

# DEPARTMENT OF PHYSICS SCHOOL OF MATHEMATICAL AND PHYSICAL SCIENCES CENTRAL UNIVERSITY OF KERALA

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Minutes of the Meeting: PG Board of Studies

### 29.07.2016

Members Present:

- 1. Professor K J Thomas (Chairman)
- 2. Professor P. Kolandaivel, Bharathiar University
- 3. Dr. Alok Sharan, Pondicherry University
- 4. Dr. Vincent Mathews
- 5. Vijay Shenoy, IISc, Bangalore (on Skype)

The meeting began at 11.00 AM on 29.07.2016 in the office of the Dean, SPS. The members of the board have discussed and deliberated on the content of the Programme Structure. After the deliberations, the Board of Studies has suggested some modifications to the existing syllabus. The modified programme structure is approved and enclosed herewith.

The programme structure with the modified syllabus will be in force for students admitted in 2016-17 academic year onwards.

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Dr. Vincent Mathew

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Dr. Alok Sharan

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Professor K J Thomas

## PHY5304 Experimental Physics III

Course Code	PHY5304	Semester	Ш
Course Title	Experimental Physics III		
Credits	4	Туре	Core

#### **Course Outcome**

Students get training in

- 1. Modern instrumentation
- 2. Nuclear detector handling, Data analysis,
- 3. Soft skill development
- 4. Scientific paper writing

#### **Course Structure**

#### Experiments:

Nuclear Physics: GM counter, scintillation counter, alpha, and gamma detectors, analysis of nuclear reaction data.

Solid state physics: Hall effect, four probe, band gap measurement, optoelectronic devices, Kerr effect, analysis of X-ray diffraction data. Thin film preparation.

Spectroscopy: Zeeman effect, Laser Raman spectra, constant deviation spectrograph, ESR, NMR, Ellipsometry.

#### Mini project:

Students shall take up one extended experiment involving writing of report in the form of a manuscript.