

COMMUNITY SEISMOLOGY PROGRAMME

The CSP aims to engage a wide community in the national seismology programme and physical sciences in general. The programme will support existing educational programmes and curricula and develop new collaborations and networks to support education and outreach in the area of STEAM (Science, Technology, Engineering, Art and Mathematics). The programme has four core objectives:

- 1. Engage Irish society, including public groups and students, to contribute to the observation and study of seismic events in Ireland and internationally
- 2. Stimulate interest in physics, mathematics and geoscience at school level and hence develop an interest in studying Earth/geosciences/physical sciences at third level and provide support materials/activities for interested students and teachers
- 3. Support the government STEAM (Science, Technology, Engineering, Art and Mathematics) initiative to achieve a highly-skilled workforce and informed society
- 4. Promote the INSN and its products to the general public, media and other bodies including the establishment of an online community of Citizen Seismologists in Ireland

DIAS and GSI will provide advisory assistance to the CSP Officer to operate the programme successfully. The Officer will report to the DIAS Director of Seismic Networks and work alongside several technicians and analysts already employed within DIAS Geophysics.

CSP OFFICER - DUTIES AND RESPONSIBILITIES

Assist and advise schools, other suitable hosts and citizens with the installation and operation of low-cost seismometers with real-time data connection.

Develop an online homepage and forum with instructions for hardware/software setup, data analysis and visualization guides. Act as a contact person for teacher and citizen seismologists in Ireland.

Organize regular seminars and workshops to support the growth of an Irish citizen seismology community and to empower teachers to teach observational science via seismological measurements.

Configure exhibits for outreach, eg. Open Days, school visits etc.

Act as outreach contact person for the INSN including answering requests from media and using social media to publicise INSN activities and observations.

Present the CSP at national and international Earth Science meetings.

In co-operation with DIAS and GSI staff drive the development of teaching modules, e.g. for the Junior Cert, Transition Year or Leaving Cert curriculum as appropriate.

Work closely with the INSN technical staff to include CSP data into the real-time INSN system.

PERSONAL QUALIFICATIONS & EXPERIENCE

Essential:

B.Sc. or equivalent in Physical/Mathematical/Geosciences

Very good communication skills and previous experience with operating social media accounts and editing websites

Ability to familiarize with the installation and configuration procedures of low-cost seismometers, e.g. Raspberry Shake

Ability to organize and run workshops to support school teachers and to foster an Irish citizen seismology community

Awareness of, and interest to develop, physics, geoscience, physical geography or similar teaching modules

Full driving license and a willingness to frequently travel to visit schools, attend public events and organize workshops

Desirable:

Experience with processing, analysing and visualizing scientific time domain data, ideally using python in a Linux environment

Previous experience with organizing outreach activities.