# **SEM Facility**

#### **Rules for using SEM facility at PSG IAS**

- > Nanotech facility services can be availed on charge basis.
- > Prior registration with payment is essential to avail any of these facilities.
- Appointment will be given as per queue and the allotted time for the slot will be informed through E-mail from <u>sem@psgias.ac.in</u>
- > For a better analysis basic details about the sample should be given.
- Before giving the sample for SEM analysis, it is suggested that the sample is characterizedby any other techniques such as XRD, TG-DSC and DLS etc.
- > No refund of the payment made in any case.
- External colleges & Universities and industry users should pay the charges in advance before the characterization is carried out.

Contact details: Email: <u>sem@psgias.ac.in</u> Tel: 0422 4344000 extn: 4321

Faculty In-Charge: Dr. Anuradha M. Ashok, Professor, PSG IAS, Email: anu@psgias.ac.in

## **SEM & EDS Specification**



## Model: Carl ZEISS EVO 18- Germany-

Operating modes: Secondary electron (SE) and Backscattered electron (BSD) Modes. Up to 200 nm resolution depends up on samples. It is attached with AMETEK Team V.4.3 EDS detector.

#### **SEM Sample preparation**

- SEM specimen preparation facility with Au/Pd coating facility can be availed on chargeable basis
- ▶ User may also prepare their SEM Samples by themselves.
- SEM specimens of biological samples should be prepared by the user. Coating can be given at our facility

## > Metallic samples

• Bulk metallic samples size should be less than **1cm \* 1 cm \*1cm** and also base of the sample should be perfectly Flat.

## > Powder samples

• Powders samples should be in perfectly dried condition. Quantity of the powder samples needed **5 to 10 grams**.

## Biological Samples

• Biological Samples should be in perfectly dried condition. Base of the sample should be perfectly as Flat (Bead, Solid etc).

S.No		Analysis	Internal	External	Industry
		-	Per Sample		
1	Coating		100 /-	250 /-	500 /-
2	SEM Analysis		500 /-	750 /-	1500 /-
3	EDS	Spectrum only ( No image)	100 /-	250 /-	750 /-
		Point analysis	200 /-	400 /-	1000 /-
		Line Scanning	200/-	250/-	750/-
		Elemental mapping	200 /-	500 /-	1500 /-
4					
5	One Slot for 45 Minutes*		1500 /-	2500 /-	5000 /-
6	Including 18% GST				

## **Charges for using SEM Facility at PSGIAS**

\* Charges are applicable per slot basis and per sample basis. This will depend on nature of the smpeand data required.

## Payment account details:

<b>Beneficiary Name</b>	: PSG Institute of Advanced Studies.		
Account Number	: 1481412317.		
GST No.	: 33AAATP2881NAZY.		
Bank Name	: Central Bank of India.		
Bank Address	: Peelamedu, Coimbatore - 641 004.		
IFSC Code	: CBIN0280913.		

Note : Payment can be done after the analysis is done. We accept only online payments

#### **Postal Address:**

SEM Facility (I-109), PSG Institute of Advanced Studies, Peelamedu, Coimbatore – 641 004