**BACKGROUND**

Radiopharmaceuticals, along with imaging instrumentation, are the pillars that support the edifice of clinical nuclear medicine. The field of radiopharmaceuticals has witnessed continuous evolution thanks to the immense contributions of scientists from diverse disciplines such as radiochemistry, physics, inorganic chemistry, organic chemistry, biochemistry, physiology and pharmacology. A thorough understanding of the biochemical mechanisms as well as the clinical needs is essential to develop new efficacious labelled compounds that can be used as radiopharmaceuticals. The growth of the nuclear medicine field is linked to the availability of new radioisotopes and radiopharmaceuticals for diagnosis as well as therapy of various disease conditions. Major developments have been taking place in the production of isotopes, generator systems and new radiopharmaceuticals using SPECT, PET and therapeutic radionuclides. The International Symposium on Trends in Radiopharmaceuticals, ISTR-2005, will provide scientists and professionals working in the field of radiopharmaceuticals and related sciences an opportunity to review the exciting developments in the field.

**OBJECTIVES**

The objectives of the symposium are to promote the exchange of information on current developments in the radiopharmaceuticals chemistry and related fields. The symposium will focus on the development of SPECT, PET and therapeutic radiopharmaceuticals and their application in clinical nuclear medicine.

**AUDIENCE**

Participation of scientists working in all aspects of radiopharmaceutical research, development, production, quality assessment and regulation is expected. In addition, specialists in isotope production & instrumentation relevant to radiopharmaceuticals development and nuclear medicine physicians are encouraged to attend and present papers.

**TOPICS**

The scope of the symposium is to cover the latest developments in the following fields:

- Radionuclide production and synthesis of radiopharmaceuticals
- Novel technetium chemistry and radiopharmaceuticals
- Flourine-18 and iodine-123 based radiopharmaceuticals and automation of synthesis
- Other radiohalogens and metallic nuclides for PET
- Carbon-11 radiopharmaceuticals and other short-lived PET tracers
- Therapeutic radiopharmaceuticals
- Molecular biology based radiopharmaceuticals
- Pharmacology and dosimetry of radiopharmaceuticals
- Codes of GMP for radiopharmaceuticals
- Centralized radiopharmacies
- Regulatory aspects
- Indigenous capacity building in radiopharmaceuticals