The study of electromagnetic scattering is of particular relevance in the frame of several applied disciplines ranging from radar detection to everyday life critical situations, to geophysical or archaeological research, civil engineering, biological imaging, and so on. The deepening of the methods of analysis, both for direct methods, especially in complex environments, and for inverse methods, is of crucial importance in order to have the possibility of a correct interpretation of the sensor data, whenever not only a single object constitutes the target to be revealed, but a rather complicated geometry to be imaged is involved.

Potential advancement in the use of several techniques ranging from direct to inverse scattering, to communication and information based, and preliminary results about ‘ad hoc’ methods and models are welcome from a large part of the Antennas and Propagation community, focusing mainly on the involved methodologies, with the needed numerical and experimental support. Potential topics include but are not limited to the following:

- Antennas modelling and measurements for scattering problems
- Big data analytics for imaging
- Direct methods for scattering in free space and complex environments
- Electromagnetic aspects of MIMO communications
- Inverse problems in electromagnetic wave scattering and radiation
- Microwave tomography and radar imaging
- Near zone sensing

**Deadline for submissions: 31 October 2020**