

## **Symposium K**

### **Title:**

X-ray Tomography and Radiography Imaging

### **Scope:**

Using X-rays generated by synchrotron or X-ray sources, hidden structures can be revealed in a non-destructive manner in heterogeneous materials. In addition, as the materials and components under study become increasingly complex, multi-modal imaging techniques and multi-scale studies are rapidly gaining importance. The aim of the symposium is to provide information on the rapidly developing experimental imaging techniques with respect to novel potential applications. Applications to several fields ranging from engineering to biology, biomedical research, and geology will be presented.

### **Session Topics:**

- Recent developments in synchrotron and conventional X-ray tomography
- Phase-contrast imaging (tomography and radiography)
- Diffraction contrast imaging
- X-ray fluorescence tomography
- Imaging of dynamic systems
- Digital radiography
- X-ray topography
- Application in materials science, life science, geology and engineering

### **Tentative List Invited Speakers:**

Ingo Manke, Helmholtz-Zentrum Berlin für Materialien und Energie GmbH (HZB),  
Imaging Group, Germany

Luigi Rigon, Istituto Nazionale di Fisica Nucleare (INFN), Italy

Zhong Zhong ,Brookhaven National Laboratory (BNL), USA

Koen Janssens, University of Antwerp , Department of Chemistry, Belgium

Antonio Brunetti, University of Sassari, Italy

**Symposium Organizers:**

Augusta Isaac, Pontifícia Universidade Católica de Minas Gerais - PUC Minas, Brasil

Marcelo Hoennicke, Universidade Federal da Integração Latino-Americana (UNILA),  
Brasil

Ricardo Tadeu Lopes, Universidade Federal do Rio de Janeiro / COPPE, Brazil