

**One-day Industrial Workshop  
on  
“Analytical Techniques for  
Materials Characterization  
2023” (AToMiC2023)**

**13 September 2023**



**Organized by**

**Department of Physics  
School of Advanced Sciences  
VIT-AP University, Amaravati, Andhra  
Pradesh – 522 237, India**

**Venue: AB1 - Einstein Hall,  
VIT-AP University**

**About VIT-AP University**

With a history of 39 years of innovation in education and research domains, VIT has emerged as a forerunner in delivering quality education. Consistently ranked among the top educational institutions in the country, the VIT group of institutions take pride in scaling new heights of knowledge and excellence in research through hard work and dedication. In keeping up with this tradition, the pioneering leadership at VIT-AP University strives to resonate the academia-industry partnership while forging ahead with decisiveness and dynamism to become one of the leading Universities. VIT-AP University offers a whole range of avenues and training to explore one's abilities and nurture to develop core competencies while engaging the students in a holistic transformation of becoming better global citizens with the motto of 'Apply knowledge- Improve life'.

**About the department of Physics**

The Department of Physics was founded in 2017 with a faculty of five. Currently, it is thriving with a strength of 25 highly qualified Physicists with well-established research track records. The Department of Physics offers M.Sc. Physics program regular and M.Sc. Physics with specialization in Energy Science and Technology. We offer a Ph.D. program with a fellowship for three years. In addition, we extend our financial support to our scholars with a contingency fund, open-access publication fee and travel expenses for paper presentation at international conferences.

The School of Advanced Sciences is envisaged to develop into a Centre of Excellence in Education, Research, Innovation and Entrepreneurship that generates a transformative impact on the society. Therefore, students are trained on foundational concepts leading to an advanced level of broad understanding of engineering physics equipped with practical skills that enable them to address challenging engineering problems. Laboratory training complements their class-based learning by giving hands-on experience of using devices for a variety of measurements to impart knowledge of experimental design. Furthermore, students have an opportunity to engage in research projects with faculty.

Research at our department helps students develop essential analytical and problem-solving skills to deal with the current and future technological challenges. Major domains of departmental research include Nanomaterials, Photonics, Biophysics, Quantum Physics, Computational Physics, Semiconducting Materials and Devices, Magnetic Materials, Energy harvesting materials, Sensors, Thin films, Polymer science and Condensed Matter Physics.

**About the workshop**

The one-day industrial workshop brings together academic and industrial researchers giving the opportunity to exchange ideas and network with industrial experts. It provides an overview and critical comparison of major analytical techniques for 'materials characterization'. It will also emphasize

practical applications in physical, chemical, biomedical and engineering domains. Topics covered are suitable for undergraduates, postgraduates, Ph.D. scholars, and faculty.

### Topics of the workshop

- *Basics and sample on a Scanning Electron Microscope*
- *Fundamentals and Applications of X-Ray Photoelectron Spectroscopy*
- *ThermoFisher ARL XRF and Spark-OES: Technique and Few Applications*
- *Current trends in molecular spectroscopy*
- *Characterizing Ferroelectric Materials and application-based Ferroelectric Testing*

### Resource Persons

- **Dr. Karthick Balasubramanian**, Sales Development Manager, Thermo Fisher Scientific India Pvt. Ltd.
- **Dr. Pragati Chaturvedi**, Sales Manager, Thermo Fisher Scientific India Pvt. Ltd.
- **Dr. Abhijit Sen**, Application Manager, Thermo Fisher Scientific India Pvt. Ltd.
- **Mr. Amit Joshi**, Application Manager, Thermo Fisher Scientific India Pvt. Ltd.
- **Mr. Aniruddho Purkayastha**, Micromatic Systems and Radiant Technologies Inc, USA, Kundli, Sonipat, Haryana.

### Call for Participation

Applications are invited in the enclosed form from faculty, Ph.D scholars, M.Sc and B.Tech students of Universities and Colleges. Complete your registration and payment by using the following QR code or <https://shorturl.at/tzCJ2>.

### Registration fee

- Industry/Faculty/Postdoc: ₹ 500
- Ph.D/Students: ₹ 300
- Deadline: 9 September 2023



### Coordinators

#### Dr. Prabhakaran Thandapani

Assistant Professor, Physics, SAS, VIT-AP University

#### Dr. Nallamuthu S

Assistant Professor, Physics, SAS, VIT-AP University

### Faculty Members of Physics

Prof. V.R.K. Murthy, VIT-AP

Dr. N. Madhusudhana Rao, VIT-AP

Dr. M Venkata Rajanikanth, Associate Dean, SAS, VIT-AP

Dr. Lakshmi Sowjanya Pali, HOD, Physics, SAS, VIT-AP

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Dr. S. Roopas Kiran, VIT-AP

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