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**FACULTY DEVELOPMENT PROGRAM**  
**ORGANISED BY**  
**DEPARTMENTS OF CHEMISTRY, PHYSICS,**  
**AND MATHEMATICS**

### Atomic Absorption Spectroscopy (AAS)

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The Department of Basic Science, MVJCE, has organised a Faculty Development Program (FDP) from 25th March 2025 to 27th March 2025 at Seminar Hall 1, MVJ College of Engineering. The Faculty Development Program (FDP) aimed to provide an in-depth understanding of advanced materials characterisation techniques. The program sought to enhance the participants' knowledge of the latest tools and methodologies used in material analysis and to facilitate the application of these techniques in both academic and research settings. The program featured interactive sessions and technical discussions led by esteemed resource persons from premier institutes. The details of the forenoon session are as follows.

Date of the Event	26.03.2025
Title of the Event	"Atomic Absorption Spectroscopy" (AAS)
Guest Speaker	Dr. A. Kumar, Managing Director, Chariton Research Institute
Organized by (Department name)	Department of Physics, Chemistry and Mathematics
Name of Department event coordinators	Dr. Bharath.D (Assistant Professor and HOD, Department of Physics)

Dr. Preethi, HoD, Department of Chemistry, welcomed the Chief guest, and Prof.Swati Lal, Department of Chemistry, introduced the Chief guest to the audience. The session was concluded with a vote of thanks by Dr.Swetha from the Chemistry Department.

Dr. A. Kumar introduced the fundamental principles behind AAS and how it is used for material characterisation. Participants learned about the components and working of AAS equipment, including the atomiser, light sources, and detectors. The speaker enlightened the participants about the various fields where AAS is applied, including environmental monitoring, metallurgy, and materials science. The importance of sample preparation in obtaining accurate and reproducible results in AAS analysis was also emphasised.



**Figure 1:** On the dais: Dr. A. Kumar, Managing Director, Chariton Research Institute, addressing the faculty.

Dr. A. Kumar shared his extensive knowledge of material characterisation and gave insights into atomic absorption spectroscopy's industrial and research applications. The participants highly appreciated his expertise and practical approach.

The FDP saw a participation of 35 faculty members from various engineering disciplines. The participants engaged actively throughout the program, contributing to discussions, asking questions, and benefiting from the extensive experience shared by Dr. A. Kumar.

**Outcome of the event:**

The FDP was designed to encourage active interaction between the resource person and the participants. Several Q&A sessions allowed participants to clarify their doubts and discuss real-world applications of the techniques. The FDP provided a platform for faculty members from different institutions to network, share ideas, and explore potential collaborations in research and academic activities. The program was well-received by the participants, who gained a deeper understanding of advanced techniques used in material analysis. The interactive sessions and expert lectures contributed significantly to the program's success.