

## FORM FOR EMPLOYERS

INSTITUTION: **AGH University of Science and Technology**

CITY: **Krakow, Poland**

POSITION: **Adjunct – scientific researcher (Postdoctoral Researcher)**

DISCIPLINE: **Electrical Engineering, Computational Physics**

POSTED: 30 June 2018

EXPIRES: 30 September 2018

WEBSITE: <http://www.agh.edu.pl/en/>

KEY WORDS: full wave modeling, extremely low frequency, radio wave propagation, ground-ionosphere waveguide, inverse solutions

### Requirements:

- PhD,
- Required skills and knowledge: numerical modeling of electromagnetic wave propagation in inhomogeneous media, modeling of propagation parameters for ground-ionosphere waveguide in the extremely low frequency range,
- excellent track record of research achievement and publications in top-ranked journals,
- active participation in conferences and symposia
- at least B2 level (CEFR scale) in spoken and written English,
- ability to work in a team,
- strong research ethic.

### Research activities:

The postdoctoral researcher will work in a team studying natural electromagnetic fields in the Extremely Low Frequency (ELF) range. The electromagnetic wave modeling will be used for analyzing observations from our global radiolocation system WERA, composed of three ELF stations located in Poland, North America and South America, and in our ongoing study *"Tomography of the Martian ground using inverse solutions for ELF waves generated by dust storms in the ground-ionosphere waveguide"*, which aims at using our methodology for the Martian environment.