

Excelssior Education Society's

K. C. College of Engineering & Management Studies & Research

Mith Bunder Road, Kopri, Thane (E)

Report on Two-Days Faculty Development Program

on

“Emerging Areas of Research in Science and Environment”

DAY-1: 5 JUNE 2021

The department of Humanities and Applied Sciences has organized two days FDP on Emerging Areas of Research in Science and Environment on 5th and 7th June, 2021.

On world environment day, the first session was taken by Professor Yogendra Shastri, Department of Chemical Engineering, IITB on Incorporating Sustainability in Engineering Design. Yogendra Shastri did B. Tech. in Chemical Engineering from LIT Nagpur, M. Tech. in Systems and Control Engineering from IIT Bombay, and PhD in Bioengineering from the University of Illinois, Chicago. Subsequently, he was a post-doctoral research associate at the Energy Biosciences Institute, University of Illinois at Urbana-Champaign. His talk was focused on sustainable development, principal of green chemistry, green engineering and biomimicry.

Our second speaker of the day was Dr Seema Garg. She has Twelve patents on her credit and a number of publications in journals of repute viz. Royal Society of Chemistry (RSC Advances), Elsevier (Journal of Colloid and interface Science, Separation and Purification technology, Applied Surface Science, J of industrial and Engg. Chemistry, Ecotoxicology and Environment Safety, J of photochem and Photobiology etc.), and MDPI journals (Materials, Catalysts and Nanomaterials). She has completed a project as a Principal investigator a DST-NRDIO sponsored bilateral Indo-Hungarian Research Project with a total funding of 1.74 Crore. Now, she has again got the approval as Co-PI of DST-NRDIO sponsored bilateral Indo-Hungarian Research Project with Prof Pravin Ingole and Prof. Sameer Sapra, IIT Delhi. She elaborated her research work on treatment of waste water using Green Technology. She explained synthesis of composites of Bismuth oxyhalides (BiOX, X= Cl, Br and I) using different leaf extracts. She focused following points in her talk that Leaf extract is known to possess anti-oxidant and stabilizing properties that aids in the immediate reduction and stabilization of the metal ions into their corresponding nanostructures. She also discussed the preparation of BiOX and their composites by hydrolysis method (without leaf extract). She showed characterization methods also in her talk SEM, XRD, FTIR, UV-vis DRS.

DAY-2: 7 JUNE 2021

On second day, first session was conducted by Dr. Soumik Siddhanta. He was Assistant Professor at the Department of Chemistry, Indian Institute of Technology Delhi, India. Before joining IIT Delhi, he was a post-doctoral fellow in the Department of Mechanical Engineering, Johns Hopkins University. He elaborated the chemistry of nanostructured materials at the interface of chemistry, biology and materials science. He emphasised on interdisciplinary research in the frontier areas of nanotechnology; Energy, Environment and Healthcare, modern methods of synthesis, spectroscopic

characterization and imaging of nanomaterials. He concluded his session with the following outcomes

Design and develop the desired nanostructured materials

Understand the structure-property relationship for applications of nanomaterials

Initiate a research activity in the field of nanostructured materials.

Promoting newer research endeavour in the challenging domain of nanomaterials

Last session was taken by Dr. Hema Bhandari, she is working as an Assistant Professor in Department of Chemistry, Maitreyi College, University of Delhi for last 10 years. She obtained her PhD degree from Indian Institute of Technology, Delhi and NPL, CSIR New Delhi in Polymer Science and Engineering. Her area of specialization is conducting polymers, Anticorrosive smart coatings, Nanocomposites, Antistatic coating and waste water treatment. She has published 25 research articles. She delivered her talk on Smart Conjugated Polymers and their designing with anticorrosive Properties. She explained conjugated polymers and their modifications with advanced anticorrosive properties. She also discussed designing of conjugated polymers by using various strategies such as use of substituted monomers/comonomers, different dopants, metal/metal oxide nanoparticles and effect of various components in polymers matrix such as presence of substituents/comonomers, dopants and metal/metal oxide nanoparticles on their structural, morphological, thermal, physico-mechanical and anticorrosive properties.

There were 68 participants who participated in this two days FDP. The last session was concluded by vote of thanks to all speakers, participants, management and principal.



