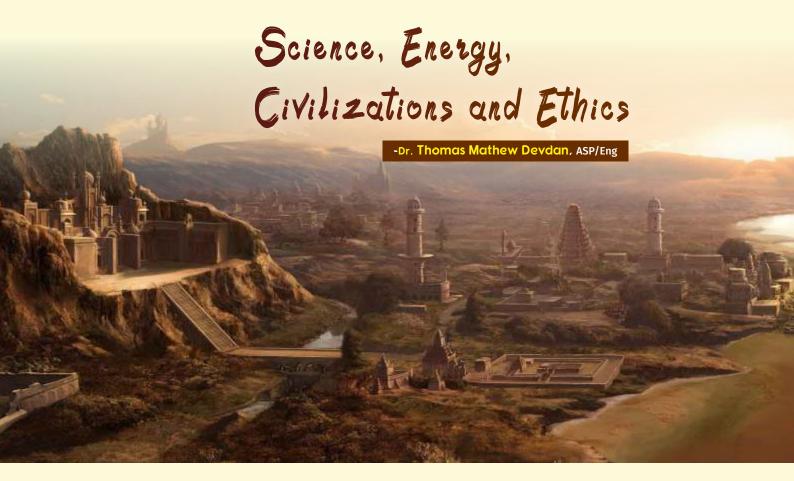
The Department of Computer Science and Engineering organized a one-day Webinar on "Startup for Stepping into the Future: Reality check for Techie" on 29.01.2022 through the online mode.Mrs. Shamsiya Shamsudheen, Coding Instructor, White Hat Education Technology Pvt. Ltd., was the Chief Guest and she spoke in detail about the various technologies used in industries.

The Department of Information Technology organized an Industrial Guest Lecture titled "Industry-Academia Collaboration— Challenges & Opportunities", on 12.03.2022, from 11:30 am to 01:20 pm. The venue was the IT smart classroom and 36 students from Year-II to Year-IV participated. The Guest Speaker was Mr.V.Sasikumar, Project Manager, L&T Infotech,Chennai, who delivered the Guest Lecture which was extremely inspiring and educative to the students. The students were exposed to Industry, a topic which has been receiving significant attention, recently. They were prodded to think about the need, necessity and routes for achieving. They also understood the problems faced due to development in science and technology, and how these issues could be tackled. The students also had the opportunity to interact with the speaker regarding their career prospects and about the means to achieve them.





The Young Farmers Club of Excel Public School (CBSE) goes ahead with its activities on a regualar basis. For these kids, "Everything in life begins with sowing." The EPS Tiny Tots took their first step in nurturing the seeds with their tiny hands. They gave their seedlings enough water and sunlight. Such activities enhance the kids' knowledge of the significance of plants and the need to protect Mother Nature.



Scientific temper is good and is to be stimulated, appreciated and promulgated. No doubt, it is Science that has brought humankind out of the darkness of ignorance, superstition and the ruggedness of human endeavour that gave no space forreflection, appreciation & relaxation. It is science that opened the vistas of man towards the Creator, the creation and upon himself too. Scientific temper is a divine mandate for believers and a sublime duty for unbelievers. Science is nothing but empiricism, where every truth is empirical, can be experimented, repeated and where the outcomes can be predicted with the varying degrees of certitude according to the circumstances. And science is rational or reasonable enough to be patient and understanding, and is never an escapist.

The providence of science is not limited to removing superstitions and false beliefs, but it is much more that. When the primitive man saw the sun as a god, science came to show him as a God-given source of energy and promoter of life. We might have conquered the Everest and the Moon and the Mars, but we have not yet fully mapped the utilitarian source of the sun as a source of energy that promises unlimited possibilities, all free of cost. The faster we learn to tap the energy potentials of the solar heat, light and even vitamin reserve, we can claim to be truly possessing the scientific temper.

Every civilization has had its scientific temper, however crude it might seem to us today. Civilizations have come and gone and left us a legacy of scientific advancement though it might have had religious or superstitious overtures. In the Greek civilization, philosophy was science and in ancient Hindu / Indian civilization, Philosophy was Theology. Though Christian philosophy built upon Greek philosophical foundations, distinguished itself from Christian Theology, the final development was the emergence of Empiricism, Materialism and finally the dark abyss of Agnosticism. The present permissiveness pervading the whole world had its roots in a philosophy that was devoid of Theology or simply put, ethical values.

Ethics is an all-pervasive moral code irrespective of religious barriers and cultural milieus. Simply put, it is ethics that keeps the wheel of human life well-oiled and in good running condition. Think of a society where ethics is in doldrums and you can find a tottering society about to tear into tatters. This essay tries to skew on to the fact that a scientist need not be an atheist; while implementing scientific advancements, he does not have to sacrifice ethical values on the altar of science. And finally, it is science, ethics, and the practical need to provide sources of energy that will enhance the growth of a healthy and wholesome civilization.

