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SPIE STUDENT CHAPTER LUMS

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About SPIE Student Chapter Lahore University of Management Sciences (LUMS)

SPIE student chapter LUMS, is a newly established chapter in Pakistan. As an emerging chapter, our aim is to learn, discover and innovate in the field of Optics and Photonics. LUMS has a very experienced faculty and state of the art laboratories. We have collaborations with foreign universities. Under the banner of SPIE student chapter, we are doing many useful activities for the optics education.
Details of Expenses

Opening Budget $500

1- Hands-on Workshop on Mathematica $30
   a) Refreshments: $30

2- Industrial Tour to Bulleh Shah Packaging (Private) Limited, Kasur $170
   a) Transportation expenses: $120
   b) Food expenses: $50

3- Outreach Activity $270
   a) Outreach Activity 1
      Transportation: $20
      Refreshments: $80
      Consumables for the experiments: $20
   b) Outreach Activity 2
      Transportation: $50
      Refreshments: $70
      Consumables for the experiments: $30

4- Meetings and gatherings of the chapter’s members $30
   a) Refreshments: $30
Hands-on Workshop on Mathematica

Date: Wednesday, 14th Nov, 2018

Physics Department at Syed Babar Ali School of Science and Engineering (SBASSE), Lahore University of Management Sciences with the collaboration of LUMS SPIE Chapter organized a Hands-on Workshop on 'Mathematica' on Wednesday, November 14, 2018. Mr. Farid Pasha from Wolfram Research Inc. was the guest speaker at the workshop.

Workshop Contents: Understanding Notebook Environment, Using different methods to enter calculations, Computing Basic Calculations, Making Interactive Models, Sharing Mathematica Documents, 2D & 3D Graphics, Visualizing Data, Algebraic Manipulation & Equation Solving, Calculus, Importing Data, Writing Functions

About the Speaker:

Farid Pasha joined Wolfram Research in 2011 as a member of the International Business Development group, where he works with customers in Southeast Asian countries and the South Africa and Pakistan regions. Prior to joining Wolfram Research, he worked for ten years in the oil and gas industry. Farid provides Mathematica trainings and seminars at universities, community colleges, and high schools in his region. He is experienced in working with educators on how to integrate Mathematica into their courses.
Taking forward its aim of providing students of the Syed Babar Ali School of Science and Engineering (SBASSE) an industry relevant education, the LUMS SPIE student chapter arranged an industrial tour to Bulleh Shah Packaging (Pvt.) Ltd. in Kasur.

To provide a closer look at their operations, the students were invited to the factory by Usman Rafique, Assistant Manager, Human Resource Department of Bulleh Shah Packaging. The students were first given a presentation about the recycling of old paper and the production processes at the company. They were then taken on a tour of the production units at the establishment, helping the students gain an understanding of different types of paper manufactured with raw materials and local ingredients. The trip proved to be a great learning experience for the students.
Outreach Activity

SPIE LUMS recently arranged two outreach activities for optics education for school children in Lahore. The first activity was held at Government High School, Chung Khurd, (near LUMS) in Lahore on February 7, 2019 (almost 60 students), and the second activity was organized at Syedanwala Higher Secondary School, Syedanwala, Kasur on February 9, 2019 (almost 70 students).

The activities educated the primary and secondary level students about the nature of light and its properties. Four SPIE chapter officers, Muhammad Kamran, Ali Raza Mirza, Aamir Hayat and Ubaid Ullah arranged these activities, which comprised basic experiments using locally available items, conducted to show scattering, dispersion, guided propagation, and the nature of light. Students enjoyed and participated in these activities as it created an interest in them to understand the experiments related to light and optics. The faculty advisor of the SPIE chapter at LUMS, Dr. Muhammad Faryad, Assistant Professor of Physics felicitated all the student members of the Chapter for arranging the optics related outreach activities for school children and expressed the hope that these will help raise the number of professionals working in optics and photonics in Pakistan.
Meetings and gatherings with the chapter’s Members

Regular meetings and gatherings were arranged with the officers, advisor and members of SPIE student chapter LUMS. The purpose of these gatherings and meetings is to plan different activities. These gatherings also helpful in the development of the chapter. Total three meetings were held.
Planned Activities for the Future

In 2019-20 we are planning the following activities:

1. An industrial tour to a photovoltaic solar cells industry.
2. We are planning to participate in a Science Mela (Science Fest) being organized by the Khwarizmi Science Society, Lahore.
3. We are also planning to target more schools for the outreach activities because these outreach activities are the most important part to promote light base education.
4. We are interested in arranging a visiting lecture by a foreign speaker for the undergraduate and graduate students at LUMS.
5. Seminar for students.