Dr. Shelley Oberoi
Associate Professor and Head
Department of Humanities and Applied Sciences
KCCEMSR, Thane (E)

Zoom Meeting Screenshot

Participants (74)

- Neha Khare(Me)
- Deepak Khabale(Host)
- Dr. Seema Garg
- Dr. Nuzrath Junaidi
- Preeti Zade
- Vibhavani Kulkarni
- deepthi katari
- Anshu
- Jagriti Gaythane
- Dr. Rajratna Tayade
- G. Sasi Rekha
- Dr.R.Pushpalatha
- Pranjal Jog
- Aarti bakshi
- Neeta Vanage
- Agarsana TK
- Dr.S-Preethi
- Trupti Paradkar
- Dr. Priti Shrivastava
- Rajendra Prasad

PowerPoint Slide:

BiOCl: Azadirachta indica (BiOCl-N), Ocimum Sanctum (BiOCl-T) and Saraca indica (BiOCl-A)

JCPDS card No.06-0249

BiOCl

Scale: 20° 2θ

YouTube Video Screenshot

Let us make every day an environment day!

Thank You!

yshastrii@iitb.ac.in

<http://www.che.iitb.ac.in/ys/index.html>

Facebook page:
<https://www.facebook.com/SustainableEngineeringPrinciples/>

K. C. College of Engineering & Management Studies & Research, Thane(E)

FDP on Emerging Areas of Research in Science and Environment

59 watching now · Started streaming 106 minutes ago

Top chat:

- smitsa badwe very informative
- Vibhavani Kulkarni is there any feedback or attendance link ? please let us know about it
- Arundhati Chakrabarti informative and a lot of takeaways from the session
- Shelley Oberoi yes
- Trupti Paradkar very informative session
- vikas raut Excellent session for sustainable development
- Shelley Oberoi will forward attendance
- Priya Joshi good mornig. will the content be shared?
- Neeta Vanage informative session
- Monika Tyagi send the feedback link please
- Mr. Sachin K. Dhawale Every day is an environment day
- Prof. Neha Khare Say something...

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Skill Development Program for students in collaboration with



Excelssior Education Society's
K. C. College of Engineering and Management Studies and Research
(Affiliated to the University of Mumbai)
MithBunder Road, Near Hume Pipe, Kopri, Thane (E)-400603

Activity Report

File No. / Ref. No. Academic Year: 2020-21

I. Basic Details:

Name of The Activity: Faculty Development Program - Emerging Areas of Research in Science and Environment			
Day & Date of Conduction	Name of Faculties	Department/ Committee	Coordinator Name & Phone no.
05.06.2021- 07.06.2021	Dr. Shelley Oberoi A.P. Neha Khare	Humanities & Applied Sciences / Electronics & Telecommunication	Dr. Shelley Oberoi shelly.oberoi@kccemsr.edu.in 9873412922 A.P. Neha Khare neha.khare@kccemsr.edu.in 9757410510
Time	Venue	Activity for class / group Student/Neighbourhood (number of participants)	Nature: Academic/co-curricular / extracurricular/ Environmental/ social/ other
4 Hrs Per Day	Microsoft Teams - Online Platform	68	Research & Environmental

II. Brief Information about the Activity (Criterion no -): 3 & 7 as per NAAC

Topic/ Subject of the activity	Two-Days Faculty Development Program on “Emerging Areas of Research in Science and Environment”
Objective for conducting the activity	To motivate faculty members for integrated research in emerging fields of science.
Methodology	Microsoft Teams - Online Platform
Outcome	At the end of the faculty development program all the participants will able: To know the Emerging Areas of Research in Science and Environment.
Budget Received (if any)	Not Applicable

III. Proofs attached: communication letters/notice/Details of Guest/authenticated signed list of participants/ certificate format (if any)/ document/payment vouchers/one page report/photos/feedback analysis/ any other

1. Communication Letter	2. Details of Guest	3. Registration Details
4. Flyer	5. Report	6. Photos
7. Appreciation Letters for Speakers	8. Participation Certificate	9. Attendance & Feedback Analysis

Nkhare

Arundhati Chakrabarti

Arundhati

Vilas Nitaware

Asst. Prof. Neha Khare

Dr. Arundhati Chakrabarti

Dr. Vilas Nitaware

Dr. Shelley Oberoi

Coordinator Signature

IQAC Coordinator

Principal