Now, there are scientists who say that cutting green-house emissions is not the only way to solve the problem of global warming. If man-made technologies are capable of heating the planet, they are probably capable of cooling it down again. Known as geo-engineering, it holds that, rather than trying to change mankind's industrial habits, it is more efficient to counter the effects, using planetary scale engineering. This general approach has been on the table for decades. A paper on climate change prepared for President Lyndon Johnson in 1965 made no mention of cutting greenhouse-gas emissions. It nonchalantly proposed dealing with the results by dumping vast quantities of reflective particle into the ocean to increase the amount of sunlight reflected into space.

The scientists, now, have accumulated evidence for global warming and its possible consequences, so the scientific and political consensus has favoured attempts at reducing carbon emission through taxes and regulations and subsides, many of them directed at factories and motor cars. More needs to be done. Greenhouse-gas levels have gone on rising and the threat of Maldivian Islands being submerged is not an imaginary one. The rapid industrialization of China and India means they are going to rise even more. The gloomy outlook has encouraged new interest in a technological fix. Many big ideas for global cooling have been suggested over the years. They include seeding the skies with compounds to encourage the formation of low lying, cooling clouds; building a giant sunshade in space; and dumping iron in the oceans to encourage the growth of algae that would take in carbon when alive and trap it in on the sea floor when dead.

Blocking out the sun technologically might keep the planet cool, but it would do little to address other effects of high carbon dioxide levels, such as the acidification of the oceans. In fact, geo-engineering inspires opposition for 'various and sincere reasons that are not wholly scientific.' Others might say the same about its support. One early enthusiast was Edward Teller, a Hungarian physicist who is cited as an inspiration for many a geo-scientist, who now tends to see geo-engineering research as a form of insurance policy against the effects of continued global warming, not as an excuse for downplaying the problem, not for tolerating more carbon emissions in the meantime.

We might expect green groups to applaud this approach. More often, they resist it in principle, and have little time for conducting research involved. At worst they seem to see it as a scheme by devious scientists to thwart Nature's just revenge. So, even scientists seem to acknowledge a transcendental power whose retribution they fear in spite of being empirical in every way. Ultimately, we may conclude that few scientists have dared to play with nature in every civilization. So, there is a responsible fear here that an illusory hope of a scientific fix might undermine the sort of dogged and grubby policy solutions, such as carbon caps and carbon quotas, needed for taking the fight against climate change to its source. The precautionary principle which calls for extra prudence in areas of scientific uncertainty, also applies here. You can look that it was found itself performing on the planet. To start a second experiment, in the hopes of counteracting the first, would be, to put it mildly, rather risky.

Our nation is already accused of keeping the problem of greenhouse effects on the backburner, especially as China has come forward boldly to address with its population control measure of one child policy and having larger forest reserves of the green umbrella. Things seems to be easier on the other side of the Himalayan wall due to the Marxist government offering zero tolerance or very little tolerance to the masses with regard to government policies, whether it comes from a government that is representative or the actual people or not. No doubt, due to the pressure from the International Monetary Fund or the real need of sufficient green umbrage, the Kasthurirangan report recently submitted that the green mountains and valleys of the Western Ghat be declared as forest areas with immediate effect. How would the people of the tiny sylvan State of Kerala react when the land they were holding for over a century, paying taxes and in between buying and selling with proper registration, is converted to a forest area where no more development will take place and felling of trees will not be allowed?

The population of India has crossed the 1.35 billion mark and science and technology has to play its parts mainly through the education of the masses, trying not to infringe on the freedom of the citizen as enshrined in the constitution. If the government of China succeeded in curbing the growth of population within its territory, it need not be an index of the efficacy of a totalitarian regime, which has to suppress sporadic democratic outbursts and enforce its sway on the legitimacy of the countries it had annexed in the recent historical milieu. Hence, putting together Science, Energy, Civilization and Ethics is no cakewalk for the scientists or for the governments or for the masses. Doldrums will occur when any two opposing winds of change begin to blow. And we have here in question more than two issues which cannot be dealt with in isolation.

No doubt, it is science that has provided weapons of mass destruction, just as it is science that has given us penicillin, chemotherapy and organ transplant. If were to discuss peace in the world in all earnestness and eschew war altogether, the peace of the people of countries not thriving, but struggling to live, on the production of arms and ammunitions is sure to be thwarted. If science is to provide a wholesome development for mankind, it has got to be tempered by the values of our civilization, nagging energy concerns and ethics. Let science be mellowed by ethics; let civilizations be founded on the principles of using energy in such a way that posterity will be taught the same lesson to save energy in every way possible.