

## GUIDELINES TO REQUEST ELEMENTAL ANALYSIS

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Elemental analysis (Carbon, Hydrogen and Nitrogen) is performed using a Perkin Elmer CHN Analyzer 2400 Series II. For chemical characterization of compounds, samples of high purity (98-99%) are required; otherwise, the values obtained from the analysis are not useful.

### Samples submission:

- To start an analysis, a minimum batch of five (5) samples/replicates are required with similar carbon content.
- Fill out for every sample a "Sample Analysis Request" fillable form, acquired from our website or from [Patricia.Granados@smu.ca](mailto:Patricia.Granados@smu.ca).
- A minimum of 10mg for C, H, and N analyses is required for synthesis products. For natural products, a minimum of 50mg is required, consult with CEAR technician.
- All samples must be supplied in clearly labeled, closed sample vials. Labels must include user's name, sample identifier, and hazards. Samples cannot be accepted in miscellaneous laboratory flasks.
- Air-sensitive and hygroscopic samples should be scheduled ahead of time with the CEAR technician. You will be provided with the instructions to prepare and submit your samples.
- Submit the samples directly to CEAR Technician, room S501 or S505, Chemistry Department.
- Indicate all elements present in the sample to evaluate results.
- Provide accurate estimates of chemical composition. This information is used to determine optimal sample weight for analysis, avoiding unnecessary retests, out-of-range results, and waste of sample.

### Sample Analyses

- Samples are analyzed as soon as possible in order of receipt. If required emergency analyses please contact the Centre for arrangements.
- Unless otherwise instructed, all samples are held for a maximum period of one (1) month under room temperature or refrigerated at 0-10°C if specified. Users are responsible for collecting their sample vials if necessary.
- Users will be contacted by email once samples are analyzed. Results can be sent by email or picked up at the Centre.

### Reports

- All paper and electronic records are stored for a maximum of one (1) year following analysis. Electronic data from our analytical instruments is automatically captured and archived in specified dated files. Data is periodically copied onto a hard drive and removed from the computer of the Elemental Analyzer.