In the IEEE Microwave Theory and Techniques Society (MTT-S) overview on the Society’s web page, we find these two opening sentences:

The MTT-S is a trans-national society with more than 10,500 members and 190 Chapters worldwide. Our Society promotes the advancement of microwave theory and its applications, including RF, microwave, millimeter-wave, and terahertz technologies. The sentiments expressed here were fully realized during MTT-S Region 8 Coordinator Jan Machac’s visit to South Africa at the invitation of the South Africa MTT-S/IEEE Antennas and Propagation Society (APS)/IEEE Electromagnetic Compatibility (EMC) Society Joint Chapter. Prof. Machac was welcomed by two universities, beginning his visit on 13 February 2017 in Pretoria and ending on 17 February 2017 in Cape Town.

Riana Geschke is an associate professor with the University of Cape Town, South Africa, and South Africa IEEE MTT-S/APS/EMC Society Joint Chapter vice-chair for MTT activities. Jan Machac is a professor with the Czech Technical University, Prague, and MTT-S Region 8 coordinator. Tinus Stander is a senior lecturer at the University of Pretoria, South Africa, and past chair of the South Africa IEEE MTT-S/APS/EMC Society Joint Chapter.

Figure 1. Prof. Jan Machac presenting a lecture at the University of Pretoria’s MTT-S workshop.
In Pretoria, his host was Dr. Tinus Stander, South Africa Chapter past chair. Prof. Machac attended a day-long student workshop, where students from the Carl and Emily Fuchs Institute for Microelectronics (supervised by Dr. Stander) presented their work. The students involved were

- Piotr Osuch, analog signal processors
- Nishant Singh, millimeter-wave on-chip filters
- Flavien Sagouo Minko, hybrid V-band low-noise amplifiers
- Hannes Venter, W-band phase shifters
- Konrad van der Walt, WR-90 mode scatterers
- Edward Hunter, W-band phased array feeds
- Brilliant Habeenzu, small-signal degradation in metal-oxide-semiconductor field-effect transistors
- Shaunel Walker, water vapor radiometers
- Hendrik Nel, millimeter-wave outphasing PAs.

Each presentation was followed by a lively discussion.

Late in the afternoon, Prof. Machac delivered his lecture “Substrate Integrated Waveguide—Base for Leaky Wave Antennas” (Figure 1). After the discussion, the meeting continued with another presentation by Prof. Machac, “Introduction to the IEEE and MTT-S,” in which he presented an overview of the structure, activities, and goals of the MTT-S. The following day was occupied by detailed discussions with students about metamaterial propagation characteristics, as well as a tour of the institute’s facilities.

Prof. Machac’s host in Cape Town was Prof. Riana Geschke, the South Africa Chapter vice-chair for MTT. Here, he repeated the same lectures as at the Pretoria meetings (Figure 2). The lecture on substrate integrated waveguide was rearranged to enhance its pedagogical content for the attending students.

During a very pleasant lunch, Prof. Geschke and other Chapter representatives discussed with Prof. Machac various possibilities for Chapter activities, as well as the overall performance of the Chapter. This discussion resulted in the initiation of the process for nominating the South Africa MTT-S/APS/EMC Society Joint Chapter for the MTT-S’s Outstanding Chapter Award.

Figure 2. Prof. Machac presenting his lecture on the IEEE and MTT-S during the University of Cape Town meeting.